Coming to Understanding

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The Crux of Coming to Understanding

God and reality as a whole are one and the same thing.
God is a *person* in the most important senses of the word.
The nature of reality and its personhood are accessible to reason.
The meaning of our lives unfolding in reality is similarly accessible.

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Part 1: The Nature of God

(1.1) Eide and Categories in Plato and Aristotle

If we set aside the putative forms of revelation common to Judaism, Christianity and Islam, then we can no longer endorse their confused and inconsistent conceptions of God. This leaves an urgent question. Absent revelation, how are we to arrive at *any* understanding of the nature and Attributes of God? The key lies in conceiving of God as the source of being, as the one on which everything is ontologically dependent, while He Himself is not in this way dependent on anything else.

It falls within the purview of metaphysics to discover and specify the relations of ontological dependence, and the special origin, if any, that they determine. As we shall see, it is not necessary to begin from nowhere. For the history of metaphysics exhibits some real, if erratic and often interrupted, progress. This progress can be retrieved, reinterpreted and put to service in an account of the nature of God. For even where it does not speak of God, traditional metaphysics has concerned itself with tracing the lines of ontological dependence back to the basic "elements of being". Wherever the tradition has successfully done this, it has thereby made a move toward the characterization of God and his nature. Thus, at varying points in the argument we will invoke—as signposts along the way to the correct metaphysics—the Platonic *eide*, the Aristotelian *kategoria*, Kant's *a priori forms of the understanding*, Spinoza's *Deus sive natura,* Hegel's *dialectic*, and twentieth-century attempts at the theory of categories. These invocations function as hints leading to the correct understanding of ontological dependence, and ultimately of God's nature.

Because it is a project of retrieval rather than pure history of philosophy this discussion will often involve interpretations against the grain. These are not so much offered as challenges to the standard historical interpretations of the philosophers in question. Instead, they are attempts to highlight a way of looking at God from the various perspectives provided by some of the leading figures of Western metaphysics.

At the heart of the conception of God to be developed here lie the eide, which Plato interpreted in different ways in his various dialogues. The topics of the so-called *theory of forms*, the eide, which Plato managed to grasp with considerable but not complete success, will be shown to be none other than the Attributes of God Himself! This, of course, is not to endorse Plato's own list of the eide or forms, but rather to insist that a correct account of the eide would thereby be a correct account of God's Attributes. In this way, Platonic philosophy appropriately reinterpreted provides a crucial hint in the project of characterizing God's nature, a hint that enables us to jettison the confused conceptions of God that have dominated Judaism, Christianity and Islam. In order to deliver on this claim it will help to locate the present inquiry within a certain line of Western philosophical and metaphysical thought that extends from the pre-Socratics to the present day.

Plato and his teacher Socrates famously inaugurated a new era in human philosophical understanding of reality by displacing the reductive physical and cosmological speculations of their predecessors from the center of philosophical understanding. Their predecessors had asked after the basic constituents of changing items (the "elements") and the structure of the superlunary world, thereby anticipating modern physics; Plato and Socrates enquired into the real definitions of things—the accounts of what it is to be this, that, or the other kind of thing—and into the nature of the good life. For them, the desire to understand could not be sated by physics or cosmology, but only by a reasoned account of how to live a life of quasi-transcendent significance in the face of the moral challenges that make up the human condition.

Plato's *Republic* famously uses the myth of the cave to compare reliance on ordinary sense experience to living in an underground cavern where one can see only the shadows of what is real. The myth of the cave implies, however, that there is a world of intelligible reality disclosed to the developed intellect. It is a world of pre-existing paradigms or eide that are not only intelligible in themselves, but are also such that understanding them makes other things, even to some degree the world of sense experience, intelligible. Plato's theory of the eide or "forms" is nowhere fully stated; it must be reconstructed from different dialogues, most centrally his *Phaedo*, *Parmenides* and *Republic*. Indeed, part of the reason for simply using the English transliteration of the plural of Plato's term *εἶδος* is to emphasize that this central notion needs considerable clarification before it can be put to use. (It cannot, for example, be properly understood in terms of the notion of a universal.)

The *Phaedo* sets the basic framework by characterizing the eide as unchangeable, eternal and fundamental explanatory factors, available not to sense experience but only to the developed intellect. Most interestingly, they are described as perfectly and truly that which their instances can only imperfectly approximate by way of imitation or participation. Thus, sensible things have their partial reality by participating in the eide, while the eide are what they are completely and independently from anything else.

As his theory develops over the early, middle and late dialogues Plato never settles on a single complete account of the exact nature of the eide or of the relation in which they stand to the everyday particulars of experience. He wrestles with this problem throughout his work, taking different positions at different times. Despite its never having reached a fully satisfactory resting place, Plato's doctrine, as we shall see, points us in the direction of a principled way of determining what eide there are and relating them to human purposes and concerns.

Aristotle, himself ever happy to clip the wings of speculation, helped tame Plato's exciting view. Aristotle brought it down to earth by way of a theory of categories as "predicables," that is, things that are said of, or inhere in, what he called primary substances. The Greek term *kategoria* employed by Aristotle in his treatise the *Categories*, was originally used to denote the accusations that might be brought against someone in a court of law. They are things that could be said against or about a defendant. By identifying the categories as a list of things that could in some sense be said of other things, Aristotle relates the categories to predicables, the most general sorts of things that can be said of other things. Aristotle provides the following list of predicables, as if it were somehow basic:

Substance (for example, man)
Quantity (for example, one cubit tall)

Quality (for example, white)
Relation (for example, half)
Place (for example, in the market-place)
Date (for example, last year)
Posture (for example, sitting)
State (for example, wearing armor)
Action (for example, burning)
Passion (for example, suffering torture)

The first issue that arises concerning this list is the inclusion of "substance." A substance such as "the individual man or horse" is not predicated or said of anything. Rather, these substances are the termini of chains of predication. Predicables can be predicated of them, but these substances cannot be predicated of anything in turn. It is therefore natural to wonder why "substance" would appear in a list of predicables. Answering this question reveals something important about Aristotle's system of categories.

Aristotle divides substances into two classes, primary and secondary. The individual man and horse—say Socrates and Bucephalus—are primary substances. Secondary substances are what we might call kinds, the various species and genera, like man or animal. Clearly, secondary substances are what we predicate of things, when, for example, we say that Socrates is a man or Bucephalus is an animal.

Thus, primary substances are not properly taken to be *kategoria*, for they are not things predicated of other things. Aristotle holds that primary substances are in some way ontologically basic, so that all of the categories are either said of primary substances as subjects or are in them as subjects. Accordingly, if primary substances did not exist it would be impossible for any of the categories to exist. Aristotle's categories, therefore, are ontologically dependent upon primary substances, which do not themselves form a category because they themselves are not predicable.

Originally, in the tradition of commentary on Aristotle, the notion of a universal was simply something that could be predicated of many things. Eventually, however, a distinction between universals understood as ontologically dependent on the things they are said of, and universals that are ontologically prior to the things they might be said of, was made. Aristotle clearly takes the former view, and so we may think of an Aristotelian theory of universals as an account of universals "in rebus" or "in things," where this is meant to convey that universals are dependent upon the things in which they inhere or of which they are said. As we would put it, Aristotle's universals or predicables are ontologically dependent on primary substances. So, for example, there could be no Aristotelian universal Running Fast—to take a universal from the category of Posture—unless Bucephalus or some other primary substance happens to run fast.

In contrast to the tradition of commentary on Aristotle that treats the categories as universals in rebus, Plato's eide are often contrasted with the categories by calling the eide transcendent universals: universals that can exist without being instantiated or exemplified by their instances. But, as will emerge below, this contrast is misleading. To be sure, Plato's eide are not ontologically dependent on the particulars that imitate or resemble them, but it does not follow from this that they are universals, i.e. items whose primary function is to explain predication. If universals are essentially predicables—that is, things predicated—then it is a mistake to think of Plato's eide as universals of any sort.

How exactly are we to think of Aristotle's categories? What metaphysical role are they to play? One common view is that they are the highest genera of predicables, the most abstract *kinds* of predicables. It is important to notice that there is a disabling objection to this common interpretation. Aristotle's theory of categories cannot be consistently interpreted as a system of the highest, or most abstract, kinds of predicables. For then the category of secondary substance or kindhood would include other categories as its members; for, by hypothesis, they are certain sorts of kinds, namely kinds of predicables.

Aristotle gives us no hint of any such internal connection between the category of secondary substance and the other categories. Indeed, in *Metaphysics* he rules out treating the categories as kinds by stating that there cannot be a highest genus (998, b22-3). He holds that a species is to be defined in terms of its super-ordinate kind or genus, plus a differentia—something that distinguishes the species from others in the genus. Thus, man (a species) is defined as an animal (genus) that is rational (differentia). As a result, if secondary substance or kindhood were the single overarching genus there would be no place to find the differentia of the categories, understood as species or sub-categories of the highest genus of secondary substance or kindhood. Rather, there would simply be the highest genus, with no underlying species.

Part of the difficulty in providing a consistent interpretation of the *Categories* is that Aristotle gives us little guidance on the relations among the categories; in effect they are presented as a mere list. This makes it difficult to see the true rationale of the *Categories*, at least in so far as this requires an understanding of the metaphysical status of the categories, i.e. their place in the articulation of the structure of Being. This difficulty constantly reappears in the history of commentary on the *Categories*. After Andronicus' edition of Aristotle's work in the first century BCE, there emerged a tradition of philosophical commentary on the categories that stretched from Alexander of Aphrodisias, Eudorus of Alexandria, Albinus, Lucius and Athenodoros, on to Olympiodorus, Plotinus and his student Porphyry. A central disputed issue in this tradition concerns Aristotle's exact purpose in the *Categories*—in particular, whether the classification he offers is to be understood as primarily grammatical, metaphysical, or conceptual.

On the grammatical interpretation, the *Categories* is concerned with the basic classification of significant kinds of words: items that are applied to or "said of" substances understood as the subjects of all meaningful sentences. On this interpretation, the *Categories* merely represents the first crude steps toward what has become empirical linguistics. This sort of categorizing can only have metaphysical significance on the shaky and now refuted assumption that the distinctions embodied in ordinary language can be a privileged guide to the structure of reality.

On the metaphysical interpretation, Aristotle's classification concerns the different kinds or elements of being, not simply as reflected in the recurrent patterns of what we say, but as drawn out or "educed" by intellectual insight and reflection. On the conceptual interpretation, the difference between the grammatical and the metaphysical is split. This conceptual interpretation was the view taken by one of Aristotle's commentators, Olympiodorus, who writes:

> Of things that are, some only refer to others, some are only referred to by others, and some others both refer and are referred to. For instance, vocal signs only refer, existing things are only referred to, but the concepts both refer and are referred to. For the concepts are referred to by vocal signs, and themselves refer to existing things. Therefore they are placed between words and things. Now other commentators say that Aristotle deals with words, and still others with things. But between them are the concepts. Thus the purpose of the categories is to deal with concepts.

This conceptualist interpretation of Aristotle does not, however, really provide a novel or adequate approach to the issue of the metaphysical status of the categories. For there are two choices in understanding categories as concepts, each associated with different models of what it means to grasp a concept. On one model, grasping a concept is to possess a structured psychological ability, i.e. the ability to meaningfully use a word or conventional sign in accord with its conventional meaning. Just as an empirical linguistics replaces any archaic classification of words that earlier thinkers might have articulated, an empirical psycholinguistics replaces any speculative account of the structure of those psychological abilities that issue in the meaningful use of words. Again, such a study can only have philosophical significance on the shaky assumption that psychological categories are a privileged guide to the structure of reality. There is scant reason to believe that this might be so. The kinds that are most natural to us psychologically are likely to be synthetic or constructed kinds that have proven valuable to us in the local niches in response to which we, as a species, evolved. However, these kinds are not necessarily items that are of ultimate metaphysical significance.

The other model by which a concept is grasped is explicitly ontological—that is, a concept is a universal and to grasp a universal is to have an intellectual insight into its nature. Such an insight guides one in seeing significant similarities and differences among particulars, and so allows for the true classification of particular things. However, this model leads us back to the ontological interpretation of the categories: Aristotle's categories are universals of a certain sort, namely real kinds or types of elements of the world.

It is probably best to interpret Aristotle's theory of categories as intending to be a theory of the fundamental kinds of things that there are. Yet, as mentioned earlier, one fundamental kind of being—primary substance—is not a predicable. So, the theory is not completely described by the more familiar account of it as a theory of predicables or universals. The theory is actually organized around a central category of primary substance, where a primary substance is a bearer of properties that is not itself borne or "had" by anything; or as Aristotle puts it, something of which things are said or predicated, but which is not itself said or predicated of anything else. Therefore, the organization of Aristotle's categories is wholly in terms of their relations to the basic category of primary substance. Here then is a theory of categories that starts with a class of distinguished concrete objects—the substances—and works out from there. It explores the kinds of being that also have to be if there are such distinguished particulars.

Aristotle is thus taking as basic a pluralistic substance ontology: an ontology in which middle-sized concrete things, such as "the individual man or horse," are treated as ontologically independent beings existing in their own right, and not, as Plato himself held and as Spinoza argued centuries later, as dependent aspects of some more fundamental underlying reality.

Reasons to reject any pluralistic substance ontology as being ontologically basic are offered below. (Those reasons will in part recapitulate the insights of Plato and Spinoza.) Once pluralistic substance ontologies are rejected there is then little to be salvaged from Aristotle's explicit theory of categories. Still, this does not mean that we have nothing to learn from Aristotle. Given that the categories are indeed eide as Plato finally conceived of them—that is, preeminent non-spatiotemporal *particulars*—Aristotle's indelible contribution to the theory of eide actually lies in his deep theory of particularity. This account of particularity is given in his so-called doctrine of the "four causes."

In Aristotle's *Metaphysics*, the four causes are characterized as follows:

> We call a cause (*aitia*) (1) that from which (as immanent material) a thing comes into being, e.g. the bronze of the statue and the silver of the saucer, and the classes, which include these. (2) The form or pattern, i.e. the formula of the essence, and the classes which include this (e.g. the ratio 2:1 and the number in general are causes of the octave) and the parts of the formula. (3) That from which the change or freedom from change first begins, e.g. the man who has deliberated is a cause, and the father a cause of the child, and in general the maker a cause of the thing made and the change producing of the changing. (4) The end, i.e. that for the sake of which a thing is…

Consider how each of these four "causes," or explanatory factors, is present in Aristotle's favorite example of the statue, say, in this case, a pure white marble bust of Zeus. Marble is the matter of the statue. The form of the statue is that structure or shape that came to be realized in the marble by the chiseling of an artist. The end or purpose—the final cause—of the statue is, we may presume, the production of a certain kind of aesthetic delight. In citing this purpose, we give further evidence that we are dealing with a genuine entity rather than with a mere plurality of parts or accidental collection that just happens to have a particular arrangement. Behind Aristotle's idea of purpose or telos is the important idea that the existence of a genuine entity has a point, in the way that the existence of a mere plurality, for example the stones in some backyard, does not. When we have cited these three explanatory factors—matter, form and finality—we are on the way towards recognizing the statue as a genuine entity, rather than merely as some marble or merely as a collection of the calcium carbonate molecules of some marble.

As Aristotle observed, we still lack an account of what makes the statue this very entity as opposed to another entity of the very same kind, that is, with the same matter, form and final end. A series of distinct statues—a first, then a second and then a third—could be made from the same bronze, according to the same form of Zeus and for the same end of producing a certain kind of aesthetic delight. It is here that Aristotle's idea of originating efficient causation enters in so as to complete the account of the particularity of a thing. What makes *this* statue the particular statue that it is—say the third statue, rather than the first or the second—is that it was brought into being by the particular acts of chiseling of the particular artist who made it on the particular occasion in question?

We should point out that our interpretation of Aristotle, although suggested by the text, does not always fit what he has to say. Sometimes it sounds as if the matter of the statue is what distinguishes that statue from other things: The matter of each object is specific to *it*. Other times, it sounds as if form does the job: it separates the object from the other objects that are nearby, or contiguous, with it.

In any case, Aristotle's doctrine of the four causes has been immensely fecund in the history of philosophy. The question remains, however, what exactly do Aristotle's four causes or "explanatory factors" explain? Because this question is not addressed, the four causes can look to be a primitive and long-outdated, anticipation of our science, a simple-minded attempt to explain what happens in the world. A better interpretation of the four causes is to see them as crucial aspects of any adequate account of the particularity of a composite entity. Each of the four causes or explanatory factors are aspects of a complete answer to a specific metaphysical question of why *this* particular thing is what it is. This is a basic metaphysical question: what is it that accounts for "the particularity" of any given particular? The four causes are best seen as a sophisticated response to that profound question, and not as a primitive attempt at empirical science.

Despite the sophistication, Aristotle's response is still in need of refinement. In responding to the specific metaphysical question—how this particular thing is what it is—notice that matter and form, on the one hand, and efficient cause and telos, on the other, are two different aspects of the answer to this question. We can describe matter and form as answering the question about this particular thing with respect to how it is internally—or how it is with respect to itself alone. Efficient cause and telos, on the other hand, answer the question of in virtue of what this particular thing is what it is by appeal to things that are external to it.

Still further refinement is called for. A closer look at form reveals that it actually has three roles. Aristotle shows awareness of two of those roles in his own descriptions of form, as well as in his examples. But the third role of form occurs in his exposition of efficient cause. Part of the problem is that his choice of examples buries the complexity of his "four" causes.

Instead of a statue, consider a temple. A temple, let us imagine, is constructed by first hewing a large slab of rock into stone blocks. Then the blocks, let us suppose, are subsequently assembled into the temple. Notice that we have here *two* ways in which "form" is arising—two roles for form. There is, first, *differentiating*. Unlike Aristotle's marble statue case, we first have sub-portions (blocks) of the matter (the slab of rock) that are hewn. These are hewn externally to the temple, for there is no temple yet. This is characterized, by Aristotle, as a species of efficient cause; but in fact it is form at work here differentiating the sub-portions of the rock. A second role for form that arises in our example is that of *structuring*. The blocks are organized in one way and not in another to create a temple (as opposed to a pyramid). Finally, there is an entirely different relationship that form has to the actual particular (the temple) that results. This we call the *individuating role* of form. The temple is a particular. Any particular must have form and matter to make it the particular that it is. That form plays this role with respect to the temple itself (as opposed to the blocks that make it up, and as opposed to the organization of those blocks in the temple) distinguishes yet a third role for form. It is this third role that Aristotle most often has in mind when he describes something as the form of a particular.

We have, therefore, not four causes—not four ways that explain the particularity of a particular—but six: Aristotle's (individuating) form, matter, efficient cause, telos—and in addition—differentiating (form) and structuring (form). We should note that something like differentiating, as we have described it here, is noticed by Aristotle. Recall, earlier, that we spoke of Aristotle's view that the differentia distinguishes the species from others in the genus. As the example indicates, however, Aristotle does not apply the notion of differentia to particulars; rather, the notion belongs to his views on classification.

Nevertheless, in what follows, these six causes will be shown to apply to particulars quite generally, even to the particulars that are, on a proper understanding, the eide themselves! So, most notably, the reader has the right to expect an account of efficient, final, formal and material causation, differentiation, and structuring, as they apply to the preeminent and *non-spatiotemporal* particulars that are the eide. Obviously this will demand generalizations of these notions, as Aristotle developed his original four for the restricted case of spatiotemporal particulars like statues, and we refined those four into six causes by considering other examples of things that are composed by the structuring of differentiated sub-portions of material, such as temples.

Before applying the six causes explicitly to the eide, we should examine the history of category theory further, especially as it arises in somewhat disguised form in the thought of Spinoza and Hegel. In this way it will be possible to determine whether and in what respects the later insights of category theory might shed light on the ultimate task of characterizing God and his Attributes.

(1.2) Category Theory Since Plato and Aristotle

Despite its unifying theme of primary substance, Aristotle's *Categories* still exhibits a lugubrious, list-like quality. Nothing significant is said about interrelations among the categories, and so the difficult and seminal question of whether some of these interrelations themselves count as categories is never actually confronted. (As will emerge below, the interrelations among the categories must themselves count as categories.) Nor does Aristotle give us any indication as to how the categories connect with the hylomorphic (matter/form) analysis of substance, or to efficient and final causes. Nor, as Plotinus emphasized in *Enneads*, are we given any indication of how Aristotle's substance-based list of categories is supposed to relate to the structure of the eide that Plato described.

Turning first to the issue of the interrelations among the categories, Porphyry, the student and biographer of Plotinus, advanced one influential idea for specifying the relations that essentially bind the categories together, namely the relations of a tree structure whose highest node is the most abstract or general of the categories—the summum genus—and at whose immediate nodes are sub-categories distinguished by their differentia or special distinguishing features. This downward structure of sub-species upon sub-species, each defined by (i) the genus under which it falls and (ii) the features that differentiate it from other species of the same genus, reiterates at every level of the tree. In this way, the categorical structure, which came to be known as "Porphyry's Tree," is generated. The relation between a species and a genus thus emerges as a categorical relation, something as fundamental as the categories themselves. Yet, paradoxically, that categorical relation has no place at any of the nodes of Porphyry's Tree.

Once that paradox is noted, an obvious question arises. *How are we to think of the structure of the categories if the fundamental relations among the categories are themselves to be thought of as categories?* Unfortunately, we will have to wait until Hegel for this question to come clearly into view.

After Porphyry, it is safe to say that from the point of view of the present enterprise nothing particularly novel happens in the history of category theory in the West until we reach Spinoza and then Kant.

It may seem odd to cite Spinoza as a central figure in the history of category theory. For Spinoza nowhere explicitly thematizes the idea of a category. What Spinoza does is to take the two most fundamental categories of Descartes' philosophy, namely *thought* and *extension*, and treat these as two among an infinitude of Attributes of what he calls *Deus sive natura*, that is, "God or Nature." Spinoza is famously a substance monist; according to him there is only one substance, namely God, and everything is ontologically dependent on it. So if there are to be relatively basic categories or divisions of reality they are not ways Aristotelian primary substances can be, for such substances are not ontologically basic for Spinoza. (He regards such "singular things," as he calls them, as modes or modifications of the one substance that is God.) Given Spinoza's thoroughgoing substance monism, the fundamental divisions of being that the categories purport to represent can be none other than the Attributes of God Himself.

Spinoza thus provides a very satisfactory account of the significance of the categories. They are not our concepts, our ways of carving up reality. They are not merely the most general ways of thinking about things. They are instead the fundamental aspects or Attributes of God. Therein lies their deep ontological significance. Every other particular thing besides God and His Attributes, everything that Spinoza calls a mode, falls under the Attributes of thought, extension, and indeed under the infinity of the other unknown Attributes. That is why thought and extension appeared so fundamentally explanatory in the Cartesian system that Spinoza took over and elaborated. Thought and extension are basic aspects of God, understood as the thing on which everything else depends.

This account of the centrality of the Attributes will be repeated and expanded in what follows. But there is no reason to think that the central elements of the Cartesian philosophy, thought and extension, are all the Attributes we know, or even that these two Attributes and their relations to ordinary particulars are properly characterized by Spinoza. Still, one might have hoped that philosophy would have pursued the task that Spinoza outlined, namely the characterization of the categories understood as the Attributes of God.

Kant, however, managed to hijack philosophy by disparaging this central metaphysical task. When Spinoza had fully objectified the Cartesian categories as Attributes, Kant was to subjectivize them as the shaping structures of experience and judgment. Kant begins his so-called critical philosophy by noticing that certain universal propositions regarding space and time, propositions codified in the mathematical physics of his age, seem to be necessary truths. Kant is particularly impressed by the alleged truths of Euclidean geometry. He takes the purported necessity of such truths as a given, and raises the epistemic question of how it is that we are able to grasp the fact that such truths are necessary. His answer is that the only possibility is that our minds impose such truths upon everything that we experience. The structure of our mind, operating as it does to make the objects of our experience in conformity with its principles of understanding, itself rules out the possibility of objects of experience at odds with these principles. Otherwise, although we might observe that certain geometrical generalizations hold locally around here, we would never have the right to conclude that they are universally and necessarily true.

Kant thus draws the conclusion that space and time, and the laws that they are described as satisfying in Euclidean geometry and Newtonian physics, are the shaping structures of all of our experience of objects. Hence they are "*a priori* forms of intuition" imposing conditions on anything that could be an object of experience. The laws of space and time, for example the laws of geometry, determine how we will experience the things we can experience. This is why none of the objects of experience can present counterexamples to the laws of space and time. Those objects are in a certain way predetermined or pre-created by our minds to fit the laws of space and time.

Emboldened by this conceptualist thesis about space and time, Kant turns to the categories with an antecedent understanding of them as the most general forms of thought and judgment. The categories, in effect, are to stand to thought as space and time, the a priori forms of intuition, stand to our experience of objects. They will figure in shaping the various types of possible judgments that thought can entertain.

According to Kant—and here he is probably over-influenced by the logic books of his day—there are exactly twelve types of possible judgments. These are Universal (e.g., all men are mortal), Particular (e.g., some men are mortal), Singular (e.g., Socrates is mortal), Affirmative, Negative, Infinite, Categorical, Hypothetical, Disjunctive, Problematic, Assertoric, and Apodeictic.

By considering the elements that make up these types of judgments Kant hopes to isolate the categories or "pure concepts of the understanding" as he calls them. Thus he arrives at the following pure concepts or categories, extracted from the possible types of judgment:

Totality
Plurality
Unity
Reality
Negation
Limitation
Substance and Accident
Cause and Effect
Reciprocity
Possibility and Impossibility
Existence and Nonexistence
Necessity and Contingency

These concepts, like the *a priori* notions of space and time, do not arise empirically from the contemplation of experience, but instead are imposed by the mind itself—*a priori*—on any possible object of thought and judgment we can entertain. So, for example, we will judge that every object of experience must be the effect of some cause, and that it must be a substance having accidents. Likewise we will also judge that it also must be one or many. We can indeed conceive of an object without whiteness or without weight, but not without unity, plurality, reality, limitation and so on. Thus, the universal applicability of Kant's categories to anything we might sense or imagine or think of is to be explained in the same way as the universal applicability of the notions of time and space: these categories are the work of our minds and our minds are so structured that things must *appear* to us in ways that fit these categories.

This manner of theorizing about the categories, namely deriving them from the common features of objects as they appear to us in sense experience and thought, means that we are very far from Spinoza. That is, we are still very far from an account of the categories as fundamental aspects of reality as it is in itself.

Kant himself emphasizes this feature of his theory, by way of his central distinction between "noumena" or things in themselves and "phenomena" or appearances, a distinction between reality as it *really* is and the seeming reality of things-as-they-appear-to-us. Things-in-themselves, Kant argued, are unknowable because none of the categories that we must impose on anything we can think about can apply to them. We thus have no ground for supposing that the thing-in-itself is a cause or a substance, that it is either one or many, or that it has quantity, quality, or stands in relations. All these categories apply only to things-as-they-appear-to-us, not to the things-in-themselves.

In this way, Kant saw himself as decisively eliminating the kind of metaphysics that Western philosophy had been engaged in since Plato. Any possible knowledge must be constrained by the set of categories through which anything can be thought, and this knowledge is reliable only insofar as it is applied to appearances. If we imagine that it is possible for us to know reality as it is in itself, then we are deluding ourselves. In point of fact, metaphysics must itself be a delusion, for it is nothing but the attempt to limn the structure of fundamental reality (that is, to characterize the nature of things in themselves). In particular, the metaphysical ambition of characterizing God's Attributes must be jettisoned. For God is the paradigm of a-thing-in-itself. So for Kant, our knowledge of God, such as it is, can only come from the practical side of philosophy. The little we know of Him is exhausted by what we are pragmatically required to believe in order to not give up hope in this life. There is no metaphysical insight to be had into the structure of God's being.

Kant's approach to the categories is guided by a central question: How can such inherently general concepts as cause, substance, possibility and necessity—concepts that are not given in experience—apply to empirically given objects? He is struck by the conviction that these concepts necessarily apply to the objects of experience, even though these concepts cannot be acquired through experience-based generalizations. Hence, Kant's aim is both to account for the *a priori* or non-experiential basis of the categories and at the same time to explain how such *a priori* concepts necessarily apply to the objects we experience.

Despite the great esteem in which his philosophy is properly held, Kant on the categories reads like an embarrassing attempt to do cognitive science *a priori*, that is, from the armchair, without actually investigating how the mind does in fact work. As for his austere recommendation that we give up ambitions of penetrating appearances in order to grasp reality as it is in itself, this remains precisely the ambition of science and of scientifically informed metaphysics. And as a matter of actual historical fact, Kant's austere recommendation was roundly rejected by those who followed him. It instead provoked a renaissance of metaphysical thought. Kant's denial that the categories apply to "things-in-themselves" made things-in-themselves an irresistible object of theoretical attention, particularly among his immediate descendants, Fichte, Schelling and Schopenhauer.

This trend culminated in Hegel's identification of the thing-in-itself as the Absolute, i.e. God, revealing Himself in the world-historical process. Thus when Hegel looks back on Kant's theory of categories he sees it as a form of subjectivism, as when he writes in the *Encyclopedia of Philosophical Sciences*:

> Objectivity of thought in Kant's sense is … to a certain extent, subjective. Thoughts, according to Kant, although universal and necessary categories, are *only* our thoughts—separated by an impassable gulf from the thing, as it exists apart from our knowledge. But the true objectivity of thinking means that the thoughts, far from

> being merely ours, must at the same time be the real essences of things.

Hegel reinstates the Spinozistic idea ignored by Kant that the categories, whatever they turn out to be, must correspond to the basic elements of an independent and ultimately Divine reality, and must not merely be facets of our most general style of thinking. Hegel goes further, however, and this next step is very important for the new metaphysics set out below. Hegel reinterprets the Kantian synthesis of concept and experience not as a mental process, as Kant took it to be, but as a quasi-logical relation among the categories themselves. In this way, Hegel introduces for the first time a dynamic, generative, and teleological structure among the categories—the so-called dialectical process—that he also takes to be the hidden key to the development of nature, consciousness, and history.

Hegel's dialectical process is a story of stages in the overcoming of objective incompleteness. As Hegel puts it in an earlier work:

> Each being is, because posited, thereby op-posited and so is both conditioned and conditioning. The Understanding completes these limitations by positing the opposite limitations as their necessary accompaniment. These require the same completion, so that the Understanding's task develops into an infinite one ... as it completes a relative identity through its opposite and produces again, through the synthesis of the two, a new identity, which again is in its way incomplete.

Thus, Hegel's idea of the dialectical structure of the categories is built around two claims: (i) that to be a definite thing is to be demarcated or delimited by one's opposite, and (ii) that these opposites make up a genus, which will in its turn be delimited by its opposite, and so on ad infinitum. To see this dialectical process at work, begin with a category and call it the thesis. Standing as the delimiting opposite of the thesis, as its negation, is the antithesis. Taken together the thesis and the antithesis comprise the synthesis.

The odd thing is that despite Hegel's genuine sensitivity to the importance of categories, and to the importance of determining how they arise from one another, he deploys no real analogue of Porphyry's *differentia*. He gives no account of how a thesis is delimited within the genus by anything other than its antithesis, a striking omission because it looks as though a thesis and its antithesis are intended to exhaust the relevant genus. From where then does the *differentia*, the distinguishing factor that makes for the division between thesis and antithesis, come?

This omission leads to a radical indeterminacy in Hegel's system of categories. The vertical structure of the categories is clearly determined as a downward tree beginning with the summum genus at the topmost node, with each node of the tree (i) occupied by some genus and (ii) branching into nodes occupied by two sub-categories corresponding to a thesis and an antithesis respectively. However, we are given no idea of how the Hegelian categories are related "horizontally"—that is, how they stand to each other when they are at the same level of generality and yet not themselves thesis and antithesis of the same genus. The branches at a given horizontal level in the tree are not standing in any interesting categorical relations. The suspicion is that by omitting the notion of the *differentia*, or leaving it simply as bare negation, crucial cross-connective tissue is lost in the resultant theory of categories.

For Hegel, so long as we are below the first category—*Being*—any genus or synthesis functions as a thesis, which finds its own antithesis, and then comprises a new thesis with its own opposing counterpart or antithesis. By iterating the thesis/antithesis structure, Hegel is implicitly offering an account of the relations among the categories, and so is advancing category theory a certain distance beyond the list-like inventory that we complained of in Aristotle.

However, what Hegel does not do is present an overall picture of the resultant structure. Once the "infinite" task of the understanding is complete, what exactly would the categorical structure it contemplates be like? Once categories are seen to require conceptual connections to one another, and once this is recognized not merely as a subjective psychological fact about how we think about categories but is instead seen as a metaphysical fact about the categories themselves, the steps are in place to allow genuine discoveries about just how the categories are connected to one another.

Despite the resurrection of category theory's ontological status by Hegel after the unhelpful conceptual turn taken by Kant, subsequent category theory has been much more circumscribed in its scope. It has failed to connect with the original insights of Plato and Aristotle, and it ignores the gains made by Spinoza and Hegel. Most notably, in a complete break with Hegel's deployment of his categories, category theory in the twentieth century entirely neglects the possibility of an intrinsic teleology at the heart of reality. Instead, the varieties of subsequent theories of categories are typically exercises in conceptual or grammatical taxonomy, where the taxonomy usually arises from some philosophical description of reality favored by considerations that are not deeply informed by the question of ontological dependence.

Consider for example the category theory of Edmund Husserl. Husserl makes a fundamental distinction between categories of meanings and categories of objects, and then stipulates a systematic correlation between the two sorts of categories as a precondition of our being able to conceive of objects. Categories of objects represent metaphysical divisions of various items into kinds. Categories of meaning are classifications of concepts into kinds, kinds that fit together in thought in ways that are characteristic of each kind.

With respect to categories of meaning, Husserl offers a particular syntactic substitution test to distinguish one such category from another. In the *Logical Investigations,* he argues that when the substitution of one term for another in a sentence produces syntactic nonsense, this is because the two terms belong in different categories of meaning. Things as heterogeneous as *Alexander* and *Bucephalus*, *lions*, and *the armies of the night* are therefore in one category; while *runs*, *and*, and *because* do not belong to that category. This is shown by the various substitutions of these terms for "*Alexander* and *Bucephalus*" in the sentence "*Alexander* and *Bucephalus* are ferocious." (For example, "The armies of the night are ferocious" is well-formed and capable of being true, whereas "Runs are ferocious" and "And is/are ferocious" are mere syntactic nonsense.)

Husserl's syntactic test distinguishes categories by determining when the substitution of one term for another leads to ungrammaticality. However, grammaticality is a property of sentences in natural languages, and so one should worry about whether the categories so distinguished represent any more than systematic features of the way we talk and write. In this way, grammaticality can look to be a contingent and somewhat arbitrary matter, tied mainly to the peculiar way that each natural language has evolved. So, at best, grammaticality will be loosely connected with the way the world is, and even less connected with the way it must be. The resulting "categories" distinguished by Husserl's syntactic test may therefore not be of much metaphysical significance. Husserl thus faces the same objection raised against the conceptualist interpretation of Aristotle's theory of categories. Why think that even relatively systematic features of *our* way of thinking or talking correspond to the fundamental divisions of reality? Here Kant's "anthropocentric turn"—the placement of the structure of our sensibility and intellect at the center of philosophical speculation—lives on.

In the same vein, the influential Oxford philosopher Gilbert Ryle broadened Husserl's syntactic test beyond the scope of grammar to include absurdities of all sorts—whether syntactic or not—as the indicators of when the concepts involved are in different categories. Ryle takes there to be a difference in category between the concept of an animal and the concept of a day of the week, on the grounds that while "Fido is sleeping" makes perfect sense, "Saturday is sleeping" is an absurdity. "She came home in a flood of tears and a sedan-chair," similarly shows a difference in categories between "flood of tears" and "sedan-chair" because although there is nothing syntactically wrong with the sentence, it is nevertheless absurd.

Ryle's approach is only relevant to metaphysics if we attribute metaphysical significance to such ordinary intuitions about when a sentence is absurd or not. However, these intuitions arise from nothing deeper than the historically accidental ways that we use words. Only if our ordinary intuitions are not accidents of usage but instead indicate the way things are in the world can our sense of the awkwardness of sentences like "I have a table and a mind," have any relevance to the question of whether a Cartesian Dualism of body and mind is tenable.

Roderick Chisholm was one of the first twentieth-century thinkers to break with these linguistic and conceptual approaches to category theorizing. Returning to the Aristotelian tradition, he presents his own version of category theory as an account of the most fundamental kinds of entities that there are. Starting with a highest and most inclusive genus of Entities, Chisholm introduces Contingent Entities and Necessary Entities as its immediate sub-categories. The category of Contingent Entities then divides into the categories of States and Individuals, and the category of Necessary entities divides into the sub-categories of States and Non-states. Chisholm's division of categories then continues on in the same fashion and is supposed to encompass all of the allegedly fundamental kinds of entities.

Encouraged by Chisholm's attempts to limn the basic structure of reality, others have also returned to the enterprise of category theory as basic metaphysical classification. This looks somewhat promising as a general approach, especially when it does not allow ordinary language and our natural ways of conceptualizing to distort the categorical systems it spawns. There are, however, a number of immediate worries one might have about the return to the metaphysical in category theory, worries that clearly emerge even on this very brief characterization of Chisholm's approach.

To highlight these concerns, let us focus on Chisholm's system. First, it is natural to ask after the nature of the categories being divided. Presumably they are super-ordinate kinds of entities; but then one would have expected a category of kinds itself to be ontologically fundamental, and so represented explicitly in Chisholm's system. Second, is it so clear that necessary and contingent are the fundamental sub-categories of the most inclusive genus, especially once one takes the plausible view that what is necessary is derived from prior facts about the patterns of ontological dependence among things? Third, why should it be that a single notion, the notion of states, has nevertheless two distinct positions in the tree, and so therefore turns out to be a sub-category of two distinct genera? Fourth, we have surely failed to offer an illuminating categorical division if we have no better name for that division than that between states and non-states. What is it that unifies the non-states in such a way that they should be set off as making up a single kind that is different from the states? Fifth and finally, category theories such as Chisholm's seem too relative to the particular philosopher's preferred way of parsing reality. That is, it may be objected to Chisholm that although his way of parsing reality may be adequate for his purposes, there is nothing in his work that shows why his scheme of categories is the unique, privileged structure that captures reality. It will be useful to keep these objections in mind as we explicate the new system of categories below.

As the foregoing indicates, the recent return to category theorizing as pure metaphysics, though promising and encouraging, has been largely unsatisfactory. This is in part because of certain mistakes that we described earlier. What follows are some constraints on theorizing about categories. These constraints, for the most part, will be motivated by our later discussion.

> *Ontologically, categories are eide, i.e. preeminent particulars that are ontologically more fundamental than the ordinary particulars around us.*
>
> *The six causes, understood as explanatory relations, are fundamental to what it is to be a particular, and hence apply in principle to all particulars.*
>
> Together, these two constraints imply that the six causes apply to the eide.
>
> *The fundamental relations among the eide are themselves eide.*
>
> Together these three constraints imply that the six causes are themselves eide.
>
> *The eide are not a mere system of metaphysical classification, however fundamental; they are the Attributes of God, and this in its turn accounts for their explanatory priority when it comes to the ordinary particulars that "fall under" them.*

A corollary of the above is that the Attributes of God are fundamentally organized by the six causal relations.

The following conditions on eide have also emerged from our previous discussion.

Because the categories are the Attributes of God, and because those Attributes are eide, there must be an eidos of eide. (We will call this eidos The Eide (The Attributes of God)).

No eidos can appear in two places in the pattern of ontological dependence that unifies the eide. (For example, the eidos of states, if it is an eidos, cannot be an immediate sub-eidos of two different eide.)

No eidos can be characterized as the mere negation of some other eidos. (For example, the category of non-states, as it functions in Chisholm's theory is not a useful eidos.)

The theory to be developed below will be in conformity with these constraints and conditions. Before developing that theory in detail it will be necessary to examine Plato's eide once again, in order to clear out of the way the common misconstruals of eide as universals or as kinds.

(1.3) Plato's Eide Revisited

Plato's theory of the eide undergoes considerable modification through his middle and late periods. What stays in place is the idea that the eide are not in space and time, and that they are ontologically prior to the ordinary spatiotemporal particulars that fall under and imitate them. Ordinary spatiotemporal particulars, for example Aristotle's individual man and horse, owe their reality to the eide that they imitate.

Plato, or rather Plato's Socrates, is also keen to make the eide do a certain kind of semantic work, namely to account for what we might mean when we use a predicate "F" to characterize some spatiotemporal particulars. On this theory of predication, if what we mean when we say that both Alexander and Bucephalus are ferocious is true then the spatiotemporal particulars Alexander and Bucephalus instantiate the universal ferocity. Universals, i.e. entities that stand in the relation of instantiation to ordinary particulars, thus make their first appearance in an ontological account of predication. And it seems clear that Socrates, at some points in Plato's dialogues, treats the eide as universals.

To further understand the idea of universals it helps to begin with what David Armstrong once described as the most obvious datum for any theory of language, and indeed for any theory of the reality it describes, namely the facts of sameness and difference. Things have properties in common, and these common properties ground the mutual similarities and differences among things, similarities and differences in virtue of which things are classified together in various natural kinds. On this picture, having properties can seem more basic than membership in a kind, for it is the sharing of properties that makes for inclusion in a given kind. Though one may be able to articulate another theory—namely that it is the preeminent particulars or eide that an individual resembles or imitates that determines what properties the individual has—the property-first theory appears to be bolstered by the seemingly fundamental role that properties play in making certain predications true or false. So it seems obvious that

> "Bucephalus is chestnut in color" is true if and only if Bucephalus has the property of being chestnut in color.

More generally,

> "An F is G" if and only if the F in question has the property of being G.

And most schematically,

> Something satisfies the predicate "is G" if and only if it has the property of being G.

The property-first theory treats the right-hand sides of these biconditionals as truly explanatory of the left-hand sides. That is, it treats having a property as the explanation of satisfying a predicate. Here is the fundamental idea of properties as universals: they are "predicables," that is, the things the having of which grounds the truth of this or that predication. One can then go on to ask whether these universals are *in rebus*, as Aristotle held, or transcendent, as Plato insists in his early dialogues. But the common doctrine is that universals ground predication; it is by having or instantiating this or that universal that you come to satisfy this or that predicate.

Otherwise, it can seem as if predication, and hence truth, floats free from the world; it can seem as if the truth of sentences is not determined by the way reality is. Without the instantiation of universals, how do we explain the making of sentences true by the way reality happens to be? How does truth arise if it does not arise from the instantiation of universals by particulars, understood as the meanings of the predicates that figure in the relevant sentences? What other structure in the very nature of being could explain the actual distribution of truth among sentences? The later Plato argues that it is the imitation of the eide that fundamentally explains the distribution of truth among sentences. But first we must see why he comes to reject the conception of the eide as universals instantiated by particulars.

The first thing to notice is that there is, perhaps, no need for an ontological account of predication; all we may need to say is that predicates are meaningful, and as a result are satisfied by some items and not others. We may not need a special category of things, namely universals, to be the meanings of predicates.

Most strikingly, in his later dialogue the *Parmenides,* Plato himself brings a famous regress argument against just such a semantic use of the eide, namely the so-called "The Third Man Argument." The conclusion to this argument states: "no longer will each of the eide be one, but unlimited in multitude." The argument properly addresses a particular use of the eide, namely, the semantic use of providing a general explanation of what makes a predication true of a particular.

A premise of Plato's discussion in the *Parmenides* is the self-predication thesis, namely that the Beautiful is beautiful, that the Good is good, and in general that the eidos F is F. A second premise is that an eidos is a one over many: that it is a universal instantiated by many particulars and so is defined by this potential pattern of instantiation. Begin, now, with the eidos Man, defined by its potential pattern of instantiation by all the particular men there have ever been. But there must be another eidos, the "Second Man" defined by a different pattern of instantiation, and which includes all the men there have ever been and the eidos Man, which by the self-predication thesis, is a man. But then there must be a Third eidos Man, which is defined by the pattern of instantiation, and which includes all the men there have ever been, the eidos Man, and the Second Man, i.e. the Second eidos Man. And so on *ad infinitum.*

Some try to avoid the infinite regress by rejecting the self-predication thesis, and so deny that the eidos F is itself F. But this does not get to the heart of the matter, for independently of the self-predication thesis we can get an infinite regress going just from the idea that the instantiation of a universal by a particular is necessary for a predicate to apply to a particular. For consider that if

> "Alexander is a man" is true just in case Alexander instantiates the universal that is Man,

then by parity of predicational structure,

> "Alexander instantiates the universal Man" is true just in case Alexander instantiates the universal that is Instantiates The Universal Man,

and so on, leading to an infinite regress of universals. The infinite regress shows that the appeal to the instantiation of universals by particulars never really gets off the ground as an account of the truth of sentences containing predications. One must traverse an infinite number of steps in order to specify the infinitely complex fact of instantiation that makes a predication truly hold of an individual. Surely we are not presenting ourselves as having cognized any such infinite fact when we assert that Alexander is a man or that Bucephalus is chestnut in color.

The obvious lesson to draw from this is that the very idea of universals defined by their capacity to be instantiated by particulars is a bad idea. Socrates was wrong to try to press the eide into the role of universals understood as the semantic correlates of predicates.

The eide are not universals but particulars; they are not instantiated but imitated. To be sure, the eide are ontologically *preeminent* particulars; they are not in space and time, and they are ontologically prior to the ordinary spatiotemporal particulars that fall under and imitate them.

Before resting with this characterization of the eide, there is another interpretation of the eide, and by implication of the categories, that also needs to be set aside. This is the conception of eide as superordinate *kinds* that are exemplified by ordinary spatiotemporal particulars. The most developed theory of kinds and their examples is found in Nicholas Wolterstorff's *On Universals: An Essay in Ontology*, where Wolterstorff proposes that a general theory of kinds, understood as collections of the so-called cases that exemplify them, can substitute for a theory of universals. Wolterstorff's book consists of a number of compelling arguments for the following conclusions:

> Everything whatsoever is one or the other, kind or example, and that necessarily. For all predicables are kinds; all cases are examples of those special kinds,

> which are predicables; and every instance will at least be an example of the kind, Instance of a Property. The kind/example structure is a structure, which nothing does or can fall outside of, which everything falls within.
>
> That reality should be a structure of kinds and examples, it is necessary that these be related, examples to kinds, kinds to examples. And for this, it is in turn necessary that there be a relation in which they can stand to each other, the relation of being an example of. But this demand is compatible with everything's being an example or a kind; since relations, being predicables, are themselves kinds.
>
> What is also necessary, if reality is to be a structure of kinds and examples, is that there should be relationships between examples and kinds—things actually standing to kinds in the relation of being examples of them. And this demand is also compatible with the claim that everything is a kind or an example. For relationships, being cases, are themselves examples of those kinds, which are predicables.

Wolterstorff is here making the claim that the structure of kinds and their examples is exhaustive in the sense that everything is either a kind or an example. This claim is interesting, but it should be noted that it raises a typical self-application problem with which philosophers should be familiar. Consider the structure itself—the whole ostensibly made up of kinds and examples within which everything falls. Is this whole structure a kind or is it an example? Or is it, contrary to Wolterstorff's fundamental dichotomy, some third sort of thing, neither a kind nor an example?

Wolterstorff's theory is partly conditioned by his desire to make kinds and their exemplifications do the semantic work done poorly by universals and their instantiations. So Wolterstorff arrives at the view that predicates are associated with specific kinds of cases or exemplifications. The predicate "is red" is associated with the kind made up of all the particular examples of red things. So the meaning-giving truth conditions of a predication like “Bucephalus is chestnut in color” are given as follows:

> “Bucephalus is chestnut in color” is true if and only if Bucephalus is an example of the kind associated with the predicate “chestnut in color.”

However, this semantic claim also leads to an infinite regress, which is as troubling as the corresponding regress that arises for universals understood as predicables. For consider the sentence “Bucephalus is an example of the kind associated with the predicate ‘chestnut in color’.” The sentence predicates some complex thing of Bucephalus. If we apply Wolterstorff’s theory to this predication we arrive at the following truth condition:

> “Bucephalus is an example of the kind associated with the predicate ‘chestnut in color’,” is true if and only if Bucephalus is an example of the kind associated with the predicate “is an example of the kind associated with the predicate ‘chestnut in color’.”

And obviously, once again we can repeat this process *ad infinitum*. That is, associated with any simple predication like “Bucephalus is chestnut in color” is an infinite pattern of exemplification of distinct kinds by distinct examples or “cases.”

Just as the appeal to universals and instantiation fails to account for the semantics of predication, but instead leads to an infinite regress, so also does the parallel appeal to kinds and exemplification. So we should also reject kinds and exemplification as the basic explanatory structure behind predication.

There is thus no more reason to treat the eide as kinds than to treat them as universals. And the eide themselves are not fitted to play the semantic role of explaining how predication works. Perhaps nothing plays that role; all we need to say is that predicates are meaningful, and that as a result they are satisfied by some items and not others under certain specifiable conditions. As Donald Davidson claimed, following the work of Alfred Tarski, if we are given meaningful predicates then we can make do with trivial satisfaction clauses such as

> Something satisfies the predicate "is chestnut in color" if and only if it is chestnut in color.

And then we can go on to define truth for simple subject-predicate sentences as follows:

> A sentence of the form "a is F" is true if and only if a satisfies the predicate "is F."

Once we do this, we have answered the question of why it is that truth is distributed over sentences in the way that it is. For example, if it is a fact that Bucephalus is chestnut in color then it just follows that Bucephalus satisfies the predicate "is chestnut in color," and from this it follows that the sentence "Bucephalus is chestnut in color" is true. Given Tarski's definition of truth in terms of the satisfaction of predicates, there is no need to press properties or kinds into the semantic role of contributing to the general explanation of the truth of sentences.

This means that there is no semantic reason to regard the eide either as universals or as kinds. Instead they are ontologically preeminent particulars, they are not in space and time, and they are ontologically prior to the ordinary spatiotemporal particulars that fall under and imitate them. Facts like the fact that Bucephalus is chestnut in color may ultimately be explained in terms of patterns of imitation of the eide; but the explanation here is not semantic but metaphysical, and it works via certain patterns of ontological dependence.

One sign that Plato himself comes to reject the idea that the eide should figure in the general semantic account of predication is the mockery directed towards Socrates in the *Parmenides* over the "ignoble eide": the eide of hair, mud, dirt, and the bed. The case for the postulation of these eide is merely semantic, that is, it arises simply from the existence of the corresponding predicates or general terms "hair," "mud," "dirt," and "bed." Clearly, a tension has been exposed between two different roles of the eide; namely as (i) fundamental constituents of the real, and the very different role of their figuring as (ii) the *aitia* or explanatory ground of any ordinary predication. At the end of the dialogue, Socrates seems to emerge with the view that only such eide as the just, the beautiful, and the good could be basic constituents of reality. This means that in the *Parmenides*, specifically by way of the Third Man and Ignoble Forms arguments, the semantic role of eide as the general explanation for predication is being rejected. An eidos is to be posited, not merely because a predicate exists, but because the positing of this or that specific eidos plays an indispensable role in our explanation of the structure of reality. The eide will therefore be sparser than the array yielded by an uncritical look at our meaningful predicates. Indeed, in principle, eide are to be established on a basis that may not directly involve considerations of language at all.

Despite this advance on the part of Plato in the *Parmenides*, we are still left without any good account either of how the eide are supposed to hang together or of the nature of their interrelations. Although nowhere explicitly spelled out in Plato's dialogues, there does famously arise an unwritten doctrine according to which the eide stand in a hierarchy with the eidos that is the Good at the pinnacle. Even though Plato never explains the nature of these hierarchical interrelations, in the centuries of theorizing about eide and categories that follow, the implication that they stand in a hierarchical structure evolves from this vague hint into a principle of supreme importance, especially for philosophers such as Hegel.

Although Hegel seems to have been the first philosopher to recognize the need for a method of systematically generating and relating the categories, it was Plotinus, the third-century exponent of "Neo-Platonism," who first took up the challenge of providing an account of the unity of the eide. For Plotinus, the eide are the "ideas" of an unchanging *nous* (cosmic intelligence), which in addition Plotinus identifies with being itself. This nous is not to be distinguished from what it finds intelligible (*theoria*), namely the eide themselves. The eide are the most basic reasons (*logoi spermatikoi*) for things being the way they are. On his view, ordinary sensible objects imperfectly—very imperfectly—imitate the eide.

In contemporary philosophy, Plotinus's notion of an unchanging nous or cosmic intelligence is considered problematic for a number of reasons. Nonetheless, the system to be developed below has a great deal in common with that of Plotinus, although it will shed Plotinus's "idealist" premise that everything is literally constituted by ideas or thoughts. What there remains of Plotinus's approach is the ambition to provide a system of the eide that is self-explaining. It is this self-explaining intelligibility that invites the view that the structure of the eide is a kind of preeminent "intelligence," even though it performs no acts of thought in time.

By way of contrast with Plotinus's picture of the eide as "ideas" in the mind of an unchanging *nous* or cosmic intelligence, there is another model for the unity of the eide, one that represents them as the most fundamental aspects of reality. This is the model that comes from one of our constraints on a theory of eide, here repeated:

> *The eide are not a mere system of metaphysical classification, however fundamental; they are the Attributes of God, and this in its turn accounts for their explanatory priority when it comes to the ordinary particulars that "fall under" them.*

Given this constraint, the eide are of fundamental explanatory significance just *because* they are the Attributes of God. The natures of ordinary spatiotemporal particulars are fully understood only when they are seen as falling under and imitating these Attributes. The Attributes of God are ontologically dependent on God, and spatiotemporal particulars are ontologically dependent on the Attributes of God, and hence on God himself.

Because Spinoza took us to know of only two Attributes of God, thought and extension, he faces no serious question of the structure that holds among the Attributes or categories themselves. He leaves his discussion of this to the positing of a certain sort of "mirroring" of the modes under the Attribute of extension by the corresponding modes under the Attribute of thought. So Spinoza is silent about the sequence of emanation of the Attributes; he speaks as if extension and thought are on a par metaphysically, with neither Attribute (or category) being ontologically dependent on the other.

Contrast Hegel, who sees the categories as themselves standing in relations of ontological dependence to each other, forming a kind of progression or sequence of emanation from the first category Being, by way of a process that he characterizes as a kind of logical process. There is a temptation to reject the Hegelian conception of the sequential emanation of the categories on the grounds that a "logical *process*" is a contradiction in terms. Logic involves atemporal relations of implication, whereas processes are changes in time. But one way to associate content with the idea of a *logical process* is to notice that idioms of process are already applied to atemporal mathematical objects. Mathematical objects are described as "constructed" from one another or as "generated" from others by certain mathematical operations. It is just such patterns of generation holding among the infinitude of the Attributes of God, a pattern of "sequential emanation" if you will, which the system set out below clarifies.

How can there be an *atemporal* pattern of sequential emanation? Perhaps the puzzlement here has its source in a systematic confusion of temporal processes with logical ones. Consider an ordinary inference, such as:

All men are mortal
Socrates is a man
Therefore: Socrates is mortal.

Viewed one way this is an inference that, like all inferences, we could perform in thought, in real time. We *first* grasp the premises, and *then* when we understand what follows from those premises, we grasp a conclusion. But although this inference, which essentially involves grasping or appreciating the relation of logical implication between premises and conclusion, is carried out over time, there is an important sense in which temporality is irrelevant to the nature of the implication so grasped. We infer over time, but the implication we grasp when we correctly infer something itself holds atemporally. It is not so much that the implication is outside of time—although saying this is not to say something false—as that the temporal processes themselves are altogether irrelevant to the nature of the implication. Still, the atemporal implication is directional; the premises yield the conclusion, and the conclusion does not yield or determine the premises.

A terminological distinction may be of use here. We can distinguish "temporal objects" from "atemporal objects"; and we can say that although the inferences we carry out are temporal objects (they are psychological processes that take place in time), the implications themselves, although they can naturally also be described as processes (because they involve antecedent steps and consequent steps), are not naturally described as processes that take place in time. For example, the implications in a piece of reasoning hold whether anyone thinks of them or not. It is all too easy to confuse temporal processes of reasoning with the atemporal implications that correspond to these processes.

A way to keep the notions separate is to realize that they have different properties. The atemporal implications have purely logical properties: They are, for example, either valid or invalid. The propositions (understood timelessly) either follow from or fail to follow from the assumptions. (Notice that although the idiom "follow from" can be understood temporally, it should not be so understood in logical contexts.) The temporal processes of inferring, on the other hand, are justified in terms of whether they correspond to these atemporal implications or not.

When it comes to the sequential emanation of the Attributes of God, the intended analogy is not with inferential steps, but with logical steps, steps that involve the atemporal implications of the Attributes that have already come "before" in the sequence. More exactly, the steps in the sequential emanation are steps of immediate ontological dependence, in a sense that will become clear.

Even if the categories understood as Attributes of God are subject to this sequential emanation, how are ordinary particulars such as Aristotle's individual man and horse to be located within this picture of the totality of reality and how it hangs together? This question becomes all the more urgent once God's Attributes are no longer seen as universals instantiated by ordinary particulars.

On our view, some of Aristotle's particulars are no longer to be taken as real. So no relationship to the eide need be described. However, this is not true of all of the particulars that are not eide. In those cases, two relations directly connect the Attributes of God, understood as eide, with non-eidetic particulars. Such particulars imitate the Attributes and those particulars are also parts of some of the Attributes. In Plato's final development of the theory of the eide, ordinary particulars are said to imitate the eide. We take both these notions—imitations and parthood—with respect to the eide and with respect to other particulars very seriously.

Plato's notion of imitation has at least four elements. First, ordinary particulars in some sense resemble the eide, but second they *imperfectly* resemble the eide that they resemble, for otherwise they would be one and the same as the eide they resemble. This second point can be seen from the fact that eide are like universals or properties in at least this respect: an eidos cannot be perfectly duplicated because anything that perfectly resembles an eidos is identically one and the same as that eidos. If Courage *were* an eidos (which it probably is not), there could not be another second eidos exactly like it in all respects. This feature of the eide, namely that they cannot be duplicated, marks off the eide from ordinary particulars, which can at least in principle be duplicated or perfectly resembled. Suppose the world were cyclical, as in Nietzsche's myth of the eternal return of all that has happened, over and over again, through an indefinite number of cycles. Then in the next cycle a man exactly like Alexander in all respects, differing only in his origin, and hence in his identity from Alexander, would come into being and do just the sort of things that Alexander himself did. He would even be called "Alexander". But for all that he would be merely a perfect duplicate of Alexander; he would not be identically one and the same person as that man who died long ago in Asia Minor. Yet it would be one and the same eidos, Courage, which both Alexander and this second "Alexander" resembled and imitated. Whereas ordinary particulars are susceptible to perfect resemblance at least in principle, the eide are not. This is what lies behind the second point; the particulars that imitate an eidos resemble it, but can do so only imperfectly.

The third feature of the relation of imitation holding between ordinary particulars and the preeminent particulars that are the eide is that ordinary particulars have certain characteristics in virtue of imitating their respective eide. If Courage were an eidos, Alexander would be courageous in virtue of resembling that eidos to some extent; indeed, the greater the resemblance the more courage would be found in Alexander. But precisely because ordinary particulars cannot fully resemble the eide they imitate, it follows that—and this is the fourth feature of imitation—ordinary particulars are in their natures imperfect; they are "not fully what they are" as Plato puts it. In this way they call out for an explanation in terms of something else; in the end they can only be understood in relation to the eide, that is, in relation to the Attributes of God.

We are very sympathetic to the Platonic view of imitation that we have just described. We should add that, in the metaphysical system we develop later in this book, imitation—understood largely as Plato understands it—plays a large role. This is because it is deeply involved with teleology, and the latter is as present among God, eide, and non-eidetic particulars as much as efficient causation is present. Specifically, as will be made clear in Part 3, not only do non-eidetic particulars efficiently causally affect one another, but they imitate one another as well. Just as two particulars can efficiently cause a result in a third particular (the way that two billiard balls striking a third one generate a specific trajectory and momentum in the third ball), so too can a particular imitate more than one particular, although it will do so in different ways. When particulars imitate an eidos, they do so in a generic fashion: the character that a group of particulars share can be due in part to how they imitate a particular eidos. However, the individuals in that group may differ from one another because of how they also imitate different non-eidetic particulars. An important example of this phenomenon will emerge in Part 3.

As well as emphasizing that some particulars imitate the eide, Plato also allows that some particulars can be understood as parts of the eide. Thus in the *Parmenides*, Socrates and Parmenides discuss the analogy of the sail and its parts, and how this analogy might bear on the relation between an eidos and a particular. As the *Parmenides* itself illustrates, there is some delicacy required in the use of the part/whole relation to characterize just how non-eidetic particulars stand to the eide.

On an ordinary naïve understanding of the part/whole relation, the whole is made out of the parts, and is nothing over and above the parts taken collectively or together. But this would make the whole ontologically dependent on the parts out of which it is made. So if we model the relation between even some eide and some non-eidetic particulars as that of part to whole, at least on a naïve conception of that relation, then the eide are ontologically dependent on non-eidetic particulars, which is the reverse of what we want.

What is needed is a different conception of the part/whole relation, a conception on which some wholes are ontologically prior to their parts, so that those parts in fact emerge out of the whole. Imagine, for example, an ocean made of continuous matter. It can then be divided into various seas by relatively arbitrary divisions, say ones imposed at a maritime convention. Then these subdivisions that are the seas can be understood to be ontologically dependent sub-regions of the ocean, regions that emerge from the ocean by way of conventional sub-divisions. This is the appropriate part/whole model for the relation between an eidos and its parts, and it suggests that the eide that have parts had better be matter-like in some obvious way.

If some of the eide are matter-like then the general thesis that the eide are particulars, and as such susceptible to analysis in terms of the six causes, suggests that other eide are form-like. This implication will indeed be upheld in what follows, and indeed, it will prove crucial to the articulation of the sequence of emanation of the Attributes of God. However, before this sequence of emanation of eide is set out in detail, an account must be given of how we could possibly arrive at knowledge, or at the very least reasonable opinion, concerning such matters. Is there a special arcane method for divining the structure of the non-spatiotemporal realm of the eide? Or is it that this realm opens itself up to the already familiar epistemological methods that are employed in the understanding of other domains?

(1.4) The Epistemology of the Eide and the Method of Metaphysics

Hegel famously claims to deduce the true categorical structure by way of his quasi-dynamic "dialectical" process. His categories come in opposing pairs, as theses and antitheses, and these pairs generate further categories by a quasi-logical process he calls "synthesis." Despite drawing on the vocabulary of the logic of his time, and despite his claim to have discovered the distinctive logic of the categories, Hegel clearly defends substantial propositions that lie outside what we now understand to be the province of logic. Indeed—even in his own terms—he sometimes seems so unclear about the proper demarcation of philosophy as a subject-matter that he stands prepared to deduce features of the empirical structure of the world, as when he ventures *a priori* considerations in favor of the claim that the number of planets has to be seven. Setting aside such flights of philosophical fancy, it is still the case that none of Hegel's claims about the structure of the categories can be *deduced* from truly logical principles such as the Law of Non-Contradiction or the Law of Excluded Middle.

The theory of the eide, if it is to be at all interesting, must go beyond anything determined by the deductive consequences of logic and uncontroversial conventional definitions, even definitions of the metaphysical vocabulary. Even if deduction is supplemented with ordinary *inductive inferences* on the basis of specific empirical observations concerning changing concrete objects, the theory of the eide will remain massively underdetermined.

Yet there remains a method for theorizing about the eide and the structuring relations among them, a method which includes both induction and deduction, but that goes beyond them. We might call this method "eduction." Eduction is found in a primitive form in the detective's method of using whatever relevant hints, evidence, and considerations that happen to be at hand in order to arrive at a tentative explanatory hypothesis about the problem area in question, a hypothesis that is then subjected to further testing. So, although Sir Arthur Conan Doyle has Sherlock Holmes speak of his own "deductive" prowess, Holmes' method obviously involves much more than deduction in the logical sense. Holmes' problem is to determine the perpetrator of the crime. In doing this, he employs whatever relevant hints, evidence, and considerations he finds in order to arrive at an adequate explanatory grasp of the crime: its means, motive and opportunity, and eventually its perpetrator. He forms hypotheses about these elements of the problem situation and then tests them by deducing their consequences.

So described, eduction involves at least three aspects: First, inference to the best explanation of the data at hand, which seems to be what Charles Sanders Pierce described as “abduction.” Second, the attempt to derive further consequences by deduction from our explanatory hypothesis. Third, additional inductive testing or verification against the data. Eduction is therefore essentially an open-ended process of hypothesizing and testing. It is not a process that will produce the finality and certainty of logic or mathematics. There will always be room for further refinement.

However, there is more to eduction—specifically, there is more to say about its abductive part—than what has been said so far. Sherlock Holmes’s methods certainly illustrate a part of what is involved in eduction, but his methods do not exhaust the method of eduction. The reason is that the conclusions at which Holmes arrives (for example, “the deadly snake crawled down the bell-rope”) do not go beyond our already established ways of describing the events and objects being studied. But in science and metaphysics this is not so. In physics, for example, what often happens is that a theory is established on the basis of entirely new ways of describing what there is, or by the introduction of wholly new sorts of entities. Descriptions of new particles, with novel properties not had by familiar things, are routine. This is the fourth aspect of eduction.

Now, although “observational consequences” are paramount to evaluating scientific theories, they massively underdetermine which observationally adequate theory should be adopted. Certain internal theoretical virtues are crucially relevant to deciding between what would otherwise be equally observationally adequate theories. If it is to be accepted as a working hypothesis, a scientific theory must exhibit a satisfying internal coherence, so that it illuminates the problem area for the existing experts. Often mathematical properties of symmetry and elegance play a role, but that hardly exhausts the internal virtues that practitioners in a field rely on to reject otherwise observationally adequate theories. Indeed, it is often difficult for a scientist to verbally articulate those aesthetic virtues a theory must have if it is to succeed in illuminating a problem area for the existing experts. One useful attempt in this direction is made by the physicist Steven Weinberg (in his book *Dreams of a Final Theory*), who tries to articulate some of the relevant internal aesthetic virtues and the powerful role they play in theory selection when it comes to the physical sciences.

The problem area in which the theory of eide arises is vast and abstract. One aims to give it an explanatory organization by drawing on a variety of hints, evidence and considerations in order to develop general principles. This means that, as with the more mundane results of ordinary detection, no theory of eide can lay claim to the certainty of logic; crucial to philosophical thinking, to its history and development, are the informed epistemic decisions that competent theorists make. Precisely because studies in the theory of eide involve substantive claims about an abstract structure that can only be partly discerned, philosophy in general and a theory of eide in particular can only have the status of a body of internally virtuous explanatory proposals that remain open to continual refinement and improvement.

This bears directly on the views of certain linguistic philosophers, particularly the Logical Empiricists, in the middle part of the last century. These philosophers had a theory of truth and meaning that left no place in philosophy for a method like eduction. This is because they believed in a sharp distinction between sentences true solely in virtue of the meanings—or definitions—of words, so-called “analytic truths,” and those sentences true in virtue of how the things those sentences are about actually stand, so-called “synthetic truths.” Logical Empiricists took the analytic truths to follow deductively from nominal definitions that capture the meanings of words. By contrast, sense perception and induction were taken to be the (only) routes to the discovery of synthetic truths.

Because of these views about language, the Logical Empiricists concluded that philosophical claims, if true at all, had to be analytic truths—true in virtue of the meanings of words. So the whole domain of philosophy in general, and of metaphysics in particular, was exhausted by logic and the correct definitions of the central philosophical vocabulary. Therefore, on their view, different metaphysical systems could be no more than disguised proposals to use words in certain ways.

Metaphysical truths could not represent synthetic truths about a changeless reality. So too, the practice of metaphysics could only achieve its purported apodictic certainty by actually being something close to vacuous, namely by being the logical exploration of relatively arbitrary nominal definitions.

A method like eduction, however, involving (i) inference to the best explanation of the data at hand, combined with (ii) attempts to derive further consequences of explanatory hypotheses for further testing and verification of our initial explanations, and (iii) the evaluation of the internal virtues of such explanatory hypotheses, such as their compatibility and coherence with our other background assumptions, their aesthetic viability and explanatory spread, would thus be an epistemic process that is entirely misplaced in metaphysics. Such a method—on the Logical Empiricist view—could only apply to the investigation of empirical truths.

We can now see clearly what is wrong with this twentieth century criticism of metaphysics. It is rooted in a profoundly false theory of truth and meaning. There can indeed be synthetic metaphysical truths, substantive truths about reality, which are true thanks to the essential natures of the things under discussion. So, metaphysics is obviously not the logical exploration of relatively arbitrary nominal definitions.

It must be stressed, however, that *metaphysics cannot aspire to the certainty of logic or of mathematics*. It must be content at each point in its history to educe what appear to be the best explanations available. And this is the character of the present enterprise. It does not put forward its claims as apodictic; they are instead challenges to produce better explanations of the data that constitute the domain of metaphysics. This is nowhere better illustrated than in the theory of the eide.

These days, there are many philosophers who avow this kind of fallibilism about their philosophical theories. Nevertheless there is an expository practice left over from the days of Logical Empiricism that is still widely used by philosophers (although not so common in the other fields of knowledge). This is the attempt to provide precise definitions of concepts—necessary and sufficient conditions—that are to govern a field of study. In a context where the aim is a form of apodictic knowledge, such definitions are worthy goals. But in a context, like this one, where all results must be taken to be provisional, we should instead be willing to utilize working conceptions of the relevant subject matter that fall short of precise necessary and sufficient conditions but are nonetheless illuminating because of how they resonate with our present and always fallible understanding of the domain.

That is, since metaphysics cannot aspire to the certainty of logic or mathematics, it is useless to lay down strict, unchanging definitions of the philosophical concepts in play. For just as in the empirical sciences, where concepts get modified along with empirical theories, so also, as philosophy develops by way of better and better eductions, central philosophical concepts must be modified. Concepts are themselves tightly wound-up little theories, which must evolve as the larger theoretical framework, which includes them, evolves. The present work provides many examples of this, perhaps none more striking than the concept of an eidos.

In the physical sciences, the key to ontological innovation is the application of mathematics. One might, therefore, benefit from considering how mathematics is used for this purpose, and thus extract the lesson so that it can be successfully applied in metaphysics. How is mathematics, in physics especially, a useful tool for constructing alternative taxonomies? The usefulness of mathematics comes from treating an applicable branch of mathematics, a mathematical system, as a formally defined collection of objects and properties of those objects. In this way, pure mathematicians can speak of numbers, functions, Hilbert spaces, spinors, and so on. This practice also allows formal derivations of the properties of these objects. From the point of view of the pure mathematician—who does not care about applications—such mathematical systems may be taken as corresponding to empirical objects in any number of ways.

As an example, consider geometry, and the objects posited in that subject—points, lines, and especially, plane figures. Now consider the application of such a piece of pure mathematics to the chalk markings on a blackboard. As a result of this application, certain marks on the blackboard are singled out and naturally grouped together—triangles, squares, and so on. Others are ignored. Before the application is in place, one might imagine that any marks at all could have been grouped together in any way.

Imagine, for example, that the chalk marks are in different colors—we might, therefore, have grouped the red ones together, and separate from the blue ones. This is not a grouping that the application of geometry makes salient. This application of geometry insists that certain items are to be significantly grouped together on the basis of shape and area alone, while others are not.

Applications of geometry are not the best for showing how the application of mathematics enables creative developments in ontology if only because, as the history of Euclidean geometry makes clear, we already have in place empirical descriptions of objects ("is squarish," "is circular") that prove to be mathematically tractable. In fact, geometrical concepts arose by a process of abstraction from these already-in-place empirical concepts.

A great deal of successful contemporary mathematics did not arise in this way. Complex analysis is an example of a branch of mathematics that was invented not by thinking of empirical applications, but by refining pure mathematical concepts. The subsequent applications of complex analysis are successful because they allow a taxonomy to be imposed on a phenomenon, dividing it into kinds of things and processes that we otherwise would have no way of speaking about. In particular, the taxonomy imposed on a phenomenon by a mathematical system is one we understand only through the distinctions made in that system. We have no independent access to a way of cataloguing the objects being studied. This is especially the case with the study of, say, subatomic particles. This is a point that is generally true of "theoretical" objects—and this is why such objects are described as theoretical in the first place. Our ways of classifying them arise from the theories we have about them, and commonsense ways of classifying objects simply do not come into the picture.

Simpler representational objects, such as diagrams, share this useful property of mathematical systems. In general, a diagram should be seen as a collection of physical symbols—lines, arrows, enclosed areas, colored expanses, and so on—where certain relationships among these symbols are stipulated to be significant and others are not. Such a diagram not only can be formally defined, its properties can also be formally described; the diagram can be treated as something amenable to proof.

The result, in this case, is a taxonomy waiting for content. Howsoever we apply such a diagram, it will supply an internally determined way of speaking about that to which it is applied. More importantly, it will supply kinds of objects, and relations among those objects, that—depending on exactly how it is applied—will prove to be a fresh reconstitution. A map is certainly a diagram in this sense. Maps, however, are traditionally designed only to describe the properties of a landscape that we can already describe in ordinary language; they are not supposed to be ontologically creative. As a result, the formal properties of maps cannot be used to deduce generalizations that we do not already know: all the information we can extract from a map is information that has been deliberately put into it.

This is not true of the application of mathematics to physical domains of study. In the applications of mathematics that we alluded to above, correspondence between formal properties of the mathematical objects and the empirical properties of the things to which such mathematical objects are taken to correspond *does* lead to valuable predictions and generalizations which cannot be expressed in the nomenclature to which ordinary language is restricted.

More generally, and unlike the case of maps, we can think of the many kinds of diagrams that arise in mathematics as abstract taxonomies that allow the groupings of things, and the positing of things, in ways different from the groupings allowable in natural languages. Indeed, if we are trying to break free of the inherited taxonomies of natural languages, one method is to construct a taxonomy free of those influences by utilizing diagrams that obey formal principles that we stipulate. Such stipulations should not be arbitrary, of course. Rather, they should encode various generalizations we are building into our new taxonomy. In this way, we can hope to provide the best explanations of the phenomena to which we intend to apply the taxonomy.

The success of applied mathematics, and the rich and strange taxonomies that arise in the many diagrammatic forms that are routinely applied via the applications of mathematics (for example, vector spaces, Feynman diagrams, and so on), show the fruitfulness of this methodology. How such diagrammatic forms are to be manipulated, or explicated formally (e.g., as Euclidean constructions, integrals, equations, and so on are formally manipulated), reflects implicit taxonomies that become explicit when such diagrammatic forms are applied.

In this way, diagrams are revealed to be essential to the creation of new taxonomies. In the case of our theory of eide, diagrams allow us to encode, in a formal way, principles governing eide without having to fall back on the demarcations of ordinary language. These taxonomies, when made explicit, are then to be tested in the ways that results are normally tested in any knowledge-gathering area in which they are applied.

As will become clear, the present approach to the theory of categories, the metaphysics of the eide, and the Attributes of God (all ways of talking about the same thing) is extensively "diagram-driven," in something like the sense that physics is "mathematics-driven" by the various mathematical theories it presupposes. In neither case should these phrases imply that the mathematics or the diagrams can do all the work in their respective subject areas. More will have to be said about diagrams and typologies in pages to come. For the moment, please keep in mind that the diagram structure itself will be purely formal and not itself sufficient for deriving its content.

Again, there are parallels here with physics, where the presupposed mathematics imposes structures on the empirical subject matter. These imposed structures are in turn interpreted and tested empirically. The value of the application of a branch of mathematics stands or falls with the value of the taxonomy that that branch of mathematics implicitly imposes, and on the set of generalizations that the implicit taxonomy resulting from the application invites. Similarly, to enable our study of the eide, we shall invoke a diagram pattern that is to be interpreted and the resulting taxonomy and generalizations tested. In the case of metaphysics, of course, the testing is to be executed not so much empirically as by the general methods of rational thought; so the level of "certainty" obtainable by science cannot be achieved. Our results are approximate and fallible because we use eduction, and that method has an inbuilt dimension of fallibility that keeps our system open always to new revisions and expansions. Nonetheless, these results have both value and validity, as we hope to show. This process of revision and expansion is itself a part of the telos of reality and it funds a good deal of our sense of piety and spiritual practice as well as our epistemology.

In keeping with our emphasis on the nature and revelatory power of categorical structure, we take a classic monistic point of view: the view that reality as a whole is the highest paradigm of unity, explanatory coherence, and independence. By contrast with the unity, coherence and independence of reality as a whole, the domain of changing individuals is not unified and the particulars of that domain cannot be explained in their own terms alone. Rather, changing particulars are dependent on realities that they do not directly reveal. The thesis of monism highlights the importance of this contrast between the unity of reality as a whole and its domain of changing particulars, and asserts that the latter can only be adequately understood through continual reference to the metaphysics of the whole. For us, these questions are, as has been said, extremely important. They are important precisely because, for reasons that will become clear as our discussion unfolds, when we comprehend the nature of the categories, the metaphysically significant relations among them and the equally fundamental relations between them and everything else, something about the nature and purpose of reality as a whole becomes apparent. Thus, the basis is laid for a strong and metaphysically grounded philosophy, theology and ethics.

This understanding of reality as one coherent whole has known progress and setback; it has made great and sometimes sudden advances and strayed at times onto false trails. Where we see these advances, we will build upon them; where we note problems, we hope to solve them in new and more fruitful ways. In all this, however, we will remain strictly accountable to what we take to be axiomatic for true philosophy: the conviction that truth is not esoteric nor is it irrational; it is not the province of one man or woman, one culture, or one special dispensation. Truth is not a private revelation but is rather *logos xounos*, as Heraclitus called it, "common to all"—or at least to all who pursue it in good faith and with the greatest cognitive acuity they can command.

Indeed, the genesis of this work is in line with this principle. This work is the result of a long process of conversation, reflection, critique, and rewriting in order to grasp something that claims to be merely one theory among many. It sets out what is hoped to be a comprehensive and profoundly revisionary view of the whole tradition of philosophical metaphysics upon which it draws. Whether strong or weak, then, which must be in part for the reader to judge, the system of thought expounded in the pages that follow is and intends to be a genuine universal philosophy in the classical sense of the term. It is new but old as well, recognizing past truth, absorbing it and above all, it is to be hoped, advancing upon it.

This system characterizes and explains God's Attributes understood as Platonic eide. It provides an account of how they are ordered into a coherent whole by the process of eduction, a process inherently reasonable and fallible, and thus ever open to further refinement. This fallibility and need for refinement is at once a matter of metaphysics (the sequence of emanation of God's Attributes is infinite) and of epistemology (eduction is not mechanical), and it points ahead to the openness of the system to collective discussion and further elaboration.

We now turn, in Part 2, to presenting our metaphysical system.

Part 2: The Metaphysics of God: Three Principles

(2.1) The First Principle: God's Role in the Structure of Particulars

Aristotle characterized metaphysics as the study of being qua being. Any such study must reveal what owes its being or existence to what, and so will thereby display the lineaments of ontological dependence. In order to do that, metaphysics must be centered on the ontological source of beings, the Being on which everything else is ontologically dependent, and which is itself not dependent on anything else—a being which all know as "God." The scope of metaphysics may thus be characterized as the study of God, and of the detailed structure of ontological dependence of all things on him.

Ontological dependence is the relation that holds between one thing and another just when the first thing depends on the second for its existence. As we shall see, there are various more determinate relations of ontological dependence, of which efficient causal generation is only one. Indeed, if efficient causal generation—when one thing or group of things bring another thing into existence—were the only form of ontological dependence, then science, the description of the efficient causal structure of the world, would give a complete account of ontological dependence. There would be little residual space for metaphysics to inhabit.

In setting out the lines of ontological dependence and in describing how it is that they lead back in their various ways to God, an obvious place to start is with what is relatively more fundamental, namely the categories, understood as at least giving the basic ontological divisions among things. In Part 1, it was argued that the categories are eide, i.e., preeminent particulars that are ontologically more fundamental than the ordinary particulars around us. It was also argued that what makes these eide so fundamental is that they are none other than the Attributes of God.

This is already a significant innovation in metaphysics and theology. For one thing, it decisively rejects the old doctrine of attributes as universals. It is important to note that this doctrine was always at odds with the idea of God as the Being on which everything else is ontologically dependent, and which is itself not dependent on anything else. For universals are understood to be the metaphysical underwriters of predication, and so are common to all those who satisfy the corresponding predicates. According to this doctrine, universals exist as the meanings of predicates *anyway*, and the other things that exist, including God, subsequently instantiate one or another group of the preexisting universals, and as a result have this or that nature. This is already a "two-realms" doctrine. There is the abstract realm of instantiatible universals, standing complete in itself, and then there is the concrete world of particulars, perhaps arranged according to God's creative plan. However, since universals are independently existing abstract entities that give concrete things their natures when they are instantiated, universals cannot themselves be ontologically dependent on anything in the realm of particularity, including God. But this breaks with the fundamental characterization of God as the source of all being. God must already have a nature in order to create, i.e. manifest His Will in the generation of other beings. But in order to have a nature, according to the view that God's Attributes are universals, He must instantiate a certain range of universals, namely those constitutive of that nature. And this requires the prior existence of the universals themselves. Hence on the attributes as universals view, universals are themselves conceived as not ontologically dependent on God Himself. In a certain sense this amounts to the denial of the existence of God, at least if we take seriously the characterization of God as the source of all being.

If God is the source of all being then He must in some way be the source of His own Attributes; they must emanate from Him, but this is possible only if those Attributes are particulars, not universals.

That result, when combined with the proper understanding of the six causes, yields a rich range of consequences. It is the task of Part 2 of this book to explore these consequences. For, as was argued in Part 1, Aristotle's four causes are not to be understood as a primitive type of empirical science, but as some of the elements in a unified account of the factors that make any particular the very particular it is.

Therefore, the six causes, understood as explanatory relations, are fundamental to what it is to be a particular, and hence they must apply to all particulars, even to God's Attributes. This provides a basic constraint on the characterization of the sequential emanation of God's Attributes: the emanation must be essentially conditioned by the six causes: That is, whenever we are ready to speak of an Attribute of God, we must, special considerations aside, be ready to speak of the Attribute's form (in the three senses already distinguished in Part 1), its matter, its efficient cause and its telos or purpose. Indeed, each of the six causal relations (or their converses) can be understood as specific versions of ontological dependence.

To identify God with the ontologically independent particular on which all else is ontologically dependent is in part to recapitulate Spinoza's monism. However, as noted earlier, Spinoza's monism remains largely silent about the structure of God's Attributes, since it only includes a treatment of what Spinoza takes to be two of God's infinitude of Attributes, namely extension and thought. Here Spinoza was implicitly admitting that he had no developed theory of God's nature or of His Attributes. He simply fell back on the basic categorical opposition of Cartesian metaphysics, that is, on the opposition between extended things and thinking things. It is only in the context of a metaphysics in which one recognizes that God's Attributes are none other than the categories, and that these are none other than the *eide*, that some progress can be made in characterizing the real Attributes of God.

Spinoza also held that ordinary spatio-temporal particulars, including Aristotle's paradigm substances "the individual man and horse," were modes or modifications of the substance of God—modes which "fell under" the Attributes of thought and extension, and, Spinoza presumed, also "fell under" each of the other infinitely many "unknown" Attributes. But Spinoza had no good account of this relation of "falling under" the Attributes. Being a thoroughgoing particularist, he could not treat the Attributes as universals or properties, so he could not regard "falling under" as the relation of instantiating a property or universal.

As we have discussed in Part 1, Plato understood this problem all too well. As he moves, under the influence of the Third Man Argument, towards rejecting the idea that the *eide* are the semantic values of the predications we might make, Plato emphasizes more and more the appropriate picture of the *eide* as preeminent paradigms that other particulars *imitate* to varying degrees.

It follows from what we have already said that God, since He is a particular, has form and matter. These two eide, God's Form (The Godhead) and God's Matter (Being), are each particulars, so each itself has form and matter, and these further eide also have form and matter, and so on. So we can distinguish the formal eide from the material eide. Like all form, the formal eide have no parts. But it will turn out that some of the material eide have particulars as parts.

The totality of all particulars or "reality as a whole," can be divided into two kinds: metaphysical particulars and constructed particulars. What distinguishes metaphysical particulars from other particulars is that the metaphysical particulars are restricted to God, the eide and the parts of those eide that have parts. This is codified in Principle 1 immediately below:

Principle I: God's Role in the Structure of Particulars: Everything is a particular, and God is the only ontologically independent particular, i.e., the only particular that is not ontologically dependent on anything else, while everything else is ontologically dependent on God. The metaphysical particulars that make up reality as a whole are the following:

1. **God,**

2. **God's Attributes, each of which is either a Formal or a Material Attribute with its own place in a chain of emanation from God, and**

3. **The parts of those of God's Material Attributes that have parts.**

In what follows, we shall describe the parts of eide as non-eidetic metaphysical particulars. (Literally speaking, God is a non-eidetic metaphysical particular because He is not an eidos and He is a metaphysical particular. But we shall not mean to include God when speaking of *non-eidetic* metaphysical particulars, but only when we speak of *metaphysical* particulars.)

By way of making Principle 1 more precise we give two definitions for the central metaphysical notions of ontological dependence and a chain of emanation.

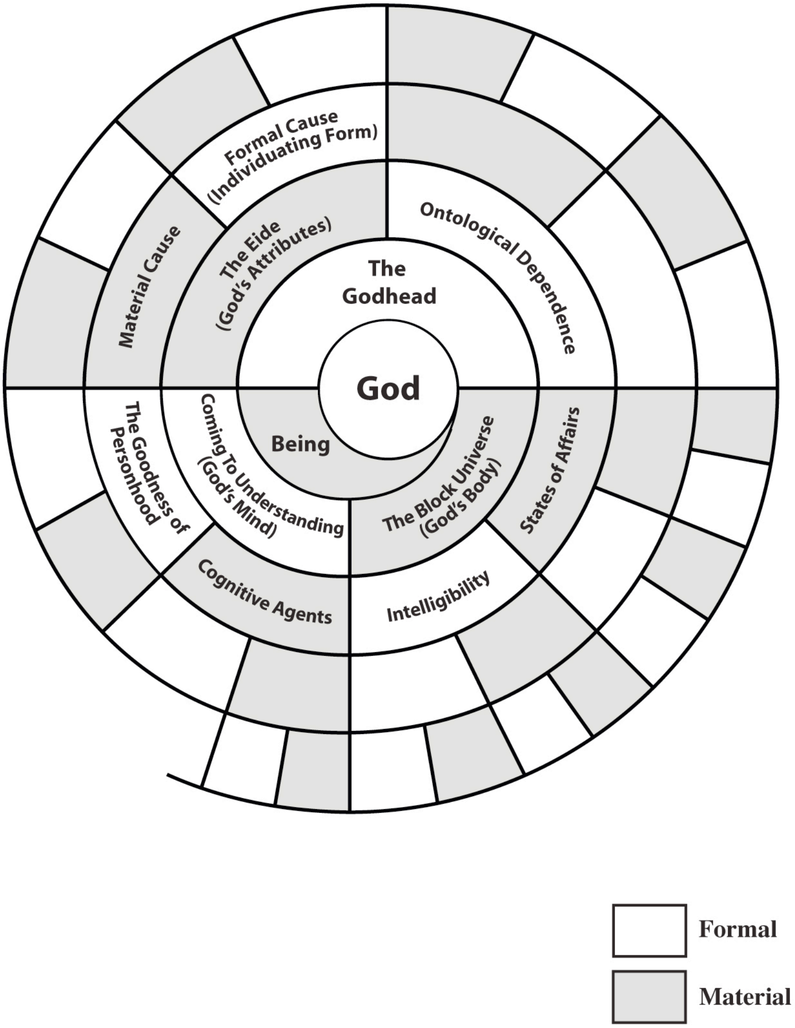
> *Ontological dependence* is a transitive relation between particulars specified as follows: a particular B is ontologically dependent on a particular A if and only if the existence of B depends on the existence of A, and the existence of A does not depend on the existence of B.
>
> (B is said to be *immediately ontologically dependent on* A just when B is ontologically dependent on A and there exists no C such that B is ontologically dependent on C and C is ontologically dependent on A.)
>
> A *chain of emanation* is any infinite step-wise succession of eide, standing in relations of ontological dependence in exactly one of the five following ways:
>
> 1. in relations of *is-the-individuating-form-of*, starting from God or from a given eidos,
> 2. in relations of *is-the-matter-of*, starting from God or from a given eidos,
> 3. in relations of *is-the-efficient-cause-of*, starting from God or from a given eidos,
> 4. in relations of *is-the-telos-of*, starting from God or from a given eidos,
> 5. in alternating relations of *is-the-structuring-form-of* and *is-the-differentiating-form-of*, starting from God.

With regard to this last definition, a few comments are in order. First, we call the first two sets of chains of emanation, "radiant emanations." We call the third set of chains of emanation, "emanations of efficient cause." We call the fourth set of chains of emanation "telic trajectories," and, finally, we call any of the first four sets of emanations, "secondary emanations." The fifth emanation we call "the primary emanation of the eide from God."

As we shall see later in this book, some chains of emanation are worth special treatment because of the light they shed on central issues in metaphysics and theology. The most important chain of emanation, however, is the primary emanation of the eide from God. Part of it is depicted in Diagram 1A as a spiral series of eide, where each one follows the previous one in a relation of immediate ontological dependence. The primary emanation of the eide from God is also seen to alternate between material and formal eide. The first eidos, Being, is a material eidos, the next a formal eidos, the next material, the next formal, and so on, *ad infinitum*.

In viewing Diagram 1A, the main point to grasp is that the iteration of hylomorphic structure determines the primary emanation of God's eide; a clearer understanding of the rest of the content of the diagram will follow later.

Diagram (1A): God and the First Twelve Eide in the Primary Emanation


God
The Godhead
Being
The Eide (God's Attributes)
Formal Cause (Individuating Form)
Ontological Dependence
Material Cause
The Goodness of Personhood
Coming To Understanding (God's Mind)
The Block Universe (God's Body)
States of Affairs
Cognitive Agents
Intelligibility
Formal
Material

Light emanates from a lighthouse; this is a process of emanation that is *in* time and that, thanks to the finite speed of light, *takes* time. In speaking of the hylomorphically determined "process" that is the primary emanation of God's Attributes we are not talking of a process that is in time or of one that takes time. The primary emanation of God's Attributes is not an *instantaneous* temporal process; it is not a temporal process at all.

For now, one easy way to grasp the concept of *hylomorphically determined process* is to recall, as we noted in 1.3, that idioms of process are often applied to timeless processes such as those that mathematical objects undergo. Mathematical objects are described, for example, as "constructed" from one another or "generated" on the basis of others. These "processes" are often glossed as logical, mathematical or metaphysical processes, rather than as time-involving physical events or changes.

What enables the application of a process-like notion of emanation to the eide is the fundamental fact that each eidos has matter and form. Matter, as traditionally conceived, does not actively do anything. It has the potentiality to take on a form, and hence a certain differentiation and structuring of its parts. In this sense, the "operation" of form on matter—its differentiation and structuring of that matter—can be understood as process-like, regardless of whether that process is taking place in time or not. This association of form with activity and matter with passivity is hardly original to us. Maimonides, an able proponent of the metaphysical importance of matter and form, writes in his *Guide to the Perplexed*:

> Matter … is always receptive and passive ... Form, on the other hand, is in its essence always active …

Two qualifications about the activity of form and the passivity of matter are required. First, to speak of matter as not doing anything, and form—by contrast—as acting on that matter, is to speak only in relative terms. For the matter of any particular is passive only in relation to the particular that it is the matter of, and not in any absolute sense. This is clear because when the matter of a particular is itself a particular, it cannot be utterly passive, since as a particular it also has form. Second, the activity of form is not to be equated in any way with the spatiotemporal activity of efficient causation, as Aristotle and Maimonides both indicate. A particular's form does not efficiently cause its matter to take on the structure that it does; a particular just is that matter, formed in a certain way by some other factor that is its efficient cause, and with some telos or end.

To appreciate this point it may help to consider Aristotle's account of the four causes as applied to the case of the statue. A sculptor makes a statue, say a bust of Zeus. It has *matter* (say, pure white marble) and *form* (the structure or shape—that of the head and shoulders of Zeus), which has been chiseled by the sculptor. The sculptor's blows are the efficient cause of the statue; they explain the production of the statue. With each blow of the hammer upon the chisel, the marble takes on a slightly new form. At any point the sculptor can stop, and the resultant statue would have the form that the sculptor's last blow completed. Here it is the sculptor's blows that together make up the efficient cause of a particular form coming to structure the matter. That is why the sculptor's blows count as the efficient cause of the statue coming into being. (Of course, to give a full account of what it is to be that very statue we must also explain the end or purpose of the thing caused—for example, the purpose of the statue might be to produce aesthetic delight. In this case, such an end would be the one intended by the sculptor.)

A central novelty of the present account is that this same explanatory schema can and indeed must be applied to the eide. For, they too are particulars.

As Diagram 1A shows, the eide emanate from God though, of course, God is not one of His own eide. God is defined as the ontologically independent being on which all other beings are ontologically dependent; more of His essential nature will emerge as the various emanations of the eide are described.

A common and fundamental theological claim about God is that He is the Creator of everything—the efficient cause of everything. That is one concrete way of filling out the definition of God as the ontologically independent thing on which everything else depends. It will turn out that a great deal of reality is properly understood as a consequence of God’s efficient causal “activity.” Notably, if by “efficient causal consequences of God” one means consequences of God’s eide, then, as we shall learn from Principle 2, one-half of all of God’s eide are the efficient causes of the other half. Thus, the efficient causal relation will be one of the fundamental structuring relations among the eide, and to this extent, the relation of efficient causation does structure a great deal of reality. The eide that have parts are not the efficient causes of those parts, though all their parts will be seen to be ontologically dependent on them.

There is, however, a deeper sense in which God Himself is the efficient cause of everything, when by “everything” what is meant is the four-dimensional block universe of the physicists and nothing more. As the diagrams below will show, God is the efficient cause of the eidos called The Block Universe (God's Body). But here God’s Body is understood not as a thing external to God, as the statue is external to the sculptor, but as an eidos of God.

These agreements aside, the exclusive emphasis on efficient causation in traditional theology goes hand in hand with the lack of any systematic account of God’s eide, or of the ways in which those eide are ontologically dependent on God. The focus is all too often exclusively on God’s relation to individual things—to the objects He is taken to have created, and to His relationships with human beings—and (as we will show) these relationships are mistakenly treated as ones of efficient causation. Once this is conceived as the starting point, the resultant theology ignores what is ontologically most fundamental, namely The Godhead—the eide structured by ontological dependence.

(2.2) The Second Principle: God's Eide

The six causes fix the structure of ontological dependence among the eide. Thus, the structure of the eide is much more complicated than Porphyry's idea that the fundamental categories fit into a branching tree organized around the genus/species distinction. At one level of analysis the "tree" is better understood as a product of the infinite iteration of the form/matter distinction. Hence Principle 2, which sets out some of the details of this iteration.

Principle 2: God's Eide: God has matter and form; God's Matter and Form have matter and form, and each of them in their turn have matter and form, and so on, thereby iterating to produce an infinite matter/form tree with God at its source, as follows:

1. **We call the Form of God, "The Godhead." We call the Matter of The Godhead, "The Eide (God's Attributes)." The matters and forms of the infinite matter/form tree with God at its source are God's Attributes. God has no other Attributes.**

2. **There are exactly six relations of ontological dependence by which *eide* stand to God and each other. These are none other than Aristotle's four causes (or converses thereof) plus two relations of *immediate* ontological dependence as follows:**

    a. ***is-the-matter-of*, its converse being the emanation relation *has-as-its-matter*,**

    b. ***is-the-individuating-form-of* ("*individuates*"), its converse being the emanation relation *has-as-its-individuating-form*,**

    c. ***is-the-matter-that-is-the-efficient-causal-consequence-of*, its converse being the emanation relation *is-the-efficient-cause-of*,**

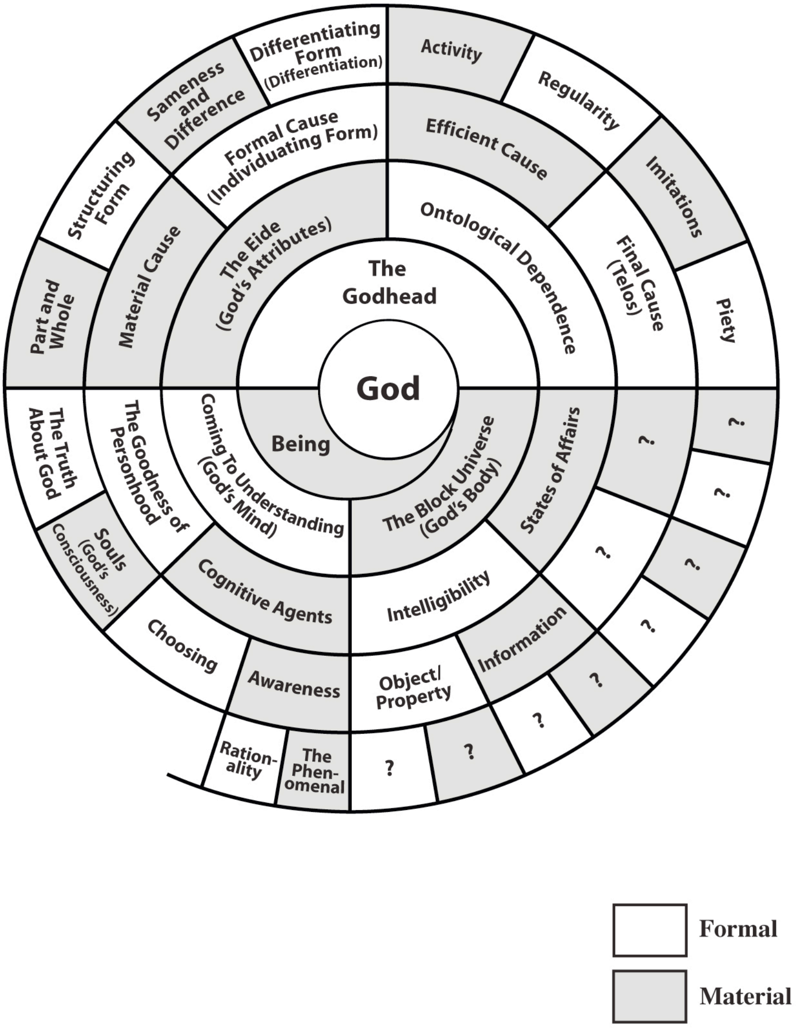
d. ***is-the-form-having-as-its-telos*, its converse being the emanation relation *is-the-telos of*,**

e. ***is-the-matter-that-is-differentiated-by*, its converse being the emanation relation *is-the-differentiating-form-of*, and**

f. ***is-the-structuring-form-of* (“*structures*”), its converse being the emanation relation *is-the-matter-that-is-structured-by*.**

Diagram 1B depicts thirty of the first forty of the eide, as they are organized by these relations of ontological dependence.

Diagram (1B): Thirty of the First Forty of the Eide


God
The Godhead
Being
The Eide (God's Attributes)
Ontological Dependence
The Block Universe (God's Body)
Coming To Understanding (God's Mind)
Formal Cause (Individuating Form)
Efficient Cause
Final Cause (Telos)
States of Affairs
Intelligibility
Cognitive Agents
The Goodness of Personhood
Material Cause
Differentiating Form (Differentiation)
Activity
Regularity
Imitations
Piety
?
?
?
?
?
?
?
?
?
?
Information
Object/ Property
Awareness
Choosing
Souls (God's Consciousness)
The Truth About God
Part and Whole
Structuring Form
Sameness and Difference
Ration- ality
The Phen- omenal
Formal
Material

Here are some notable patterns of eide that Diagram 1B reveals:

- i. The eide emanate from God in a single infinite linear sequence (what we earlier called the "Primary Emanation"), spiraling through the matter/form tree of eide as follows: the first eidos, Being, emanates from God as God's matter; all the other eide succeed Being in alternating relations of *is-structured-by* and *is-the-differentiating-form-of* ("*differentiates*"), as follows:
    - a. Every formal eidos in the Primary Emanation structures and is immediately ontologically dependent on the material eidos immediately preceding it in the sequence.
    - b. Every formal eidos in the Primary Emanation differentiates the material eidos immediately following it in the sequence, and that material eidos is immediately ontologically dependent on that formal eidos.
    - c. God, Being, and all of the formal eide are all undifferentiated particulars, that is, none of them have parts.
- ii. Every material eidos, other than the first eidos, Being, stands in exactly five kinds of relations to God and other eide:
    - a. *is-the-matter-of*,
    - b. *has-as-its-individuating-form*,
    - c. *is-the-efficient-causal-consequence-of*,

    d. *is-the-immediate-ontologically-dependent-matter-differentiated-by*, and

    e. *is-structured-by.*

iii. Every formal eidos stands in exactly five kinds of relations to God and the other eide:

    a. *is-the-individuating-form-of* ("*individuates*"),

    b. *has-as-its-matter*,

    c. *is-the-form-telically-bound-by*,

    d. *is-the-differentiating-form-of* ("*differentiates*"), and

    e. *is-the-immediate-ontologically-dependent-structuring-form-of* ("*structures*").

iv. Every eidos has a unique material eidos as its consequence, and every eidos is the telos of a unique formal eidos.

v. Infinite sequences of eide also emanate directly from each of the eide themselves ("secondary emanations"), arching through the matter/form tree in infinite sequences of eide as follows:

    a. Every formal eidos stands in a secondary emanation of formal eide ordered solely by relations of *is-the-telos-of* (a "Telic Trajectory").

b. Every material eidos stands in a secondary emanation of material eide ordered solely by relations of *is-the-efficient-cause-of* (an “Efficient Causal Trajectory”).

The foregoing shows the extent to which the present approach to the metaphysics of the *eide*—the Attributes of God—is literally “diagram-driven.” This claim may seem strange, but the reader should recall the analogy given in Part 1 with the way in which physics is “mathematics-driven” in the sense of being significantly shaped by the particular mathematics that it presupposes. This is not to imply that either the mathematics or the diagrams can do all the work in their respective subject areas. In physics, for example, the presupposed mathematics imposes structures on the empirical subject matter. Those imposed structures are in turn interpreted and tested empirically. The value of the application of a branch of mathematics within physics stands or falls with the value of the taxonomy that the branch of mathematics implicitly imposes, and on the set of generalizations that the implicit taxonomy invites. Similarly, to enable the study of the *eide*, certain diagram patterns will be invoked and interpreted. The resultant taxonomy and generalizations will then be tested. In the case of metaphysics, of course, the testing is to be executed not so much empirically as by the general methods of rational thought. However, both approaches conform to the more general method of eduction, as outlined in Part 1.

The basic topology is clear. The matter/form tree of the eide, beginning with and emanating from God, along with the sublime arching of emanations throughout the tree, places each eidos in a unique position in a perfect spiral; all of this is in virtue of the structuring relations of immediate ontological dependence between successive eide. The spiral is infinite, and it is actually shaped by two simpler topological structures:

(i) the (infinite) matter/form tree sprouting radially outward from God at the center, in which every eidos branches into exactly two sub-eide (one matter and one form), and

(ii) the (infinite) linear sequence that is the primary emanation spiraling out from God at the center.

Considered separately, the divine emanation need not be a spiral as opposed to a list, and the branches of the matter/form tree need not be organized in the spiral sequence. However, the branching structure and the list, taken together, force the tightly wound spiral on us.

Throughout, the names of the eide are capitalized (as in Diagram 1B) to distinguish clearly those cases where what is at issue is an eidos and those cases where we are speaking of what intuitively "falls under" that eidos. So, in particular—and to illustrate with an example where ambiguity can be especially confusing—when we are speaking of eide, we use lower case (as just illustrated); but when we are, say, speaking of the eidos The Eide (God's Attributes) we use upper case (as just illustrated).

Recall from Part 1, the criticism of Aristotle and other category theorists to the effect that the theory of eide cannot be a mere list; it must recognize the interconnecting relations among the eide, and it must treat those relations as themselves eide. Accordingly, eide akin to the four explanatory relations must themselves appear at some point in the hylomorphically generated sequence of eide- Notice that they do in fact appear as eide, emanating from God, as Diagram 1B indicates.

The eide emanate from God, but God himself is not an eidos. That, of course, is why Diagram 1A is described as "God *and* the First Twelve Eide in the Primary Emanation." As Diagram 1B suggests, we can make considerable progress in educing the eide or the Attributes of God. So, contrary to the claim of God's ineffability made by many mystics, such as the author of *The Apocryphon of John*, God is rationally intelligible. To understand God, we only need to employ the same method that we employ in understanding anything else (for example, the domain proper to science)—namely the method of eduction. The diagrams depict the results of applying this method to God’s Attributes.

One thing that emerges from this method is the detailed way in which the six relations of immediate ontological dependence structure the eide. The role of these relations can be more easily understood by seeing them at work in Diagram 2A and Diagram 2B.

Diagram (2A): The Relations of Ontological Dependence

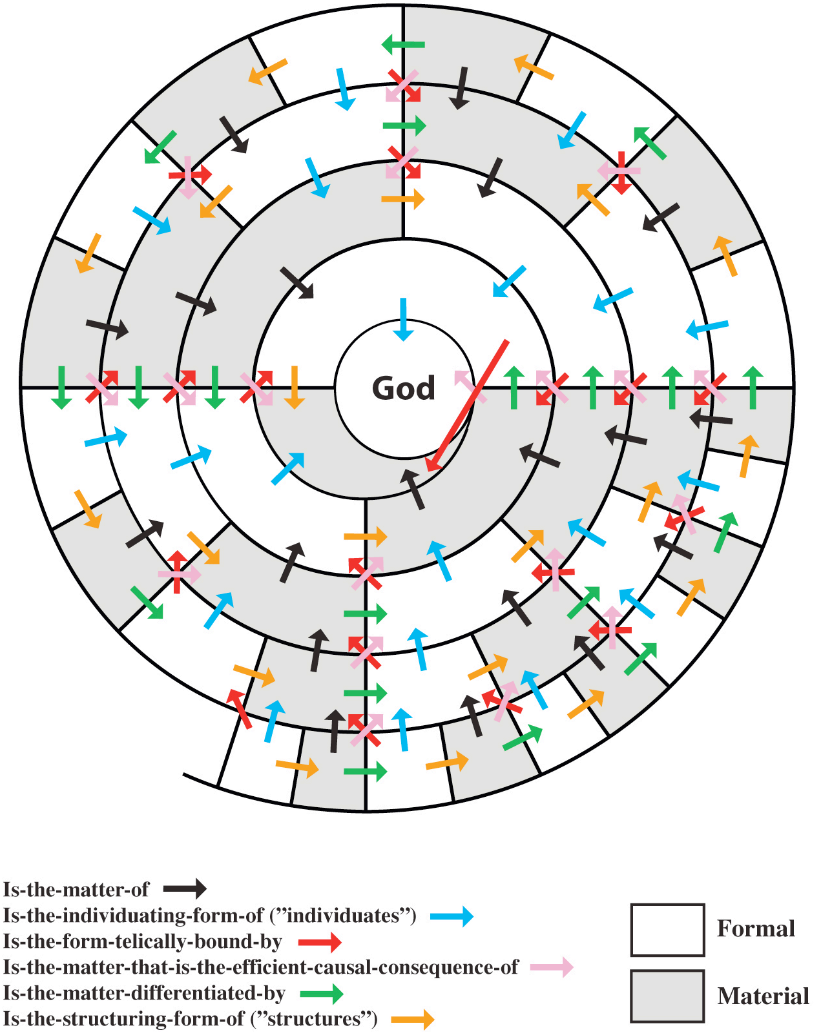
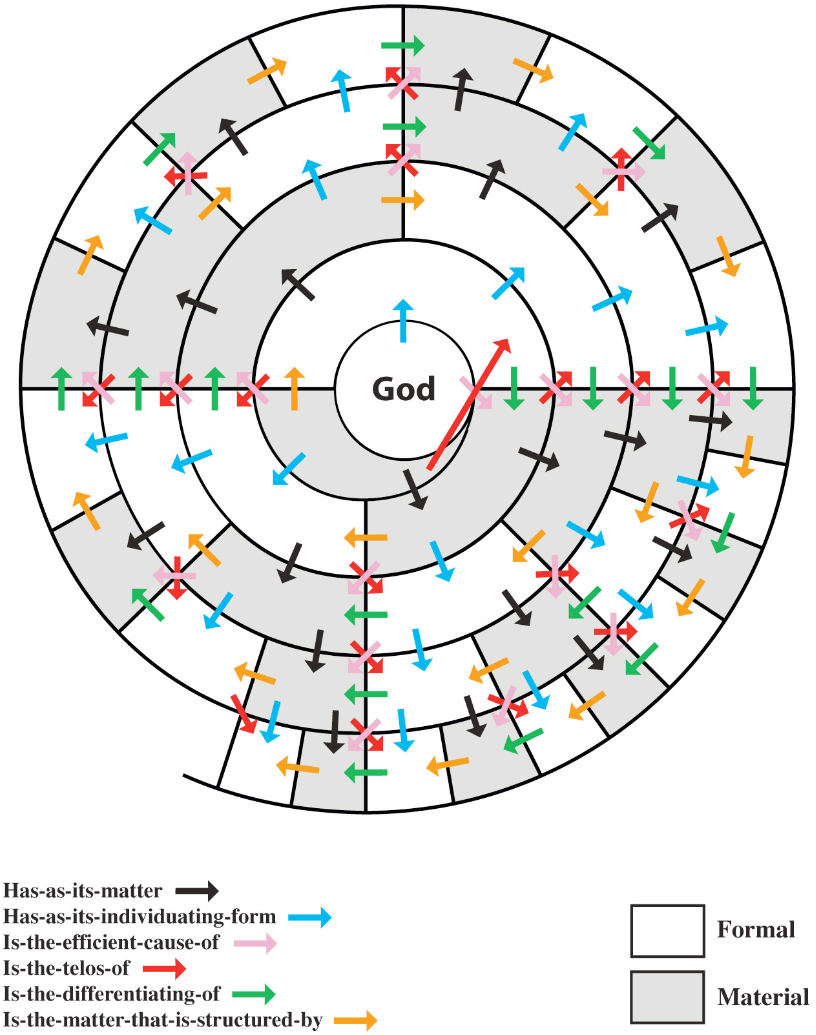

God
Is-the-matter-of
Is-the-individuating-form-of ("individuates")
Is-the-form-telically-bound-by
Is-the-matter-that-is-the-efficient-causal-consequence-of
Is-the-matter-differentiated-by
Is-the-structuring-form-of ("structures")
Formal
Material

Diagram (2B): The Lines of Emanation


God
Has-as-its-matter
Has-as-its-individuating-form
Is-the-efficient-cause-of
Is-the-telos-of
Is-the-differentiating-of
Is-the-matter-that-is-structured-by
Formal
Material

As the reader may have already recognized, although there are six relations of immediate ontological dependence, they over-determine the topology of the spiral structure of the eide emanating from God. It is trivially the case that no one relation suffices to uniquely determine the topology. However, two of the six relations, namely *is-the-final-cause-of* and *is-the-efficient-cause-of,* when taken together are sufficient to determine the topology of the eide. No other pair chosen from the six, taken on their own, can do the job.

This is no accident. These two relations (or more exactly their converses) are none other than the two sub-eide of the eidos Ontological Dependence, and are literally what structure the eidos The Eide (God's Attributes). It is the hylomorphic role of the formal eidos Ontological Dependence to structure its material sister—The Eide (God's Attributes). It does so by determining the whole eidetic structure, without the help of the matter and form relations. Note also, as Principle 2 states and as the diagrams reveal, that no material eidos has a telos, and no formal eidos has an efficient cause.

It is worth mentioning here that efficient cause is the fundamental notion underlying all scientific explanations, and telos or final cause is the fundamental relation underlying all theological explanations. In the same way that neither one of these two relational notions is sufficient for structuring the totality of God's Attributes, so too, neither one of them is sufficient as an explanation of the whole of reality. Present day proponents of "scientific" atheism and fundamentalist religion are at each other's throats, naively insisting that *all* is explicable by just one of these—efficient cause for the atheists, and final cause (God's will) for the fundamentalists. Both are victims of one-sided conceptions of reality, each of which is properly corrected by an adequate account of what it is to be a particular, an account that recognizes the explanatory aspects of matter, efficient cause, telos and form (in its three senses).

However, as we have seen, even an Aristotelian pluralism of quasi-independent substances is a profoundly incomplete picture of reality. It neglects the sequential emanation of God's Attributes that plays such a fundamental role in structuring reality—even the reality of ordinary particulars such as the individual man and horse. Only by understanding ordinary particulars—when they are real, as parts of some of God's Attributes, and as imitating God's Attributes—can one arrive at a full appreciation of the utterly dependent nature of non-eidetic metaphysical particulars on the eide. This is a matter to be characterized later by Principle 3, but to be taken up in full discussion in Part 3.

In the meantime, our task is to attempt an account of the sequential emanation of the Attributes of God. This is, of course, a daunting task. To carry it out would be, in effect, to at the same time deliver on the promise of Plato's system of eide *and* bring out what is correct in Hegel's system of categories.

What follows then, is a fallible, indeed very fallible, attempt to say something definite about the sequential emanation of God's Attributes.

(2.3) Eduction of the Eide

Sections 2.1 and 2.2 respectively, give two principles that may be of some help in seeing one's way through to this better conception of God. Here in 2.3, we give some reports of attempts at the eductions of thirty of the first forty eide in the primary sequential emanation from God.

To start, here is a single list of all the eide that we discuss—for handy reference, numbered as they appear in the sequence:

1. Being
2. The Godhead
3. The Block Universe (God's Body)
4. Coming-To-Understanding (God's Mind)
5. The Eide (God's Attributes)
6. Ontological Dependence
7. States of Affairs
8. Intelligibility
9. Cognitive Agents
10. The Goodness of Personhood
11. Material Cause
12. Formal Cause (Individuating Form)
13. Efficient Cause
14. Final Cause (Telos)
15. (? For science to say)
16. (? For science to say)
17. Information
18. Object/Property
19. Awareness
20. Choosing
21. Souls (God's Consciousness)
22. The Truth About God
23. Part and Whole
24. Structuring Form
25. Sameness and Difference
26. Differentiating Form (Differentiation)
27. Activity

28. Regularity
29. Imitations
30. Piety
31. (? For science to say)
32. (? For science to say)
33. (? For science to say)
34. (? For science to say)
35. (? For science to say)
36. (? For science to say)
37. (? For science to say)
38. (? For science to say)
39. The Phenomenal
40. Rationality

Now follows a gloss on each of the eide just mentioned in order to give a sense of how each was educed:

1. Being. *Being is the matter of God. Its hylomorphic partner is The Godhead. It is (exceptionally) not an efficient causal consequence. It is the efficient cause of The Eide (God's Attributes) and the telos of the Godhead. It is (exceptionally) undifferentiated. Being is structured by The Godhead. It has Coming-to-Understanding (God's Mind) as its individuating form, and The Block Universe (God's Body) as its matter.*

The eidos Being is not some general category underneath which everything that exists can be subsumed; that is, Being is not the most inclusive of kinds or classes. The eidos Being does not *have* parts or members. Traditionally, the term *being* refers to two fundamentally different notions: 1) the most fundamental object or subject of which anything can be predicated, and 2) the most fundamental predicate that there is. Given our commitment to monism and hylomorphism, it is only natural for us to describe God as fulfilling both these definitions. God's matter, the eidos Being, fulfills the first definition, while God's form is "being" in the latter sense. Distinguishing these two, we shall describe the most fundamental object of which anything can be predicated as "Being" and the most fundamental predicate there is as "The Godhead."

2. The Godhead. *The Godhead is the individuating form of God; its hylomorphic partner is Being. Its telos is Being. It is the telos of Coming-to-Understanding (God's Mind). It is the efficient cause of States of Affairs. The Godhead structures Being and differentiates The Block Universe (God's Body). It has Ontological Dependence as its individuating form, and The Eide (God's Attributes) as its matter.*

The Godhead is the only formal eidos that emanates directly from God, and the only eidos that is telically bound to its own hylomorphic partner, in this case the eidos Being. This profound link between The Godhead and Being will be an important aspect of our theology in Part 4. For now the reader need only keep in mind that understanding the Godhead is simply to view it as The Eide (God's Attributes) structured by the relation of ontological dependence (as described in 2.2 and Diagram 1B). Certainly this is the most plausible explanation of God's own form.

3. *The Block Universe (God's Body).* *The Block Universe (God's Body) is the matter of Being; its hylomorphic partner is Coming-to-Understanding (God's Mind). It is the efficient causal consequence of God. It is the efficient cause of Cognitive Agents. It is the telos of Ontological Dependence. It is differentiated by The Godhead, and structured by Coming-to-Understanding (God's Mind). It has Intelligibility as its individuating form and State of Affairs as its matter.*

Failure to recognize the hylomorphic nature of the eidos The Block Universe (God's Body) leads to a consequent loss of explanatory power on many counts. When physicists think of "the block universe" as everything there is, and as contained in space-time, they think of the contents of space-time as describing whatever encompasses everything around us, and everything around that, and so on, until everything is included. But in thinking of the block universe in this way, we may inadvertently take it to be a totality or aggregate of all particular things. There are several philosophical varieties of this thought, but for present purposes they all amount to the same thing. Although "the block universe" contains—in an appropriate sense of "contains"—everything “concrete” (everything that is in space and time), on such views no sense is made of the block universe as a particular distinct from, and ontologically prior to, this inclusive aggregate. The block universe is ontologically dependent on the particulars that make it up, according to these views. It is not seen, as it should be, as a preeminent particular and a complex of matter and form.

4. Coming-to-Understanding (God’s Mind). *Coming-to-Understanding (God’s Mind) is the individuating form of Being; its hylomorphic partner is The Block Universe (God’s Body). Its telos is The Godhead. It is the telos of Intelligibility. It is the efficient cause of Material Cause. It structures The Block Universe (God’s Body) and differentiates The Eide (God’s Attributes). It has The Goodness of Personhood as its individuating form and Cognitive Agents as its matter.*

If, as we show in Part 3, God is a person and we describe God’s matter as the eidos Being, and if Being’s matter is God’s Body, then it is only natural to take that Being’s form to be God’s Mind—God’s process of Coming-to-Understanding The Godhead, The Eide (God’s Attributes) structured by ontological dependence, at which it is directed.

5. The Eide (God’s Attributes). *The Eide (God’s Attributes) is the matter of The Godhead; its hylomorphic partner is Ontological Dependence. It is the efficient causal consequence of Being and the efficient cause of Efficient Cause. It is the telos of The Goodness of Personhood. It is differentiated by Coming-to-Understanding (God’s Mind), and structured by Ontological Dependence. It has Material Cause as its matter and Formal Cause (Individuating Form) as its individuating form.*

As the Second Principle makes clear, the eide are the elements in the spiral structure of God’s Form. In this way the system remains faithful to the constraint articulated in Part 1, namely that there must be an eidos corresponding to the eide, for they themselves are ontologically fundamental.

6. Ontological Dependence. *Ontological Dependence is the individuating form of The Godhead; its hylomorphic partner is The Eide (God's Attributes). Its telos is The Block Universe (God's Body); it is the telos of Formal Cause (Individuating Form). The material eidos that it is the efficient cause of has not yet been educed. Ontological Dependence structures The Eide (God's Attributes), and differentiates States of Affairs. It has Final Cause (Telos) as its individuating form and Efficient Cause as its matter.*

Recall the earlier definition of ontological dependence:

> *Ontological dependence* is a transitive relation between particulars specified as follows: a particular B is ontologically dependent on a particular A if and only if the existence of B depends on the existence of A, and the existence of A does not depend on the existence of B.

A possible source of misunderstanding concerns how talk of the *relation* of ontological dependence is to be made compatible with thoroughgoing particularism. To talk of relations is not to introduce universals by the back door; those eide that are relations, like the other eide of God, are particulars and not universals. One eidos' ontological dependence on another is as particular as the eide themselves that are so related.

It is also important to note that, in general, forms do not have parts. Applied, to eide, it follows that formal eide do not have parts either. That means that the particular ontological dependence relations are not parts of the eidos Ontological Dependence. This is in contrast to, for example, the eidos Efficient Cause (to be educed below), an eidos that has as its parts the actual efficient causal relations among particulars.

7. States of Affairs. *States of Affairs is the matter of The Block Universe (God's Body); its hylomorphic partner is Intelligibility. It is the efficient causal consequence of The Godhead and the efficient cause of Information. It is the telos of Final Cause (Telos). It is differentiated by*

Ontological Dependence and structured by Intelligibility. Its matter and individuating form have not yet been educed.

The Block Universe includes local "modes" or *states of affairs* that correspond to the physical aspects of ordinary objects that ordinary people, and many philosophers, take to exist and to be primary substances (in Aristotle's sense). The aggregative picture of the block universe implies that the world is ontologically dependent on the objects in it, whereas the truth is exactly the reverse. We should think of ordinary concrete objects as local and fleeting manifestations of the block universe, just as a wave is a local and fleeting manifestation of the ocean. And, just as a wave is ontologically dependent on the ocean, being no more than the ocean-conformed-in-that-way-there-and-then, so too ordinary concrete objects, such as Aristotle's "individual man and horse," are no more than the block universe conformed in appropriate ways (as Spinoza explicitly suggests). Whether there is a concrete object at a particular region of space-time, and how that object happens to be, is determined by how the block universe is at that time and place. This is what justifies the analogy with the ocean and the waves.

8. Intelligibility. *Intelligibility is the individuating form of The Block Universe (God's Body), and the hylomorphic partner of States of Affairs. Its telos is Coming-to-Understanding (God's Mind). The formal eidos that it is the telos of has not yet been educed. It is the efficient cause of Awareness. Intelligibility structures States of Affairs and differentiates Cognitive Agents. It has Object/Property as its individuating form and Information as its matter.*

Our grasp of states of affairs is mediated through the eidos Intelligibility. Therefore, the eidos Intelligibility is the efficient cause of the eidos Awareness. It is only insofar as states of affairs are made intelligible to us that we are aware of them. This is why any description of states of affairs must be a matter for science to determine. We cannot be aware of these particulars directly. The way that States of Affairs is made intelligible to us is via the matter of and the form of Intelligibility; this is a matter we discuss in the appropriate eductions below.

9. Cognitive Agents. *Cognitive Agents is the matter of Coming-to-Understanding (God's Mind); its hylomorphic partner is The Goodness of Personhood. It is the efficient causal consequence of The Block Universe (God's Body) and the efficient cause of Souls (God's Consciousness). It is the telos of Object/Property. It is differentiated by Intelligibility and structured by The Goodness of Personhood. It has Awareness as its matter and Choosing as its individuating form.*

Cognitive agents are non-eidetic metaphysical particulars that are the parts of the eidos Cognitive Agents. Thus there is an order of cognitive agents. These are the seats of awareness and decision that we perceive ourselves to have. The eidos Cognitive Agents is the matter of Coming-to-Understanding (God's Mind); it is only insofar as cognitive agents are aware of realities that God Himself can be aware of those realities.

10. The Goodness of Personhood. *The Goodness of Personhood is the individuating form of Coming-to-Understanding (God's Mind); its hylomorphic partner is Cognitive Agents. Its telos is The Eide (God's Attributes). It is the telos of Choosing. It is the efficient cause of Part and Whole. It structures Cognitive Agents and differentiates Material Cause. It has The Truth About God as its individuating form and Souls (God's Consciousness) as its matter.*

Not every cognitive agent is a person. To be a person requires more than the capacities for awareness and decision. Also needed is the capacity to recognize God's Will as it arises through His teleological needs. When a person is good, it conforms its awareness and choices to the teleological needs of God that it recognizes. The eidos The Goodness of Personhood structures the eidos Cognitive Agents. This means that cognitive agents differ in their goodness, and this difference is crucial to whether, and how, they contribute to Coming-to-Understanding (God's Mind).

11. Material Cause. *Material Cause is the matter of The Eide (God's Attributes). Its hylomorphic partner is Formal Cause (individuating*

Form). It is the efficient causal consequence of Coming-to-Understanding (God's Mind) and the efficient cause of Sameness and Difference. It is the telos of The Truth About God. It is differentiated by The Goodness of Personhood, and structured by Formal Cause (Individuating Form). It has Part and Whole as its matter and Structuring Form as its individuating form.

Recall the need to include the eidos known as The Eide (i.e. God's Attributes) in order that the things that are deemed by the system as ontologically fundamental themselves correspond to an eidos. Since the hylomorphic division of particulars is also fundamental, there must also be eide corresponding to matter and form. This is nothing but hylomorphism writ large within the structure of God's Attributes. So the matter of the eidos The Eide is Matter (Material Cause) and, of course, the form of this eidos is Formal Cause (Individuating Form).

12. Formal Cause (Individuating Form). *Formal Cause (Individuating Form) is the individuating form of The Eide (God's Attributes). Its hylomorphic partner is Material Cause. Its telos is Ontological Dependence and it is the telos of Structuring Form. It is the efficient cause of Activity. It structures Material Cause and differentiates Efficient Cause. It has Sameness and Difference as its matter and Differentiating Form (Differentiation) as its individuating form.*

Following Maimonides, and Aristotle before him, it is natural to associate form with activity, and matter with passivity. However, one qualification about the activity of form and the passivity of matter is required. To speak of matter as not doing anything, and a form—by contrast—as acting on that matter, is to speak only in a relative manner. For, as noted earlier, the matter of any eidos is passive only in relation to the eidos it is the matter of, and not in any absolute sense. This is clear because any matter of any eidos is itself in turn a hylomorphic particular, and therefore cannot be utterly passive since it too has form.

13. Efficient Cause. *Efficient Cause is the matter of Ontological Dependence. Its hylomorphic partner is Final Cause (Telos). It is the* *efficient causal consequence of The Eide (God's Attributes) and the efficient cause of Imitations. It is the telos of Differentiating Form (Differentiation). It is differentiated by Formal Cause (Individuating Form), and structured by Final Cause (Telos). It has Activity as its matter and Regularity as its individuating form.*

In general, full explanations of particulars (and thus full explanations of the eide) will consist of at most six causes; they will not usually be restricted to matter-form analysis. Notice that if the eide were taken to be universals, then it would be puzzling how notions of causation or teleology could be applied to them. Of course, as we have stressed repeatedly in the foregoing, the *eide* are particulars. Therefore, any reason for distrusting the application of the six causes to the eide is groundless.

14. Final Cause (Telos). *Final Cause (Telos) is the individuating form of Ontological Dependence; its hylomorphic partner is Efficient Cause. Its telos is States of Affairs, and it is the telos of Regularity. The material eidos that it is the efficient cause of has not yet been educed. Final Cause (Telos) structures Efficient Cause. The material eidos that it differentiates has not yet been educed. It has Imitations as its matter and Piety as its individuating form.*

The matter of Final Cause (Telos) is Imitation. Particulars are affected by other particulars not only efficiently but also in virtue of teleological relations that hold between them. When this happens, one particular is involved in the imitation (in one respect or another) of the other particular. The various ways that a particular can be analyzed are: by the efficient causes that have affected it, by the other particulars it has formal relations to (in three senses), by its matter, and by the various other particulars that—in varying ways—it has imitated.

(15-16. We do not list or attempt to educe these two eide, taking them to lie within the dominion of science rather than of philosophy or theology.)

17. Information. *Information is the matter of Intelligibility; its hylomorphic partner is Object/Property. It is the efficient causal consequence of States of Affairs. The material eidos that it is the efficient cause of has not yet been educed. The formal eidos that it is the telos of has not yet been educed. The formal eidos that differentiates Information has not yet been educed. Information is structured by Object/Property. Its matter and individuating form have not yet been educed.*

The eidos Information is the matter of the eidos Intelligibility. But Information is a special eidos because it has parts that belong to an order of particulars. These particulars are metaphysically real; but we cannot describe them any further at present. Our awareness of the parts of the eidos Information is structured and differentiated by our awareness of them via the eidos Object/Property. More detail about this is given in the next eduction. The particulars of Information, because they are in the quadrant of the eidos The Block Universe (God's Body) are for science to further characterize.

18. Object/Property. *Object/Property is the individuating form of Intelligibility; its hylomorphic partner is Information. Its telos is Cognitive Agents. The formal eidos that it is the telos of has not yet been educed. Object/Property is the efficient cause of The Phenomenal. It structures Information and differentiates Awareness. Its matter and individuating form have not yet been educed.*

The eidos Object/Property is the form of the eidos Intelligibility applied to the matter Information. In turn, it differentiates the eidos Awareness, which is the matter of the eidos Cognitive Agents. Cognitive agents (ourselves included) are aware only of objects and their properties. These objects can be real particulars, but in general they are not. Nevertheless, our awareness of the particulars of information occurs only in the form of our awareness of objects and their presumed properties.

19. Awareness. *Awareness is the matter of Cognitive Agents. Its hylomorphic partner is Choosing. It is the efficient causal consequence* *of Intelligibility. The material eidos that it is the efficient cause of has not yet been educed. The formal eidos that it is the telos of has not yet been educed. Awareness is differentiated by Object/Property and structured by Choosing. It has Rationality as its individuating form and The Phenomenal as its matter.*

Cognitive agents are the loci of awareness and choosing. Their experience of themselves is as agents who are aware of things (objects and their properties), and who make decisions about them (make choices). Another aspect of ourselves that we associate with our being "conscious" is our having emotions. But emotions are not genuine aspects of ourselves as cognitive agents. Rather, emotions are the properties of something else of which we, as cognitive agents, are aware. Awareness in this sense is phenomenologically pure: it is directed towards phenomes, and otherwise has no qualities. We discuss this further in later eductions, and in Part 3.

20. Choosing. *Choosing is the individuating form of Cognitive Agents. Its hylomorphic partner is Awareness. Its telos is The Goodness of Personhood, and it is the telos of Rationality. The material eidos that it is the efficient cause of has not yet been educed. Choosing differentiates Souls (God's Consciousness) and structures Awareness. Its matter and individuating form have not yet been educed.*

Choosing is the form of the eidos Cognitive Agents. Our experience of ourselves as cognitive agents is that we apply our decisions to that of which we are aware. Our choices, in fact, influence the pattern of phenomes of which we are aware. Our experience is one where our choosing to be aware of something and not something else (that we nevertheless could be aware of) is a form that structures an otherwise disorganized pattern of phenomes.

21. Souls (God's Consciousness). *Souls (God's Consciousness) is the matter of The Goodness of Personhood; its hylomorphic partner is The Truth About God. It is the efficient causal consequence of Cognitive Agents. The material eidos that it is the efficient cause of has not yet* *been educed. The formal eidos that it is the telos of has not yet been educed. It is differentiated by Choosing and structured by The Truth About God. Its matter and individuating form have not yet been educed.*

The eidos Souls (God's Consciousness) has parts that belong to the fifth order. These parts, souls, are passive events of God's Consciousness of sufficiently good cognitive agents. By being sufficiently good persons, cognitive agents help bring about souls. By being sufficiently good persons, cognitive agents help bring about God's Consciousness, and in turn, God's Coming-to-Understanding.

22. The Truth About God. *The Truth About God is the individuating form of The Goodness of Personhood; its hylomorphic partner is Souls (God's Consciousness). Its telos is Material Cause. The formal eidos that it is the telos of has not yet been educed. The material eidos that it is the efficient cause of has not yet been educed. The Truth About God structures Souls (God's Consciousness) and differentiates Part and Whole. Its matter and individuating form have not yet been educed.*

The eidos The Truth About God is the form of the eidos The Goodness of Personhood. Cognitive agents that are sufficiently good persons enable God to be conscious of the truth about Himself.

23. Part and Whole. *Part and Whole is the matter of Material Cause; its hylomorphic partner is Structuring Form. It is the efficient causal consequence of The Goodness of Personhood. The material eidos that it is the efficient cause of has not yet been educed. The formal eidos that it is the telos of has not yet been educed. Part and Whole is differentiated by The Truth About God and structured by Structuring Form. Its matter and individuating form have not yet been educed.*

It is vital not to import into the notions of part and whole, as they are being used here, spatial intuitions that only apply to objects in space or time. It cannot be denied, however, that the ordinary notion of part and whole is most firmly and intuitively based on cases of spatial, even temporal, extensions. It is natural to think of spatiotemporal objects as having spatial and temporal divisions or restrictions as their parts, parts contained within the whole “four-dimensional” object. But it is very clear that the notion of parts and wholes naturally extends well beyond these primitive beginnings. Consider the idea of a judgment as Bertrand Russell often thought of it. This, according to Russell, is a logical object that nevertheless has as its proper parts the items that the judgment is about. There is no suggestion, however, that the judgment (which for Russell is an abstract object) is extended in space and time, even though what it is about may be.

24. Structuring Form. *Structuring Form is the individuating form of Material Cause. Its hylomorphic partner is Part and Whole. Its telos is Formal Cause (Individuating Form). The formal eidos that it is the telos of has not yet been educed. The material eidos that it is the efficient cause of has not yet been educed. Structuring Form structures Part and Whole and differentiates Sameness and Difference. Its matter and individuating form have not yet been educed.*

Particulars often have components that must be organized—or *structured*—in certain ways in order for those particulars to be what they are. This is one of the three senses of the notion of form. The eidos Structuring Form is the form of the eidos Part and Whole because this is a kind of form that applies to the parts of a particular, if it has any, in virtue of which that particular exists.

25. Sameness and Difference. *Sameness and Difference is the matter of Formal Cause (Individuating Form). Its hylomorphic partner is Differentiating Form (Differentiation). It is the efficient causal consequence of Material Cause. The material eidos that it is the efficient cause of has not yet been educed. The formal eidos that it is the telos of has not yet been educed. Sameness and Difference is differentiated by Structuring Form, and structured by Differentiating Form (Differentiation). Its matter and individuating form have not yet been educed.*

Sameness and Difference is the most abstract feature of the way in which particularity is presented to us; for particulars present themselves as this one and that one, as this self-same one in contrast to all the different and hence distinguishable others. Of course, Formal Cause is an essential *sine qua non* of this distinction between the same and the different, and Differentiating Form crucially makes for the distinction between the same and the different.

26. Differentiating Form (Differentiation). *Differentiating Form (Differentiation) is the individuating form of Formal Cause (Individuating Form); its hylomorphic partner is Sameness and Difference. Its telos is Efficient Cause. The formal eidos that it is the telos of has not yet been educed. The material eidos that it is the efficient cause of has not yet been educed. Differentiating Form (Differentiation) structures Sameness and Difference, and differentiates Activity. Its matter and individuating form have not yet been educed.*

A particular—as a whole—has form (Individuating Form). If it has components, then it is what it is by virtue of those components themselves being distinguished from one another and from other things. This is differentiating form. It applies to a particular by virtue of its application to the components of that particular.

27. Activity. *Activity is the matter of Efficient Cause; its hylomorphic partner is Regularity. It is the efficient causal consequence of Formal Cause (Individuating Form). The material eidos that it is the efficient cause of has not yet been educed. The formal eidos that it is the telos of has not yet been educed. Activity is structured by Regularity and differentiated by Differentiating Form (Differentiation). Its matter and individuating form have not yet been educed.*

In the same way that we take Efficient Cause and Final Cause (Telos) to be the twofold way that Ontological Dependence is writ large, we take Regularity, Activity, Imitation, and Piety to be the fourfold way that Ontological Dependence is writ large. We see this depicted in Diagram 1B, as well. That is, Ontological Dependence is Activity structured by Regularity, and Imitation is differentiated by that same Regularity.

28. Regularity. *Regularity is the individuating form of Efficient Cause. Its hylomorphic partner is Activity. Its telos is Final Cause (Telos). The formal eidos that it is the telos of has not yet been educed. The material eidos that it is the efficient cause of has not yet been educed. Regularity structures Activity, and differentiates Imitations. Its matter and individuating form have not yet been educed.*

Efficient cause is law-like. In this way, the particular causes and effects fall under patterns that can be treated uniformly. Scientific codification of efficient cause relies on the eidos Regularity being the individuating form of the eidos Efficient Cause.

29. Imitations. *Imitations is the matter of Final Cause (Telos). Its hylomorphic partner is Piety. It is the efficient causal consequence of Efficient Cause. The material eidos that it is the efficient cause of has not yet been educed. The formal eidos that it is the telos of has not yet been educed. Imitations is differentiated by Regularity and structured by Piety. Its matter and individuating form have not yet been educed.*

Particulars imitate one another. Eide imitate other eide. Non-eidetic particulars imitate eide and they imitate one another. Non-eidetic particulars resemble each other, in part, because of the eide they mutually imitate. Non-eidetic particulars that imitate the same eide differ from one another, in part, because of the different non-eidetic particulars that they imitate.

30. Piety. *Piety is the individuating form of Final Cause (Telos); its hylomorphic partner is Imitations. The material eidos that is its telos has not yet been educed. The formal eidos that it is the telos of has not yet been educed. The material eidos that it is the efficient cause of has not yet been educed. Piety structures Imitations. The material eidos that it differentiates has not yet been educed. Its matter and individuating form have not yet been educed.*

As in Plato, imitation is a primary feature of the realm of non-eidetic particulars. The eidos Piety is the form that structures the eidos Imitation. The eidos Piety—our name for serving God's Will—is the individuating form of the eidos Final Cause (Telos). The eidos Final Cause (Telos) is the individuating form of the eidos Ontological Dependence. The eidos Ontological Dependence is the individuating form of the eidos The Godhead. The eidos The Godhead is the individuating form of God. The eidos Piety has the eidos States of Affairs—that need to unfold properly in order that God's Will can be served—as its telos.

(**31-38.** We do not list or attempt to educe these eight eide, taking them to lie within the dominion of science rather than philosophy or theology.)

39. The Phenomenal. *The Phenomenal is the matter of Awareness. Its hylomorphic partner is Rationality. It is the efficient causal consequence of Object/Property. The material eidos that it is the efficient cause of has not yet been educed. The formal eidos that it is the telos of has not yet been educed. The formal eidos that it is differentiated by has not yet been educed. The Phenomenal is structured by Rationality. Its matter and individuating form have not yet been educed.*

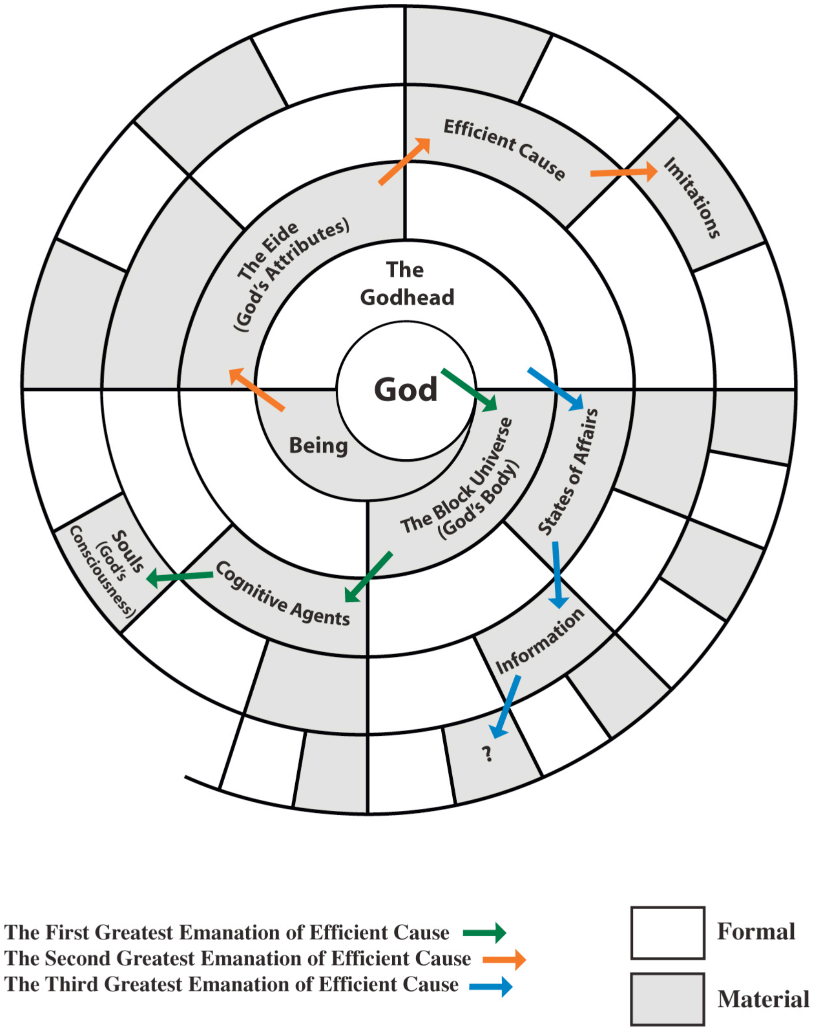
The matter of the eidos Awareness is the eidos The Phenomenal. The material of the awareness of cognitive agents are phenomes. These can be objects, and their apparent properties, or they can be actual metaphysical particulars that are the parts of eide. Furthermore, what a cognitive agent is aware of can be something true or something false.

40. Rationality. *Rationality is the individuating form of Awareness. Its hylomorphic partner is The Phenomenal. Its telos is Choosing. The formal eidos that it is the telos of has not yet been educed. The material eidos that it is the efficient cause of has not yet been educed. Rationality structures The Phenomenal. The formal eidos that it differentiates has not yet been educed. Its matter and individuating form have not yet been educed.*

The form of the eidos Awareness is the eidos Rationality. No cognitive agent is simply aware of phenomes as if they occur in a disorganized pile. Rather, phenomes must be structured by rational considerations, i.e. various generalizations that the cognitive agent uses to determine what that cognitive agent takes itself to be aware of—for example, that objects are laid out in space according to geometrical principles, and that some appear smaller than others because they are further away from the viewer.

This concludes our eductions of specific eide. We now turn to a brief characterization of certain important patterns of relations among eide. These are certain sequences of eide in which the same connecting relation ties together the eide making up the sequence. Three such sequences may be called the Greatest (or most significant) Emanations of Efficient Cause, and can be depicted as follows.

Diagram 3: The Three Greatest Emanations of Efficient Cause


God
The Godhead
Being
The Eide (God's Attributes)
Efficient Cause
Imitations
The Block Universe (God's Body)
States of Affairs
Information
?
Cognitive Agents
Souls (God's Consciousness)
The First Greatest Emanation of Efficient Cause
The Second Greatest Emanation of Efficient Cause
The Third Greatest Emanation of Efficient Cause
Formal
Material

Not all of these significant sequences, which are united by a single relation, are emanations outwards from God. For example, especially worth attending to are what we might call The Three Greatest Telic Trajectories, two of which will be briefly discussed in Part 3.

The second principle, the Principle of God's Eide, describes the objective reality of God's Attributes. Although the eductions based on this principle are fallible, the system implies that real understanding of God's Attributes is in fact possible. Moreover, when fully appreciated, the first and second principles suggest that there is an objective process of coming to understanding which is unfolding in the world. Part 3 will examine the nature of this process of coming to understanding and the non-eidetic metaphysical particulars that are crucial to the process.

(2.4) The Third Principle: God’s Non-Eidetic Metaphysical Particulars

Crucial to the process of coming to understanding, as we have just stated, are certain non-eidetic particulars. We now present the final and, in some ways, the most important of the three principles governing the present system, which characterizes the non-eidetic metaphysical particulars.

Principle 3: God’s Non-Eidetic Metaphysical Particulars: Particulars are further explicable as follows:

1. **For any formal eidos, we call the collection of particulars that are the parts of the matter of that eidos an *order*, and we call the particulars of every order, other than the first order, *non-eidetic metaphysical particulars*.**

2. **No particular of any order is also a particular of a different order.**

3. **Orders may vary in the nature and number of their particulars.**

4. **There are exactly two relations of ontological dependence by which non-eidetic metaphysical particulars stand to eide:**

    a. **Every non-eidetic metaphysical particular is immediately ontologically dependent on the material eidos of which it is a part.**

    b. **Every non-eidetic metaphysical particular imitates one or more eide.**

5. Some non-eidetic metaphysical particulars imitate one or more other non-eidetic metaphysical particulars.

(We stress again that, by definition, God is not a "non-eidetic metaphysical particular.") The orders are numbered according to where they appear in the primary emanation of the eide. As the previous eduction showed, the particulars of the first Order are eide, and hence we call this order of particulars, *The First Order: Eide (God's Attributes).* The particulars of the second order are the parts of the eidos Cognitive Agents, and hence we call this order of particulars, *The Second Order: Cognitive Agents;* the particulars of the third order are the individual relations of *is-the-efficient-causal-consequence-of*, and they are the parts of the eidos Efficient Cause. Hence we call this order *The Third Order: Efficient Cause*, and so on.

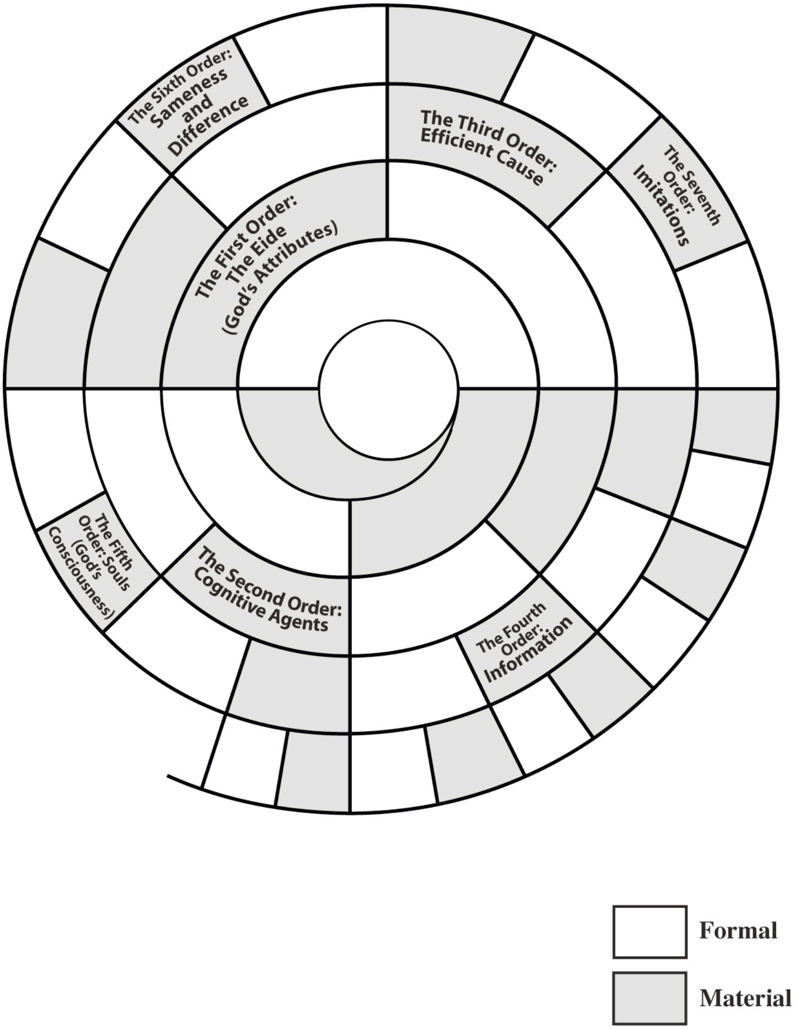
The second and third orders differ as follows:

a. *The Second Order: Cognitive Agents* has finitely many parts (individual cognitive agents).

b. *The Third Order: Efficient Cause* has infinitely many parts (individual efficient causal consequence relations).

Diagram (4) below locates the first seven orders within the spiral that is the primary emanation of the eide.

Diagram (4): The Orders


The First Order: The Eide (God's Attributes)
The Second Order: Cognitive Agents
The Third Order: Efficient Cause
The Fourth Order: Information
The Fifth Order: Souls (God's Consciousness)
The Sixth Order: Sameness and Difference
The Seventh Order: Imitations
Formal
Material

Notice that God and the orders of particulars somewhat parallel Plato’s famous four-part taxonomy. In Plato’s thought, it is possible to distinguish four distinct realms of particulars: a realm of gods, a realm of unchanging eide, a realm of souls, and a realm of imitations of the eide. It is natural to compare Plato’s four realms with God and the orders of particulars as follows:

Plato’s Four Realms of Particulars		God and The Orders of Particulars	
1.	The realm of gods	1.	God
2.	The realm of eide	2.	The First Order: The Eide (God’s Attributes)
3.	The realm of souls	3.	The Second Order: Cognitive Agents
4.	The realm of imitations	4.	The other orders, and objects

On Plato’s view, non-eidetic particulars—this includes the gods, souls, and everything other than eidos—all imitate the eidos. Thus, strictly speaking, for Plato there are two realms only: The realm of the eide and the realm of imitations.

Our view is a great deal more complicated, as Principle 3 indicates. There is God, there are the eide, and there are the parts of those eide that are the material eide of formal eide. Corresponding to these latter eide are the various realms of non-eidetic metaphysical particulars. We understand the six causes—individuating form, matter, efficient cause, telos, differentiating form, and structuring form—to apply to all metaphysical particulars. This does not mean that all six always apply to every metaphysical particular; for some only a subset of the six causes may apply. In some cases, as with eide, the matter and the form of those particulars are themselves particulars—in fact, eide. In the case of non-eidetic metaphysical particulars with form and matter, the form and matter need not themselves be particulars: they need not themselves have matter and form in turn.

In addition, this point should be made: The scientific world-picture generally assumes that everything there is—all particulars—operate according to laws that are restricted to efficient causation. This is clearly not our view. Because all six causes are involved—specifically telos—particulars can be affected by one another in ways that go beyond efficient causation. Specifically, not only do non-eidetic particulars affect one another by means of efficient causation, they can also teleologically affect one another. One way this occurs is for some non-eidetic particulars to imitate other non-eidetic particulars. On Plato's view, non-eidetic particulars only imitate eidos, never each other. On our view, non-eidetic particulars not only imitate eidos, they also imitate one another. This point will prove crucial to our discussion in Part 3 of the so-called "mind-body" problem.

Let us also discuss in a little more detail the absolutely fundamental relations of ontological dependence. Although all particulars other than God are ontologically dependent on him, eide and non-eidetic metaphysical particulars differ in several important respects on the matter of ontological dependence. Eide are only ontologically dependent on each other and on God. Non-eidetic metaphysical particulars are also ontologically dependent on the eide of which they are parts, and on the corresponding eide that they imitate. They are not, however, ontologically dependent on the non-eidetic metaphysical particulars that they imitate; indeed, the relationship sometimes goes the other way. Chains of ontological dependence go from non-eidetic metaphysical particulars to the eide of which they are the parts, and then to God Himself. Even so, God does not directly determine the nature of non-eidetic metaphysical particulars. Non-eidetic metaphysical particulars enter into efficient causal relations with other non-eidetic metaphysical particulars, so that their individual natures also depend on this pattern of efficient causation. Therein lies the ontological basis of the (limited) autonomy of empirical science, when understood as the study of efficient causation.

As we will see in the later parts of this book, some non-eidetic particulars fail to be the parts of any eidos. Instead, they are partially "constructed". This means that they are demarcated as particulars by human beings in ways that represent the idiosyncrasies of the human sensory system and cognitive apparatus. For example, each one of us seems to be aware of a self—something that is the seat of our awareness, has emotions, and has a body. But there is no non-eidetic metaphysical particular to which this entity corresponds. Rather, we are simultaneously aware of *two* non-eidetic metaphysical particulars that we mistakenly judge to be a single entity.

Similarly, most of the so-called "natural" objects around us are, in part, mental constructs. At some level, they are partially constructed or carved out by our taxonomic decisions to cleave reality in ways that mesh with our pragmatic purposes. For example, we regard a tree as distinct from the soil it is rooted in due to our need to treat "trees" in ways that make it convenient for us to think of them as distinct from their soil (as being capable of being dug up and moved, for example). This constructed nature of the items we treat as distinct and namable is even clearer when it comes to the "parts" of a single item—such as an individual tree, when we divide it into distinct objects such as leaves, fruit, roots, bark, and so on.

Exactly the same point holds of artifacts. Consider a table, understood by us to be naturally divided into legs and a top. There need not be any natural divisions in the table that justify our cleaving it thus and so. Of course, the role of such "construction" tends to be invisible to us in practice because we are so in the habit of thinking of artifacts in terms of the functions that we impose on them. In the case of a table, we recognize that the function of its legs is to hold the table up—something that is not true of its top. The same sorts of imposed functional divisions lie behind our distinguishing the "organs" of animals in the ways we do and, more importantly, in our distinguishing the animals themselves from one another and from other objects.

Some of the things that we encounter, both in everyday life and in science, are genuine metaphysical particulars; others are constructions that *appear* to be such particulars. Only a profound understanding of the metaphysics of God, the eide, the particulars that are the parts of some of the eide, and the nature of the relationships between these various things that can present themselves as particulars will enable us to recognize the important metaphysical differences here.

Finally, though non-eidetic metaphysical particulars are dependent on the eide, and so have a lower ontological status than eide, certain non-eidetic metaphysical particulars have nevertheless a high theological status. For some of these non-eidetic metaphysical particulars are vital to God and to the carrying out of God's Will, centered as He is on the process of coming to understanding. These non-eidetic metaphysical particulars, and the role they play in coming to understanding, are the focus of Part 3. Part 4 will treat the implications of the three principles and the associated eductions for religious practice.

Part 3: Non-Eidetic Particulars and God's Will

(3.1) The Orders of Particulars

As we mentioned at the end of Part 2, Plato suggests that there are four realms of reality: gods, eide, souls and imitations. We claim instead that there are infinitely many such "realms" (other than God Himself), and that these "realms" can be read off of Diagram 1B in the following way: each eidos (and only such) that is the matter of a formal eidos has particulars as its parts. The collections of those particulars are what we call *orders of particulars*, and it is those orders that we mean to describe as the many realms of reality. (See Diagram 4.)

One may wonder why the eide that are the matter of formal eide, and only these eide, correspond to orders of particulars. First, in carrying out the particular eductions of Part 2, it simply became clear that these eide, and not the others, naturally correspond to such orders. Consider, for example, the eidos Cognitive Agents, and contrast it with the matter of that eidos, the eidos Awareness. The eidos Cognitive Agents very naturally seems to correspond to an order of particulars—namely, cognitive agents. Awareness, on the other hand, does not naturally divide into units. Another illuminating example is the eidos The Block Universe (God's Body). Our monism with respect to The Block Universe (God's Body) denies that such a thing has particulars as its parts. (It may have aggregates and stand in significant relations, and even manifest agency, but it does not have proper parts.) The various eductions, based—as they must be—on the various global features of our system, indicate in many if not in most cases why particular eide have or do not have an order of particulars corresponding to them.

There are also more general considerations that incline us to posit that all and only the eide that are the matter of formal eide correspond to orders of particulars. First, there is the consideration that the particulars in the order corresponding to an eidos are the parts of such an eidos. However, the eide that are forms are not naturally conceived of as having parts. Furthermore, the eide that are the matter of formal eide should be less "material" in their composition than the eide that are the matter of material eide. Particulars, indeed, are less material than stuff that fails to be individuated in the way that particulars are individuated, because particulars have both matter and form, while mere stuff is purely material.

We are not claiming that the foregoing considerations are conclusive; but they seem a firm enough basis upon which to continue our metaphysical speculations. We repeat the point that metaphysical thinking—any metaphysical thinking—is always incomplete and tentative and should be acknowledged as such.

The first order of particulars is the collection of the eide themselves, and hereon we call it the *First Order: The Eide (God's Attributes)*. We name each order in a similar fashion, by numbering orders successively (according to the order of their corresponding eide in the primary emanation of the eide), and by indicating explicitly, in the name of each order, the name of the eidos of which that order contains the parts.

We have distinguished the particulars in all the orders other than the first with the nomenclature *non-eidetic metaphysical particulars*. (In Diagram 4, we depict the first seven orders of our system.) Our discussion of the second and later orders rounds out our characterization of the ontology of our system; these orders offer further details about non-eidetic metaphysical particulars, and at the same time they provide a natural infinite taxonomy of those particulars.

We have described the particulars of the various orders as the parts of the corresponding eide. It is important, however, to distinguish between (1) the whole of a given eidos's parts as a simple mereological sum—a whole that has no particular significance other than its happening to be that whole and our being able to refer to it as such—and (2) the eidos itself, which has two other eide as its matter and the other as form, respectively. An eidos—even though it has parts—is not a mereological sum, insofar as a mereological sum is not understood to have matter and form. Furthermore, the parts of an eidos do not make up its matter. Except for the eidos The Eide (God's Attributes), the parts of any eide are non-eidetic metaphysical particulars, not eide. The matter of a given order is a distinctly different entity from that of the mereological sum of its parts.

The difference between the nature of the matter and form of a particular and the nature of the *parts* of that particular arises not just with eide, but also more generally. Take gold, for example: a single atom of gold is a part of a lump of gold, but it is neither the matter nor the form of that gold. The matter of gold is malleable; a single atom involves quite different properties. The form of a lump of gold involves certain properties of that lump; a single atom does not. Though the gold molecule is, more or less, in a state of flux, the parts of the lump are usually, more or less, in a state of stability. The distinction between the parts of eide, when they exist, and the matter and form of such eide, is similar.

We turn now to providing further details about the orders of particulars beyond the first order. Two orders will be given special attention in subsequent sections: the *Second Order: Cognitive Agents*, and the *Fifth Order: Souls (God's Consciousness)*. They will be given special and detailed attention in our subsequent analysis, not only because they relate so intimately to the illumination of our understanding of ourselves, but also because they play a direct role in Coming-to-Understanding (God's Mind), and thus for understanding God's Will. Discussion of these two orders therefore provides a natural transition from the previous two Parts to Part 4, which concerns the implications of God's Will. In the rest of this section, therefore, we limit our discussion to the other four orders of particulars.

First, let us make some general observations about these non-eidetic metaphysical particulars. Recall from Part 1 that a complete answer to the specific metaphysical question—namely how a particular thing is what it is (the explanation of "the particularity" of any given particular)—can involve as many as six causes. We also noted that it is not a requirement of this role of the six causes that every particular have exactly *six* causes. Some may have less. Efficient cause is, of course, one of the explanatory causes, and in our view it is a quite special one. As Diagram 1B shows, the eidos Efficient Cause is the very matter of Ontological Dependence, which is the individuating form of God's own Form, The Godhead.

Apart from the particular significance that it has in shaping the spiral structure of The Godhead, in accordance with our system, efficient causation plays an extremely important role in almost any traditional theological account of God. God is the creator of the entire universe: He is the efficient cause of it and of everything in it. As we have noted in Part 2, there is only a partial agreement between these traditional views and our system. God is indeed the efficient cause of The Block Universe (God's Body). However, we claim that though God is its efficient cause *as a whole*, He has no direct efficient causal power to intervene in any of the affairs *within* The Block Universe (God's Body). To the extent that intervention is required in the service of God's Will, it is we who must intervene on His behalf.

The individual efficient causal relations of the *Third Order: Efficient Cause* are infinite in number, if for no other reason than that there is at least one such relation standing between every eidos and its efficient causal consequence. More importantly, efficient causes and final causes are inextricably intertwined, and both are required to bring about order and organization; otherwise, all would be purely accidental.

Thus far we have identified infinitely many individual relations of the *Third Order: Efficient Cause*, namely those that hold between the individual eide. Yet there are vastly many others that we have not identified, such as those that hold between individual non-eidetic metaphysical particulars and each non-eidetic metaphysical particular's efficient cause. Thus we see even further the breadth and fundamental nature of the notion of efficient cause.

We turn now to the *Fourth Order: Information*. What the appropriate particulars are that occur in this order is not for us to say: it is something for science to discover. In describing the eidos in question as "Information," however, it is not being suggested that these particulars are subjective in some sense. Rather, we posit that they are the appropriate units that function as the matter for intelligibility. These units, however, are not visible to us for an important reason. The form of Intelligibility is the eidos Object/Property. What this means, roughly, is that it is only when the particulars of the *Fourth Order: Information* are perceived as objects and their properties that the information in God's Body becomes—as it were—intelligible. It is no surprise, therefore, that cognitive agents are aware of objects and their properties. They are not usually independently aware of the particulars that are the parts of the matter of the eidos Intelligibility; they cognize these particulars, if at all, only by virtue of their direct awareness of objects.

This is an appropriate time to lay out explicitly some aspects of our views about non-eidetic metaphysical particulars and the profitable comparisons that may be made between them and other sorts of things. Doing so will not only illuminate the points we have just made but also facilitate the discussion of selves, persons and souls that arises in section 3.3.

We first draw a distinction between *metaphysical particulars* and *constructed particulars*. Metaphysical particulars—as stated in Principle 1 at the beginning of Part 2—are the parts of one or another eidos, the eide themselves, and God. We have been calling the parts of the eide *non-eidetic metaphysical particulars*. (Strictly speaking, God is also a "non-eidetic" metaphysical particular—but for what should be obvious reasons we have not included Him among the "non-eidetic particulars.") Constructed particulars, by contrast, are parts of, or groups of, metaphysical particulars that appear to operate (in one respect or another) as one thing. Both metaphysical particulars and constructed particulars are real things in the sense that the latter are portions or groups of real things.

Objects, however, in the technical sense in which we use the term here, are not real. Objects are those relata of noun phrases that do not correspond to metaphysical or constructed particulars. They are, therefore, singled out purely by virtue of a relation to a conceptual scheme, a body of beliefs, a set of propositions, or a set of sentences. These relata can be nothing at all (unicorns), but they can also be—in some sense—combinations of metaphysical particulars, constructed particulars, or nothing at all. When we think about a domain of study (for example, a scientific arena such as physics or biology), we can sometimes understand it in a metaphysically genuine way. When that happens, we are thinking of it purely in terms of the metaphysical particulars that are involved. When instead we characterize it in progressively less metaphysically genuine ways, we will describe it as involving various objects: "idealizations" that do not exist in any way at all. For example, it is not uncommon to characterize a physical object in space as something that has a smooth boundary (say, in order to allow that certain mathematical operations on its boundary are well-defined). Thinking of a physical object in this way is to think of it as an object that is a combination of something physically real (the physical object) and something physically unreal (the smooth boundary). When we attempt to think about metaphysics, we do something similar: often, we think of something not purely as it is metaphysically, but as combined in our thinking or in our awareness with something unreal—with objects.

Let us revisit the triad of eide: Intelligibility, Information and Object/Property. It should now be clearer what we have in mind. The particulars of the *Fourth Order: Information* are the parts of the matter of the eidos Intelligibility. The eidos Intelligibility, however, is the form that structures information into object/property relations. Notice again the important fact that objects are not metaphysical particulars. There is no order of particulars that corresponds to the eidos Object/Property. No more are objects constructed particulars. Instead, they are items that cognitive agents can be aware of but that do not correspond to anything metaphysically real.

Most cognitive agents—it must be stressed—are aware *only* of objects and their properties. They are not generally aware of metaphysical particulars or even of constructed particulars. This means that there is an essential illusion underlying the awareness of some, if not most, cognitive agents. This is one reason that their awareness should not be confused with God's Consciousness. When we state—as we did earlier—that some cognitive agents are aware of nothing, we mean that literally. The other reason, incidentally, to distinguish God's Consciousness from that of specific cognitive agents is simply because of the differences in the ranges of each kind of referential state. Cognitive agents are small contributors to the vast understanding of God's Mind.

We cannot leave readers with the impression that cognitive agents *must be* trapped in an awareness of illusions. This may be true for most cognitive agents, but it is not a requirement on the awareness of cognitive agents as such. Notice that, in Diagram 1B, the matter of the eidos Awareness is the eidos The Phenomenal. The way to interpret this is that the referential states that cognitive agents are in—states of *being aware of*—are states that are directed towards what we call *phenomes*. These are the contents of the *being-aware-of* states of cognitive agents;

that is, phenomes are what cognitive agents are aware of. ("Phenome" is in wide use; but this is the technical sense in which we will use the word here.) Many phenomes correspond to objects and their properties, and so most cognitive agents are aware of nothing real. In some rare cases, phenomes correspond to metaphysically significant items. That is, some cognitive agents are aware of constructed particulars, and some are even aware of metaphysical particulars. Few cognitive agents can be described, for example, as aware of God.

God, the eide, constructed and metaphysical particulars, objects, and what we shall shortly characterize as constructed notions—all these correspond to phenomes. That is, they are all items of which cognitive agents—at least in principle—can be aware. Notice that the eidos Phenomena does not have an order of particulars corresponding to it. Phenomes are not particulars; to talk about "phenomes" is merely to employ a useful shorthand for talking about the contents of the awareness of cognitive agents.

Deferring further discussion of the *Fifth Order: Souls (God's Consciousness)* until later, as we stated we would, we turn next to the *Sixth Order: Sameness and Difference*. This order has the actual individual instances of the similarities and differences of non-eidetic particulars as its parts, and so this order is clearly of great importance to explanatory relations, and especially to those of structuring and differentiating. This can be seen by its location in the Primary Emanation, where the eidos the *Sixth Order: Sameness and Difference* is seen to be differentiated by the eidos Structuring Form and structured by the eidos Differentiating Form (Differentiation). It is also crucial because, as philosophers have discovered, identity relations are more rare, and more conceptually difficult, than one would have expected. Of the relations among metaphysical particulars that exist in The Block Universe (God's Body), the vast majority are ones of sameness and difference. Similarity can even be said to be the dominant concept for understanding the natural world, regardless of whether that understanding comes via metaphysical particulars, or more indirectly through constructed particulars or mere objects.

The *Seventh Order: Imitations* has the extant individual Platonic instances of imitation between non-eidetic and eidetic particulars as its parts, as well as the other relations of imitation that occur between non-eidetic particulars. Imitation is the simplest form of telic similarity. In particular, imitation is a relationship of similarity in which there is a primary instance (that which is imitated) and a secondary one (that which imitates). To recognize a relation of similarity is not yet to make any comment about causal influence. By contrast, to characterize a similarity relation as one of imitation is to acknowledge that the imitated object has some causal influence on the agent or the object that imitates it, although it is obviously not the relation of efficient causality but rather the relation of final cause (telos). We have argued that the sort of causal influence conveyed by imitation is no less important than the efficient causal relations on which most of modern science is based. Final causes will be seen to be on a par with efficient causes in the explanation of the most fundamental and most general relations of all—the relations of ontological dependence by which things stand to each other and all things in turn to God.

This concludes our discussion of the first seven orders of particulars, apart from the further discussion of the *Second Order: Cognitive Agents* and the *Fifth Order: Souls (God's Consciousness)* that is coming in later sections. We close out this section by making one final point.

One domain of phenomena that is now considered to be an important subject area of science, and with which science has become urgently concerned, is that of mind. On this topic, however, it is not sufficient to defer to science. We take mind—which is generally understood within the academy to be a single subject matter—to be more appropriately studied in the context of philosophy and theology than in science itself. Although science has contributed a great deal to our understanding of mind, it is recognized that the cognitive sciences are stymied by major stumbling blocks in their attempts to understand mind. A successful characterization of consciousness—to mention one widely recognized problem—still eludes researchers. One of the errors of science in this area, we believe, is the conceptual lumping together of various separate metaphysical and/or theological subject matters under the single subject matter of mind. If our system achieves nothing more than to have made this case, it will have made an important positive contribution. It is not for lack of trying that the sciences of mind have faced such difficulties. It is because important aspects of this multi-faceted subject fall outside the reach of the explanatory tools that science has at its disposal. The brief discussion above of the importance of the relation of final cause (telos), which modern science has largely criticized and eschewed, offers just one example of why purely scientific accounts of mind cannot be complete.

Such "success" on our part is, of course, unintentional, for our goal is only to comprehend God's Will and how we are to serve Him, not to point out the shortcomings of science. Nonetheless, the balance of this book will also serve, in effect, as an aid to making clear why science is blocked from fully understanding the nature of mind—God's or ours—and how it is that the metaphysical assumptions of science account for this incapacity. It is remarkable how the realities of "mind" themselves blur the current (arbitrary) divisions between the sub-disciplines of science that have evolved in the attempt to manage the understanding of this seemingly recalcitrant subject matter. Philosophers, cognitive scientists (of various stripes), and linguists find themselves regularly wrestling together at interdisciplinary conferences with the seemingly intractable aspects of mind.

(3.2) Cognitive Agents and Selves

As we are all aware, there are many contemporary notions that are associated with, or have been brought in to replace, what many find to be the quaint or outdated concept of the human soul as the locus of consciousness. Today, many refer to "conscious selves," "persons," "human beings," "cognitive agents," "egos" and the like. Such terms as "higher self," "spirit" and "higher consciousness" also float about indiscriminately in popular theology and popular religion, especially among those who are seeking to move beyond the confines of the older and more traditional forms of Christian piety. For the most part, these substitutes are composites built up out of several distinct ideas; for this reason they often play confusing roles not only in the vernacular but also amongst the learned. What relations do our two fundamental concepts of *cognitive agent* and *self* bear to these older notions? What follows is our answer to this question. The results will allow us to clarify the notions of self, person and soul in section 3.3.

In Diagram 1B, we see at once that the eide in question—Cognitive Agents, Awareness, Choosing, and Souls (God's Consciousness)—are not located *within* the dominion of the eidos The Block Universe (God's Body). For reasons that we will specify, however, they are dependent on specific aspects of it for their existence. This means that our notions of cognitive agent, self, person, and soul are, in a significant sense, not to be understood as referring to physical entities, even though events and agents within The Block Universe contribute an essential role to understanding them. Furthermore, as we will see, neither our concept of a cognitive agent nor our notion of a person can be the kind of fragmented, deconstructed "self" found in so many Buddhist philosophies and in postmodern thought. We do agree with the notion of a fragmented *self*, but it occupies a very different place in our system, as we now show.

Recall from section 3.1 that, although we divide particulars into metaphysical particulars and constructed particulars, we regard both kinds of particulars as "real" in contrast to objects, which are not real. Selves are an example of constructed particulars. They are constructed from the pairing of two non-eidetic metaphysical particulars: a cognitive agent and a physical agent. In noting this, we have just introduced the not-yet-explicated notion of a physical agent, and our having done so will have puzzled the conscientious reader. For Diagram 4 labels an order for cognitive agents, and another for souls; but no label for physical agents appears. And yet there must be such an order if—as we have just claimed—physical agents are metaphysical particulars. Indeed, there *is* such an order, but it is located somewhere in the quadrant of the eidos The Block Universe (God's Body). Because of its presence in that quadrant, we are not in a position—at this time—to educe its exact location. This is something that, as we have already indicated, is true of *many* of the eide in that quadrant—the quadrant that we generally defer to science to describe.

We have identified selves as constructed particulars that involve a pairing of a cognitive agent with a physical agent. More precisely:

> *A self* is a constructed particular composed of a cognitive agent and a physical agent, where the former is ontologically dependent on the latter, and where the latter imitates the former.

A more precise definition of self will become possible after we provide a technical definition of person in section 3.3; we return to this topic also in 4.3.

One ability that we normally associate with a self is an ability to *feel*. Feelings, like everything had by a self, must have their source in something in the self that is metaphysically real. This source cannot be the cognitive agent because, as Diagram 1B makes clear, cognitive agents can only be involved with awareness and choice. That is to say, a cognitive agent can be *aware of* feelings but it cannot be the *source* of those feelings. The metaphysical particular in which feelings are located must, therefore, be the other metaphysical particular involved in selves, namely what we have called the "physical agent."

A natural question is: exactly how is a self composed out of two distinct metaphysical particulars? How is it both cognitive and physical at the same time, and how are these two aspects—what Descartes misleadingly calls *res cogitans* and *res extensa*—related? A broader question is this: how are constructed particulars, more generally, “constructed” from the particulars out of which they are constructed? This second question is not one that can be answered easily because each type of constructed particular is very different. We can, however, give a specific answer with respect to the case where a physical agent and a cognitive agent are “self-tied” together. There are two related elements involved in the “construction” of selves from cognitive and physical agents. The first is the presence of certain correlations between particular physical agents and particular cognitive agents that don’t occur between agents that are not self-tied together. These correlations are due to the specific cognitive agent being ontologically dependent on the physical agent it is self-tied to. As a result of this, the cognitive agent is aware of aspects of the physical agent, and it is aware of the environment that the physical agent is in.

Perhaps there are cognitive agents who are so enlightened that they can recognize when they are aware of themselves (as cognitive agents, and of the environment in which they function as cognitive agents), and who can distinguish this awareness from the very different awareness that they experience due to the physical agents they are self-tied to and the environments of those physical agents. Most cognitive agents are not enlightened in this way. Instead, a typical cognitive agent unifies what it is aware of—when that awareness is directed either towards itself or towards the physical agent—into what we call a *self-image*. Included in this self-image of the cognitive agent are both awareness of the cognitive agent itself and awareness of the physical agent.

There is an interesting wordplay that our phrase “self-image” has been deliberately coined to exploit. The self-image is an image of a *self*. If the cognitive agent is aware of the self as a constructed particular, one component of which is the cognitive agent itself, then such a cognitive agent perceives its self-image correctly. It understands what the appropriate metaphysical relations are between itself, the physical agent, and the self that is composed of these two. But if the cognitive agent wrongly thinks of itself not as a constructed particular but as a metaphysical given, then it is mistaken about the metaphysical relations in question. As we have noted, this kind of mistake is very common, indeed nearly universal. In such cases, a cognitive agent can associate with itself all sorts of elements that properly belong only to the physical agent. Even worse, a cognitive agent can include in its self-image elements that—strictly speaking—are neither true of itself (as a cognitive agent) nor even true of the physical agent to which it is self-tied. Because of this, we should characterize what a self is capable of (and not capable of) as due not only to the composition of the powers of the cognitive agent and the physical agent of which it is composed, but also as involving elements of how the cognitive agent understands its own awareness. Almost all cognitive agents fail to see their selves correctly as components of constructed particulars; they instead treat the relations as ones of identity: my self (myself) as a cognitive agent is the same as my self as a physical agent is the same as my self as a self.

One reason for this almost universal confusion is that almost everyone takes the processes associated with cognitive agents to be ones that occur in space and time, and in this way they identify themselves as cognitive agents with things existing in space and time. We claim, instead, that the activities of cognitive agents are purely atemporal and do not take place in time or in space. It is only the activities of the physical agent that unfold in space and time. We will return to this topic in section 3.4.

We turn now to a closer discussion of "self-image." Notice, again, the subtle wordplay involved, which gives rise to an almost universal confusion. If one uses the words "my self," one tends to think of the referent of "self" as, and identify it with, the locus of one's consciousness. However, this is not how "self-image" is being used here. "Self-images" are images of the selves that each cognitive agent is a part of—which are, again, constructed particulars composed of a cognitive agent (which is the seat of consciousness) and a physical agent self-tied together. When a cognitive agent has a self-image in this sense, it is not the image of the cognitive agent itself but instead the image of the self that is constructed *on the basis of* that cognitive agent. Similarly, when we speak of the image that a cognitive agent has of its self, it is the self that is constructed from that agent that is being spoken of, and not the cognitive agent. It is extremely important to be clear about all of this.

The self-images that cognitive agents have (and that they tend to identify with themselves-as-cognitive-agents) are quite flexible in one sense, and quite rigid in another. They are quite flexible in that they differ greatly from individual to individual and, in addition, from one culture to another. These differences are vast; they are not limited to the ways that cognitive agents vary in their perceptions of themselves as intelligent, affable, etc. Self-images also differ with respect to what cognitive agents regard as relevant and essential to a self-image, and they differ in the sets of properties or qualities that they value in the self. There are two sources for this variability. One is that the physical agent is itself capable of varying greatly in space and time. We tend (in this culture) to think of the physical agent as only the physical body over time. But that characterization works—at best—only when human bodies are involved; and even in some of those cases it can be argued (e.g., either because of the use of certain prosthetics, such as an artificial heart, or because of certain close relationships that those human bodies have with other things in their environment) that the physical agent is more than the human body that is self-tied to a cognitive agent.

Apart from these considerations, cognitive agents also differ greatly in what they regard as the sorts of properties that can be or should be *essential* to their selves. Some, for example, see accidents of birth such as gender, ethnicity, social standing or nationality as essential. If such cognitive agents discover that they are wrong about one of these, say their ethnicity, this can cause a deep identity crisis, for such cognitive agents cannot accept or imagine that they are different from what they have defined their selves to be. Others include possessions as part of what makes them "who they are." For instance, a cognitive agent that perceives itself to "own" a corporation may regard the entire corporation (truly or falsely) as a part of its self, and it may act in the world as if this were true. Still others cannot detach their selves from the cars that they own or from the style of appearance that they have adopted. These examples show the extent to which a self-image is vital to understanding how a cognitive agent participates in a self.

One thing that is being indicated here is how the psychological features of the physical agent can shape a cognitive agent's self-image. A self-image may also be in part an unconscious result of how the history and environmental nurturing of that self's cognitive and physical agents—factors far outside their own control—have unfolded and affected them. Cognitive agents have some capacity to modify these self-images, but to a large extent a self-image develops and shifts over a lifetime because of the developments in the trajectories of both the physical and the cognitive agent.

The self-image of a cognitive agent directly affects the freedoms that cognitive agent takes its self to have or to lack. When a cognitive agent believes that certain attributes are essential to its self, it becomes as a result almost necessary that these attributes cannot change. They become aspects over which the cognitive agent now has no control. In this respect, such cognitive agents engage in what might be described as *false selfness*, or even *false selfishness.* Such cognitive agents refuse to recognize the genuine elements of choice that are available to them. Their rigid self-image assumptions about who they are—a man, a woman, someone belonging to a particular class, someone who lacks certain abilities or skills, someone who belongs to a certain nationality—rule out the options of change or choice that are actually available to them. Such cognitive agents take their selves as "incapable of that sort of thing," whatever it may be.

We do not deny that there are realities, facts of the matter, about the potentials and limitations of particular selves, which hold in virtue of the particular cognitive agents and physical agents that are self-tied together in those selves. And we are by no means claiming that everyone has the capacity to be whatever they can imagine, or that a self's options are not restricted by who it is. Our main point is that a cognitive agent's self-image is often far more restricted in its potential than the actual self—composed as it is of a cognitive agent and a physical agent. In labeling certain properties as "essential" to our self, we immediately negate other properties that we might in fact be quite capable of possessing. It is also true, of course, that a self-image often provides the illusion of latitude in the options of a self, when actually very little latitude is present. Such self-delusion helps to explain the illusion of non-existing options for a self concomitantly with the illusion of non-existing constraints.

The self-image evolves despite its apparently natural resistance to change—and sometimes even despite a cognitive agent's denial or failure to realize that it has in fact changed. Dramatic events, responded to in ways that the cognitive agent did not anticipate or even would have denied to be possible, often elicit the accidental discovery that the self is capable of much more (or much less) than previously thought. In the process, certain illusions of the self that a cognitive agent once esteemed highly may be crushed. These forced developments reveal something positive, however: the self-image is far more under the control of the cognitive agent than most imagine. Our self-image is something we can reconstruct and improve.

The powers of selves are best conceived as due to a combination of components that evolve over the course of the self's history—namely, as due to the evolving properties of cognitive agents and physical agents, and therefore as also involving mere objects. This is because in any characterization of a self, its scope, and its limits, we cannot ignore the self-image possessed by the cognitive agent. Characterizations of a self and its properties must therefore include not only reference to the cognitive agent and the physical agent of which it is composed, but also reference to a self-image (a set of mental notions or phenomes that are possessed by the cognitive agent). Corresponding to the self-image had by a cognitive agent are the psychological aspects of a physical agent, e.g., the emotions generated by a human brain and body. Thus, in describing the self, we must focus on the properties of the metaphysical particulars that make it up, and on how those particulars interact with one another.

It is important to notice (and so we stress it again): a self is a constructed particular both in the sense that it is a composition of metaphysical particulars, and in the sense that mental aspects—phenomes that are embodied in the self-image—play a role in what it is. What is crucial to the self is not just a pairing of its metaphysical components but also the role of the image of the self that is had by one of those metaphysical components, that is, the self-image had by the cognitive agent that is a component of that self.

(3.3) Selves, Persons and Souls

We turn now to a concept that will prove to be extremely important to the entire concept of coming to understanding: the concept of *personhood*. We have described selves as constructed particulars; consequently, the resulting notion of a self is one whose extension contains such constructed particulars. It is possible, of course, to have a notion whose extension contains only metaphysical particulars; and yet, even then, that notion can still fail to correspond to an *order* of particulars. For example, one of the notions of "person" we shall offer in this section will be one according to which *only* God and (some) cognitive agents are persons. Such a notion cannot correspond to an order of particulars because no order of particulars can contain God. When a notion has metaphysical particulars in its extension but these do not correspond to an order of particulars, or when a notion has constructed particulars in its extension (perhaps together with metaphysical particulars), we shall describe that notion as a *constructed notion*. In so calling it, we intend only to indicate that such a notion fails to have an extension that corresponds to an *order* of particulars. It is important to notice that constructed notions can nevertheless be metaphysically significant because the particulars that they group together may have important resemblances that are valuably characterized as falling under the same notion. This, we claim, is especially true of the constructed notion to be studied in this section: that of a *person*.

As we have indicated, we understand both cognitive agents and God to be persons. We start by offering a first definition of a person.

> Definition 1: We define a *person* as a particular with three structured sets of capacities:
>
> (i) referential capacities (being aware, or being conscious),
> (ii) volitional/purposeful capacities (having a will, and/or making choices in accord with goals or purposes),
> (iii) the capacity to love (being able to exercise the first two sets of capacities in accord with God's Will).

Three qualifications are called for. First, we intend to indicate the structured sets of capacities quite broadly, so that they characterize God, cognitive agents, and other particulars with similar capacities. Being aware of something and being conscious of it, we have claimed already, are quite different things. Cognitive agents have the ability to be aware, but only God is conscious. Nevertheless, both states are "referential" in the sense that intentionality (aboutness) is crucial to both. For a person to be aware is for it to be aware of something being a certain way; so too, God is conscious of specific things being in certain ways.

Similarly, the volitional/purposeful capacities of cognitive agents—having a will (i.e., desires conditioned by purposes and goals, and directed towards certain objects), making choices, and then acting on them—are like the Will of God, although God neither makes nor acts upon choices.

The third set of capacities places a genuine constraint on particulars other than God. There are agents, for example, who possess the first two structured sets of properties but who lack the third; these agents we defined as *selves* above. Some humans, for example, are so morally deficient that they are incapable of appreciating either God's Will or the fact that their own referential and volitional/purposeful capacities should conform to it. Such humans can be very successful in life; nevertheless, they fail to be persons since they lack at least one of the three necessary conditions for personhood. God's Will, however, is already in accord with His Will; so too is His Consciousness. Therefore, He necessarily possesses the ability to accommodate His first two structured sets of capacities to His Will, and indeed, He necessarily succeeds in so accommodating those capacities. Thus God is by definition a person.

The second qualification is this. "Love," as the term is ordinarily used, is often described as an "emotion." This is not our understanding of it. Emotions have their source entirely in physical agents. Love, however, has a different source, as we have already indicated both by describing God as capable of love and by our explicit characterization of the love of persons as the capacity for exercising their other capacities in accordance with God's Will. This is a matter that will be discussed in further detail later in Part 3.

The third qualification is to note that Definition 1 does not restrict persons to metaphysical particulars. This means that constructed particulars—such as selves—can be persons. We must therefore introduce a second definition of person that excludes selves from the status of persons, and indeed, one that excludes any constructed particulars whatsoever from that status:

> Definition 2: We define a *person* as a *metaphysical* particular with three structured sets of capacities:
>
> (i) referential capacities (being aware, or being conscious),
> (ii) volitional/purposeful capacities (having a will, and/or making choices in accord with goals or purposes),
> (iii) the capacity to love (being able to exercise the first two sets of capacities in accord with God's Will).

Definition 1 is more inclusive than Definition 2, since it ranges over all particulars whatsoever. Definition 2, by limiting itself to metaphysical particulars, excludes selves from the status of persons; as a result, it allows only God and cognitive agents to be persons. On some views of personhood (Platonic, Cartesian and theological) this move is appropriate, insofar as they take the seat of awareness to be the person, and not its body; the body, they maintain, is only an accompaniment to an eternal soul. Others view the person's body as necessarily included in the characterization of the person. As our pair of definitions indicates, we are open to describing persons in either way.

This section is dedicated to exploring in more detail the kinds of selves, physical agents, and cognitive agents that are possible. In order to better facilitate this discussion, it will be useful to single out those physical agents, selves, and persons that are human. The physical agents of humans we call *human bodies;* the selves composed of human bodies and cognitive agents we call *human beings;* and the human beings who satisfy Definition 1 we describe as *human persons*. When we are describing human beings and human persons together—as for example, when speaking of groups of such—we will use the single word *humans*. Notice that although human persons as such are persons according to Definition 1, they are not persons according to Definition 2; only the cognitive agents ontologically dependent on human bodies are persons according to Definition 2, and not the entire human being.

Also notice that a human person, in a certain respect, is more like God than cognitive agents are. Although a human person is a constructed particular that is composed of two separate and distinct metaphysical particulars, nevertheless God can be described (like human persons, and unlike cognitive agents) as having a body—namely, The Block Universe.

In characterizing The Block Universe as God's body, we do not require either that God's body, as so described, is unlimited, or that God's physical powers are unlimited in the sense of His being capable of exercising them without restrictions. In making this claim, of course, our position clearly contrasts with doctrines of God's omnipotence, which are fundamental in, for example, the (traditional) theologies of the Abrahamic religions. We have also claimed that God is a person and has a mind that is individuated by His vast understanding. Although this accords with the Abrahamic traditions, we also affirm that God can be conscious of nothing further than what all cognitive agents—taken as a whole—are aware of. Thus even God's *mental* "powers" are not without limit; hence God is also not omniscient in the usual sense.

Some will find our claim that God is a person (in accordance with both definitions) not far from conventional understanding. What others may find less conventional is our belief that sufficiently intelligent, aware and goal-oriented animals should also be counted as persons (according to Definition 1). But, provided that a particular kind of animal has the required structured sets of properties, we see no reason to deny their status as selves, and even as persons. Given the empirical facts about what certain dogs and dolphins have done (and so what normal members of these species can do), it seems right to classify normal examples of these species as persons, even though they do not look like humans nor do they laugh (which was, for Aristotle, a significant distinction between animals and humans). Going yet one step further, Definition 1 does not rule out the possibility of social groups, corporate entities, and even nations being persons.

Indeed, it should be clear that Definition 1 places no constraints on physical agents. One crucial aspect of human bodies is that some have male and some have female reproductive organs; clearly neither type of bodily form is relevant to the personhood of those corresponding persons. In this sense, Definition 1 is a "functional" characterization of a person. Definition 2 is equally noncommittal on such matters. Any cognitive agent is—if it meets the third constraint of Definition 2—a person. But nothing constrains such cognitive agents as to the nature of the physical agents they must be ontologically dependent on. So, cognitive agents can be ontologically dependent on human bodies, or on animal bodies where the animals are not human. In principle, cognitive agents can be ontologically dependent on robotic bodies, or on collections of human bodies (as in an organization). There are no restrictions on what physical agents can be, and thus no restrictions on what sorts of things cognitive agents can be ontologically dependent on.

It is worth observing that we understand "physical agent" quite broadly. *Hurricanes* are physical agents. Although any cognitive agent must be ontologically dependent on a physical agent, and so, for any cognitive agent, there is a physical agent that it is self-tied to, this relationship does not go the other way. There are physical agents on which no cognitive agent is ontologically dependent. Hurricanes are examples of such physical agents: they lack awareness, volitions, and purposes (although they sometimes seem to us to uncannily act as if they had intentions). Therefore, hurricanes are not components of selves.

Persons—as we describe them in Definition 1—and selves fall into a natural, although somewhat complex, hierarchy. First, there are the individual selves and persons (humans). Second, there are those various *organizations* of these humans, which we call *institutions,* including all the various formal and semi-formal organizations, countries, corporations, societies, nations, religions, political parties, etc. Such collectivities of humans can rise to the status of selves and even to that of persons. In our view, they are selves if they possess at least the first and second sets of structured capacities of our definitions of person. (Note that this clarification provides a more precise definition of the notion of a self than we were able to offer in section 3.2.) When such collectivities have these two structured sets of capacities, the physical organizations of such human bodies, buildings, etc. are themselves self-tied to cognitive agents. When the resulting collectivity-selves have the capacity to appreciate God's Will and conform to it—that is, when the third condition of personhood is also fulfilled—they are persons.

There are still larger associations of humans and organizations, which we call *cultures*. Cultures can also rise to the level of a self, and even to that of a person. Finally, there is the broadest possibility of a self or a person—apart from God—that we know of: humanity itself. There could of course be lots of other types of selves and persons residing here or there in The Block Universe of which we are not aware.

As we have noted, selves succeed in being persons only when they have the capacity to bend their referential and volitional/purposeful capacities to God's Will. Something can be, for example, quite intelligent, and quite able, and yet still have no grasp of God's purposes. It may have no capacity to evaluate, or even to recognize, good and bad. As a result, such a self is not to be regarded as a person, according to Definition 1. Notice that our characterization of a person as required to have a capacity to conform its activities to God's Will is not far from the legal requirement that for anyone to stand trial, more is required than consciousness (understood in the ordinary way) and a capacity to act on beliefs and desires. They must also be capable of understanding the differences between right and wrong.

We stress again that nothing in our definition of a person requires persons to be human. Recall that "agent" (from Latin *agens*, acting) implies only that something be an object that performs an action or function in the world; if the functions performed are cognitive tasks, then the object has the capacities of a cognitive agent. Consider a computerized robot with sensing devices and with intricate programs that enable it to evaluate—according to a set of pre-defined criteria—what it is picking up. Suppose the robot is also programmed with goals of various sorts, for example, finding all the red objects it can move and placing them in a bin. Such an entity involves a physical agent; moreover, it has (rudimentary) awareness of its environment and its own states (even if it does not have the sort of qualia that we experience), and it is able to choose. That means the entity also involves a cognitive agent. So it is at least a self. Now imagine that it is also capable of grasping God's Will and applying its idea of that Will in order to evaluate its own actions and states. Nothing about the capacity to understand how God's Will applies to the exercise of one's own capacities is ruled out for robots—at least in principle. So not only could robots be selves, they could even be persons—at least, according to Definition 1.

But is the same really true of institutions—corporations, nations, science, cults and/or religions—as we have claimed? Certainly such collectives can be described as cognitively aware; for example, a business corporation may be quite aware of changes in the market and adjust its business plan accordingly. Similarly, we can describe a nation as first evaluating whether it is right or wrong to invade another nation and then choosing to do so. Most of the choices—for good or ill—that most kinds of complex institutions make often involve an intricate moral dimension that we naturally associate with an attention to God's Will.

Notice that it is the *institutions themselves*, and not merely the individuals in charge of them, that we tend to describe in these ways (and regardless of how the individuals in charge may be described). Consider the scientific knowledge that is developing at an ever-increasing pace in the contemporary setting. This is a crucial and significant part of the process of coming to understanding. Yet it is clear that the cognition (awareness) of such knowledge is no longer a state that can be attributed to any one human person. The same is true of the actual research experiments (the actions) that are undertaken by scientific institutions. The accumulating knowledge manifests itself in the awareness of the *institution*, which we might describe in this case as the scientific culture.

Because institutions are composed—at least in part—of humans, it is tempting to try to reduce the awareness and decision-making of an institution to the awareness and decision-making of those humans that partially compose it. But this attempt at reduction fails. What an institution is aware of can deviate from what the humans functioning within it are aware of; moreover, its decisions and actions can differ from the decisions and actions of those humans. For example, a human can discover something important, and he might try to alert others in the organization (or, more accurately, the organization itself) by sending around a memo. If the memo is waylaid by accident, the organization itself should be described as failing to be aware of what that individual knows.

A more complex way that an organization can deviate in what it is aware of from what the humans in that organization are aware of is when all the individuals in the organization are aware of something but the organization itself—perhaps because of its official policy or because of its constitution—is not itself in a position to take notice of this fact. For example, virtually all of the citizens of a country may believe that slavery is wrong. In certain cases, however, their country may be appropriately described as unaware of this—perhaps because of its current definition of a citizen, or because of its economics, or because the infrastructure that would allow that government to take account of the attitudes of its citizens is missing or corrupt, or because of other ways in which its infrastructure might be too rigid.

The ways that an organization chooses to act, and then acts, can similarly deviate from the choices and actions of the individuals functioning within it. Indeed, if an organization sues another organization, it is wrong to describe some particular individual in the organization as doing the suing. Of course, this does not exclude the possibility of individuals in an organization being sued, or of their engaging in lawsuits; but that is a different matter from the organization itself carrying out these actions. The distinction between an institution and the individuals in it is legally acknowledged by the practice of directing lawsuits both at institutions *and* at the individuals who run them.

By now the reader may be asking exactly what theological role *corporate* entities—given that it is possible in principle for such to be persons (according to Definition 1)—have vis-à-vis God. In Part 4 we discuss this central issue in much greater detail. In order to take the first steps toward discovering the answer, we must first understand how it is that human persons play the role that they play vis-à-vis God. It is here that the third concept in our section heading, the absolutely crucial notion of a *soul,* finally becomes relevant. Recall from section 2.3 that the eidos Soul (God's Consciousness) is the matter of The Goodness of Personhood. Now that we have achieved a clearer understanding of the nature of selves and persons, it is possible to say significantly more about the nature of souls as metaphysical particulars. To begin our discussion of this topic, we return to the relation of cognitive agents to physical agents.

We have characterized selves as cognitive agents self-tied to physical agents. More precisely, in section 3.2 we defined a self as a constructed particular composed of a cognitive agent and a physical agent, where the former is ontologically dependent on the latter, and where the latter imitates the former. As the definition shows, the presence of a physical agent by itself does not entail the presence of a self. This happens when a physical agent fails to be self-tied to any cognitive agent. Some humans, for example, are so shattered by events in their lives, or perhaps are just born so incapacitated, that they are nothing more than physical agents. No constructed particular exists that is a composition of that individual living human body with a cognitive agent—despite the fact that those living human bodies have functioning brains. Similarly, an institution that is sufficiently organized (e.g., legally and physically) to qualify as a *physical* agent may nevertheless be too fragmented in its behavior and vision to be self-tied to a cognitive agent. Its various components (e.g., humans) do not cooperate harmoniously enough for that; instead, each one acts on its own behalf, even though they may still do so in the name of the organization. Over time such an organization displays a trajectory of decisions that may *appear* to reveal a steady awareness of some particular fact, but a closer inspection shows that the organization is aware of one thing at a given moment and not at the next. Similarly, the organization's choice at a given moment is made with one set of goals in mind, whereas at the next moment it appears to act according to a completely different set of goals. In such cases, there is no cohesiveness to the organization's awareness or choices. It may well be the self-same organization; however, there is no locus of judgment or consciousness, which means there is no cognitive agent that the physical agent (the organization, made up of human bodies and other physical items) is self-tied to.

The next step is to put together all the various types of particulars (metaphysical and otherwise) that we have been analyzing: physical agents, selves, persons, and those persons who are related in some way to souls. Let us use the capitalized form of the term, *Person,* to signify those persons who are linked to a soul (in a way that we will shortly specify). This gives us four terms in an ordered series, and thus three different relations: the relations of (1) physical agents to selves, (2) selves to persons, and (3) persons to Persons.

For each of the four concepts, it turns out, it is possible to be that type of particular but fail to be the type of particular that follows it. Since there are four items in this list, three different failures are possible—and, more positively, three different successes can be achieved. A major goal of Part 3 of this work is to give a clear conceptual account of these relations. For an existing self, however, the task is not merely to *understand* the relations but also to live them. The task of a self is not only to be a self or person, but to be a Person. In Part 4 we will consider in much more detail what sorts of values and actions are essential to succeeding at being a Person, as well as what role institutions, including religious institutions, can play in aiding (or undercutting) this success.

First, however, it is important to fully understand what it means for individuals to be—or to fail to be—each of these different types of particulars. Regarding *Physical agents and selves*: we discovered that a physical agent fails to be a self when it fails to be self-tied to any cognitive agent. Regarding *selves and persons*: just as it is possible for a physical agent to fail to be a self, so too it is possible for a self to fail to be a person because it lacks the third structured set of properties in the definition of persons. Recall that the third set of properties was "the capacity to love (being able to exercise the first two sets of capacities in accord with God's Will)." Those selves who lack even the *capacity* to love are not persons.

Finally, regarding *persons and Persons*: a self can succeed in being a person, because it possesses the third structured set of capacities, and yet it can fail to be a Person, that is, to be related in the relevant way to a soul. But how is a Person related to a soul? Recall that in this system souls are metaphysical particulars belonging to the *Fifth Order: Souls (God's Consciousness)*. They are not separate metaphysical substances, such as the "thinking thing" or *res cogitans* defended by Descartes. A soul is quite literally a part of God's Consciousness, a part of what God knows or is aware of. Thus a Person cannot "have" a soul or "be" a soul.

It is possible, however, for a person to *bring about* a soul. To bring about a soul is to make a contribution to God's Consciousness, which in turn means to serve God's Coming to Understanding. Since aiding God's Coming to Understanding is the metaphysically most ultimate contribution we can make, bringing about a soul is the highest form of actualizing God's Will.

We can now return to the distinction between persons and Persons. Recall that the third structured set of capacities in the definition of person involves the *ability* to take account of God's Will and to conform one's own actions and thinking to it—the capacity for love. But being a Person (and thus bringing about a soul) requires more than merely being a person with the *capacity* to love; it also requires that the capacity be executed adequately. That is, only if a person adequately exercises its capacity for love—for serving God—does it qualify as a Person. And, as we just argued, only Persons bring about souls; thus only Persons make a contribution to God's Consciousness.

Being a Person, then, means not only having but also adequately exercising the capacity to love. One then naturally wants to know: *how much* love does it take to be a Person? What balance of love over selfishness is required? The answer is a simple one: Persons are individuals who manifest a balance, no matter how small, to the good with regard to loving, that is, serving God's Will. Loving, on balance, results in a soul; otherwise, no soul is brought about, which means: no contribution to God's Consciousness is made.

And what does love require? Love requires this much, at least: any person must execute the teleological roles that have been imposed upon it by God's Will. What *that* means depends very much on the abilities that person has and the circumstances in which that person finds itself. No formula, no universal list of do's and do-not's, can define love in a context-free way. What is often, perhaps almost always, required is that the person participate in various practices with other persons and selves. Sometimes what is required is that the person participate in, or become part of, a larger institutional self. Or the person may be required to participate in reforming that larger institutional self in one way or another so that it can be a person. Or again, the person may be required to participate in the creation of an institution, an institutional self, or an institutional person. As we have said, this depends on the circumstances in which that person finds itself—what institutions it has been born into, what resources it has, and what needs to be done in that particular context to best serve God's Will. In any case, each person is obliged ("called") to serve God (express its own love) sufficiently to be a Person, that is, to bring about a soul. This explains why, when we are speaking of a person who has served God sufficiently to bring about a soul, we capitalize the word "person."

As we have noted, when humans bond together in groups, the groups often possess knowledge as a result of this bonding that the individuals belonging to these groups would not have possessed on their own. As a result, these organizations or institutions can achieve things that no individual alone can manage. Humans, in fact, often deliberately subsume themselves to one or another group to which they belong. This means that they subsume their awareness, to a greater or lesser degree, to the awareness of the group, and that they subsume their actions to those of the group. This can sometimes mean—but only in relatively rare cases—that they are subsuming themselves to the will of an individual. In most cases, however, it means that they are subsuming themselves to something other than a single agent: namely, to the group itself.

There are good empirical indicators that humans have faculties that cause them to naturally bond together into larger unified institutional wholes in the ways we have described, regardless of whether or not they wish or intend to do so. For one thing, there are standard (although often unconscious) ways of speaking that indicate this phenomenon. We are very good, for instance, at describing what "we" or "they" think, as opposed to what "I" think or what "he" thinks. Furthermore, we very naturally speak of the viewpoints, attitudes and even character traits of nation-states, tribes, ethnicities, etc. Very often, the kinds of attributions that we make when speaking in this way are falsely taken to apply to every member of a group. Yet when the policies of a country are involved, it may not be at all wrong for us to attribute attitudes to the country that are not shared by many—indeed, even most—of its citizens. We should not confuse the correct tendency to recognize that institutions of humans can have attitudes and knowledge of their own with the mistaken tendency to presume that all the members of those institutions have those attitudes and knowledge.

There is a great deal of evidence from evolutionary biology that the mechanisms of social control that various institutions use on their members, together with the psychological tendencies of humans to knit together in groups, are directly due to the fact that it has been *groups* of humans (families, clans and tribes, and later even larger organizations such as cities and states) that have been the units of selection in the Darwinian evolution of humans, and not merely individual humans on their own.

A transition from groups of organisms, where the organisms survive or die on their own, to groups *as* organisms, which survive or die as whole units, looks to be fairly common throughout the history of living things. We see this in a vast range of examples, from symbiotic communities of bacteria to eukaryotic cells, from collections of such cells to larger organisms, etc. What is required to bind individuals into these larger wholes is not an altruistic or voluntary decision to sacrifice the individual interests to the greater whole, but rather a kind of involuntary inclusion of the individual into the larger unit, so that its fortunes become tied to that unit. Indeed, to some extent humans are also involuntarily included in groups by virtue of their being born into families or, historically, by belonging to tribes that survived (or failed to survive) as whole groups in the face of various external challenges.

Our psychological tendencies to identify with groups and to attribute beliefs and desires to such groups are therefore not always due to our voluntarily joining them; this Hobbesian or Lockean picture of an implicit social contract is false. Rather, our tendencies are the result of external social controls that tribes and other group-units (or the environment) automatically place on their members, as well as the result of the genetically transmitted psychological needs of individuals to belong to such groups and to operate in accordance with them. Both patterns are the result of the long evolution of such groups among humans.

The mere fact that humans form groups and that such groups form institutions does not suffice, of course, to show that all such groups are selves, or that they are, even more, persons with the capacity to love.

It may be more difficult still to envision robots as having a capacity to love. As we have noted already, however, the capacity to love is a more multi-faceted matter to explain than one might think. We postpone our discussion of this topic until section 3.6. In the meantime, we must first examine the differences between the Consciousness of God and the awareness of cognitive agents.

(3.4) The Consciousness of God and the Awareness of Cognitive Agents

In this section we shall continue our probing of the relationships between cognitive agents, physical agents, persons and souls. It will be helpful, first, to remind readers of the important distinction between *awareness* and *consciousness*. *Awareness* is the term we reserved earlier for the referential experiences of cognitive agents. We mentioned that what cognitive agents are aware of, generally, are objects and their properties. In being so aware, they may not be aware of metaphysical particulars or even of constructed particulars. After all, to be aware of objects is to be aware of nothing real. Awareness of nothing real, however, is still awareness. The awareness, that is, is still real even if what it is awareness of is not.

Consciousness is quite different. Recollect from Diagram 1B that the eidos Awareness is the matter of the eidos Cognitive Agents. In turn, the form of the eidos Coming-To-Understanding (God's Mind) is the eidos The Goodness of Personhood. The matter of the eidos The Goodness of Personhood is Souls (God's Consciousness). The eidos Souls (God's Consciousness) is efficiently caused by the eidos Cognitive Agents. The form of the eidos The Goodness of Personhood is the eidos The Truth about God.

Here is what the above comes to, in terms of the particulars we are now discussing: cognitive agents, souls, and God. Cognitive agents, naturally, differ in their awareness: they differ both in what they are aware of, and—when they are aware of the same things—in how they are aware of them. Furthermore, cognitive agents also differ in their decisions, both insofar as they act on what they are aware of and, in turn, how those decisions consequently affect their subsequent awareness of things and the awareness of other cognitive agents. Because cognitive agents vary in these properties, they vary in how good they are. If one cognitive agent is aware of truth and reality more fully or more deeply than another, then that cognitive agent is better—and in this particular respect has more goodness—than the other does. Similarly, if a cognitive agent succeeds in making other cognitive agents that are better (have more goodness) than they would otherwise be, then that cognitive agent is better (has more goodness) than other cognitive agents who do less to make other cognitive agents better. Increasing one's goodness means better obeying the Will of God, and that simultaneously means better exercising one's capacity for love and/or better enabling others to do so.

As we saw, it is only insofar as cognitive agents are sufficiently good that they bring about souls. The souls that cognitive agents bring about by their goodness *are* God's consciousness of the awareness of those very cognitive agents. Again, souls should not be conceived as eternally existing substances that exist as objects separate from God, as several major philosophical and theological traditions have affirmed. In this system we have been able to define and distinguish particulars in a rigorous fashion without needing to rely on the notion of substances or soul-like things. Further, conceiving souls as analogous to things, as Descartes' notion of *res cogitans* does, potentially divides metaphysics and epistemology, since it posits the existence of a thing (thinking substance) and then inquiries separately into what it can and cannot know. By contrast, the conception developed here gives souls an intrinsic role in coming to understanding; they are *defined* in terms of deeper and more extensive knowledge of metaphysical reality. For here the soul that a particular cognitive agent (namely, a Person) brings about *just is* God's consciousness of the awareness of that cognitive agent. In turn, God is conscious of some of that of which a good cognitive agent is aware. More specifically, He is conscious of whatever truths about metaphysical reality that cognitive agent is aware of, and those truths, ultimately, are truths about God Himself.

The philosophical topic of the nature of the soul is one with a long pedigree. Those more comfortable thinking in terms of the "conscious self" tend to confuse consciousness with cognitive agency, and often see the latter as simply an aspect of the animal body. Others, who demand that the conscious self involve the physicality of the whole body, deny that the conscious self survives the death of the body. Still others understand the conscious self to be the available memory of events from a particular point of view. Conscious selves can also be construed as the whole of the *events* of a lifetime centered, broadly speaking, on a particular animal (the physical agent with which a particular conscious self is supposedly identified), or as the *activities* of a lifetime centered, again broadly speaking, on a particular animal.

Let us consider this issue further. It is often claimed that certain kinds of creatures are "conscious." This claim usually extends beyond humans to include other primates, mammals and even non-mammalian animals. It is generally thought that this "consciousness"—what *we* call *awareness*—is more likely to be genuinely present in highly developed creatures. Perhaps the "awareness" of insects is so primitive that we should not describe them as aware at all. But rodents seem complex enough in their psychological responses to their environments to be described as aware of those environments; and primates seem aware of and intelligently responsive to their environments in ways that are very similar to our own awareness. As we ordinarily speak, then, we describe awareness as a characteristic or property of certain animals; we therefore tend to think of it as something that occurs concomitantly with their corresponding animal bodies, and therefore as located within the spatio-temporal Block Universe.

Upon reflection, however, it is evident that there are aspects of awareness that make it distinct from the space-time manifold of The Block Universe. The "intentionality" of awareness—that it intrinsically refers to other things—seems, for instance, quite different from anything that can be found in space-time.

If, despite this fact, one insists that awareness be regarded as a physical entity, or as arising from a physical entity—a brain for example—then it would follow that there are states of the brain that intrinsically refer to other things. For instance, the brain of a rodent, on this view, thinks about cheese, and when that happens there are events in its brain that intrinsically refer to the physical objects of which that the rodent is aware. It seems wrong, however, to suggest that purely physical events or entities can refer to other physical events or entities, or indeed, that they can refer to anything at all. Physical things and processes obey only physical laws, and nothing about such laws ascribes intrinsic intentionality to those things or processes. Not even mirrors or photographs refer to what they reflect or to the things of which they are images. Rather, they are just the results of certain physical processes that generate visual images.

In calling the results of these physical processes *images*, we are already imposing a referential relation upon them. From a purely physical point of view, what is actually involved is nothing more than a causal process that leads to some effects. *We* impose intentionality onto systems of cause and effect by seeing the painting as "about" the things that it is a painting of, or by treating the mirror as "presenting" to us the objects that it reflects. But if a brain, a purely physical object, cannot sustain events that intrinsically refer to other things, then it cannot be the locus of awareness. Brains can contribute to the capacity to refer, but activities such as intending and referring are not correctly predicated of things like individual neuronal firings and the electro-chemical processes of which brains consist. This means that awareness of things, together with its corresponding intrinsic intentionality, must lie *elsewhere than in The Block Universe*. This is clear from Diagram 1B: the eidos Awareness is located within the quadrant of the eidos Coming-to-Understanding, and not within the quadrant of the eidos The Block Universe.

When we think about the properties that we have attributed to God's Consciousness, above and beyond awareness, we realize that His Consciousness is no more physical, no more in space-time, than the awareness of cognitive agents. Apart from being, like awareness, intrinsically intentional—that is to say, involved in reference relations—God's Consciousness is in addition concerned with truth. Indeed, it may be appropriately described as inherently *truth seeking*; and this, we note, is the primary element that makes His Consciousness different from awareness. But truth seeking seems no more a physical matter, to be found in space-time, than intentionality is a physical matter.

Our claims about the timeless nature of both awareness and God's Consciousness are at the heart of our system. These unconventional claims are usually misunderstood, due to the way in which ordinary people intuitively speak about their own awareness of things. They think of themselves as located in space and time, which inclines them to similarly think of their own awareness as spatio-temporal. We, however, do not agree with this assumption. We argue that only brains and bodies are in space and time. Cognitive agents and awareness are to be found elsewhere. By way of elucidation of the claims we have just made about the relationship between cognitive agents, who are aware and who are the parts of an eidos that is not in the quadrant of the eidos The Block Universe, and physical agents, who are not aware and who *are* the parts of an eidos that is in the quadrant of the eidos The Block Universe, let us note the following.

Just as the logical entailment between the two premises *Socrates is a man* and *All men are mortal* and the conclusion *Socrates is mortal* is not an element of space and time, so too the unfolding of awareness and God's Consciousness is external to the spatio-temporal domain of The Block Universe. Furthermore, the way in which inferences are distinct from the temporal process of a brain's functioning is similar to the way that awareness (in a cognitive agent) is distinct from the processes of brain functioning (in a physical agent). In the same way that logical inference is not itself located in space and time, so too neither God's Consciousness nor the awareness of cognitive agents is so located. This is so even though neither God's Consciousness nor the awareness of cognitive agents would exist without the spatio-temporal unfolding of The Block Universe. The awareness of cognitive agents is ontologically dependent on the physical agents those cognitive agents are self-tied to. So too, the Consciousness of God is ontologically dependent on The Block Universe itself.

We are by no means the first to recognize this sort of distinction between the timeless and the temporal. For Aquinas, God is omniscient but He is not within space and time. Aquinas claims that God timelessly knows all spatially and temporally indexed events. The whole of everything that occurs (or, more specifically, the non-contingent, metaphysically significant dimension of what occurs) is therefore within God's ken, yet God's awareness is outside of space and time. We agree with Aquinas to this extent: we too have argued that the seat of such timeless events is God's Mind; more specifically, the seat of such timeless events is in the matter of God's Mind—the eidos Cognitive Agents. But we disagree with Aquinas about whether God is omniscient—in particular, about whether He is aware of all spatially and temporally indexed events.

Souls are God's Consciousness. Souls are His Consciousness of the awareness of *some* cognitive agents, and of *some* of that of which those cognitive agents are aware. To be specific, He is not conscious of the awareness of *all* cognitive agents, but only of those cognitive agents that are Persons: that is, those cognitive agents that are persons (in the sense of Definition 1) and who, further, by the exercise of their capacity for love have become sufficiently good (have achieved a balance of good over evil), such that as a result *God is conscious of their awareness.*

However, even if a cognitive agent is sufficiently good that God is conscious of its awareness, it does not follow that God is conscious of *everything* that agent is aware of. In particular, insofar as even a good cognitive agent's awareness is often directed at least in part towards illusions, God is not conscious of any of those illusions. We can put the matter this way: as noted above, phenomes—the items that a cognitive agent is aware of—can be any of these: eide, metaphysical particulars, constructed particulars, constructed notions, or objects. But God is never conscious of objects. Furthermore, even when a cognitive agent that is a Person is aware of a metaphysical particular, that awareness may be metaphysically impure; his awareness of the metaphysical particular may be mixed up with an awareness of constructed notions and with an awareness of objects. God, however, is conscious of none of this impurity; He is only conscious of the metaphysical particulars that a good cognitive agent is aware of insofar as that cognitive agent grasps those metaphysical particulars *truly*. There is no illusion or falsehood in God's consciousness.

Most—but perhaps not all—cognitive agents are aware of themselves. But they are usually aware of themselves in terms of self-images in their awareness, according to which cognitive agents are identified with physical agents. Consider a cognitive agent who is a Person. Imagine that he or she is aware of his or her self as a cognitive agent and is aware of a physical agent, but that he or she mistakenly identifies the two as the same entity. In this case, God is conscious of the cognitive agent, and He is conscious of the physical agent. Furthermore, He is conscious that there are *two* metaphysical particulars that the cognitive agent is aware of, but God does not hold the false belief that the cognitive agent holds.

Two important points about God's Consciousness must be repeated. The first is this: if there is something metaphysically real that no cognitive agent is aware of, then God is not conscious of it either.

Second, if a cognitive agent is not a Person, then God is not conscious of anything of which that cognitive agent is aware, including the conscious agent itself. Cognitive agents who fail to be Persons—either because they are not persons at all (in the sense of Definition 1), or because they fail to serve God sufficiently, fail to express their capacity for love sufficiently, or fail to sufficiently exercise all their capacities in harmony with God's Will (these three come to the same thing in our view)—are cognitive agents of whose awareness God is not directly conscious. They do not bring about souls; that is, they do not bring about the state of God's being conscious of their awareness.

None of what we have been describing in the last few paragraphs, we must stress again, are *physical* events in space and time. They are timeless events that are analogous to logical implications. Inasmuch as cognitive agents and souls are interrelated, and insofar as both are atemporal, the mistake of thinking of the two as just one thing is understandable. Nonetheless, this mistake hides an extremely important theological distinction between that of which a cognitive agent is aware and that of which God is conscious.

Just as importantly, cognitive agents are also distinct and different from the physical agents of The Block Universe, upon which they ultimately depend for their existence. Physical agents, we note again, belong to some order of particulars, one that, admittedly, we cannot definitively locate at this stage of our eductions. Nonetheless, we feel certain that such an order exists, and that science will need to assist with regard to its exact nature and location. Let us for now simply refer to this order as the *X^{th} Order: Physical Agents*. We assume, of course, that the X^{th} Order: Physical Agents falls within the quadrant of the eidos The Block Universe.

Physical agents are in space and time. We thus speak of them in temporal terms: The movement of a physical agent's arm is *prior* to the movement of that physical agent's leg. The movement of that physical agent's leg is *subsequent* to the movement of that physical agent's arm. If this physical agent is self-tied to a cognitive agent, there is also a series of instances of awareness that the cognitive agent experiences, and there is a series of particular choices. The cognitive agent's awareness of the movement of the physical agent's arm is *prior* to that agent's awareness of the movement of the physical agent’s leg. However, in contrast to events of physical agency, this use of “prior” is a *timeless* one. In cases where the cognitive agent’s awareness of the physical agent’s movement of his leg follows that agent’s awareness of the physical agent’s movement of his arm, it follows in the way that a logical result follows from a premise. When we speak of *selves* being aware of certain things and deciding to do other things, our way of speaking blends two very different sorts of metaphysical processes: ones that occur in space and time to physical agents, and others that occur timelessly to cognitive agents. It is important not to let ordinary ways of speaking confuse the metaphysical issues.

With this elucidation in place, let us turn to an important issue that arises with respect to selves. The problem is this: if, as we claim, a self is capable of making choices, then it becomes incumbent on us to explain our views on human choice and predestination. What role and what effects do these choices have, if any?

We can sharpen the issue by noting that our view of The Block Universe is this: It contains everything physical—past, present, and future. It is a four-dimensional manifold. This seems to invite a problem that many raise against any such view of the physical universe: how is it possible that genuine choices are made, choices that have ramifications on future events in The Block Universe, if the future is definite and already fixed in one particular way? In what sense can such future events be *due to* a self’s choices? Another way of putting the concern is this: How is it possible for a self to make genuinely free choices?

As so far described, the problem is an old and familiar one. Our view that selves are constructed particulars of cognitive and physical agents only seems to make the problem worse by locating awareness and choice in a timeless entity. Again, even if that entity can be seen as involved in timeless processes with (logically) prior and subsequent stages, a version of the problem many have with future events in The Block Universe still seems to arise: the subsequent steps are timelessly definite and one way. How is a coherent notion of choice (and responsibility for choices) to be applied to cognitive agents?

In mapping out our solution to this seemingly gridlocked issue, let us begin with a simple example. Imagine that a traveler approaches a fork in a path and contemplates which path to take. His decision, and its subsequent impact, are already present in The Block Universe; and, correspondingly, his entire future is inscribed timelessly in the cognitive agent that corresponds to that traveler. Thus it might seem that the traveler's decision to take the one path or the other is actually quite irrelevant, for all the future events in The Block Universe are predetermined. We seem to be left with a very fatalistic view: all things are predetermined, so that one can only submit to the fact that everything that occurs is inevitable. If the universe is already (timelessly) a certain way, then why should one struggle over one's choices?

Similar anxieties surrounding the topics of predestination and free choice are also apparent in traditional Abrahamic theologies. God's omniscience implies that He knows what His created agents will do. But if He knows this, in what sense can those created agents make free choices? There is a second problem that the Abrahamic traditions face: since God is omnipotent, and since the universe is entirely His creation, it would seem that created agents are not even responsible for what they do.

We maintain, on the contrary, that under certain circumstances cognitive agents do make free choices and are very much responsible for their actions. These circumstances occur when cognitive agents can *choose freely*, which means that their decisions have not been determined either by internal compulsions or by external forces. In the case of a decision made by a cognitive agent, we have distinguished between the events that are (timelessly) prior to its choice and those events that are (timelessly) posterior to its choice. If a cognitive agent sees a fork ahead of him, with one path leading to the left and one to the right, the awareness of these two paths is timelessly prior to its choice, just as the actual paths in front of the physical agent are actually prior (in time) to the movement of the physical agent's body towards one or the other path. When speaking of the physical agent, we use "prior" and "posterior" as meaning "prior in time" and "posterior in time." With respect to the cognitive agent, we use "prior" and "posterior" timelessly. When speaking of a self that makes choices, we can speak of "prior" and "posterior" events and simultaneously mean them both timelessly and timefully. The reason is that we are speaking of a constructed particular, and thus we are speaking simultaneously of a timeless cognitive agent and of the timeful physical agent to which the former is self-tied.

Our claim, in short, is that some events, including some decisions made by human selves, are not determined by events in space and time; correspondingly, some decisions by cognitive agents are not determined by the events that are timelessly prior to those decisions. This rejection of predestination or fatalism with regard to some of an agent's decisions is still compatible with other events being fixed. The elimination of the dilemma lies in establishing exactly what is required for a choice to be *freely made,* and we turn now to that issue.

Consider the crucial aspects of rational and autonomous decision-making. An agent seeks out as much relevant information as possible in order to reach a decision. The agent also needs to know what the constraints are on the current decision. If multiple options do not exist, then the agent has no choice. The very notion of complete determinism undermines the rationality of any decision-making. For if an agent seeks out relevant information, and if determinism is true, then that agent should eventually discover the antecedent event(s) that necessitated their subsequent action.

But now, the reader might ask, does not our view still face this dilemma? After all, if future outcomes are fixed within The Block Universe, then surely an agent could, in principle, find out enough about the past and present to figure out the antecedent causes of (what he or she took to be) their own free action. Correspondingly, a cognitive agent could become so fully aware of the past and present that it would discover how the future of The Block Universe (at least with respect to the physical agent it is aware of) must follow the past and present; and therefore it would know how certain events in The Block Universe follow from the past and present prior to its actual awareness of those events.

This worry turns on confusing a fact—that future events are real and are fixed in the future—with their being *determined by* events in the past. We are denying the latter is always the case; but our accepting the former does not imply the latter. So too, if a physical agent simply lives into the future, and if its self-tied cognitive agent makes choices and in this way "discovers" what the future is like, it simply does not follow that the choices must have been forced or determined.

We allow that, with respect to certain events, the future in The Block Universe can be predicted. Physical laws, for instance, enable us to predict some future events in just this way. Those future events—but not all future events—are determined by past and present events, together with the laws that characterize the temporal dynamics of certain types of phenomena. Such predictions require an ability to trace causal chains from the past and present into the future, and so such predictions are possible—even in principle—only when they are restricted to those future events with causal chains that extend into the past. But, we have asserted, not all events have causal chains that extend into the past.

To repeat: we reject complete determinism and the fatalism that goes along with it. The mere fact that the future is what it is, which we accept, does not threaten our agency. When facing a decision that is not determined by the past or present, it does not matter how much we may know about the past or present. As long as a given decision is not determined in advance by antecedent conditions plus necessitating laws—as long as it is not *nomologically* fixed by events in the past—it remains a freely made choice. As long as such events exist, cognitive agents are indeed free to make rational, non-determined decisions.

Humans usually think of themselves as agents who make choices that causally affect their bodies and their spatio-temporal environments. We maintain, as we have indicated in the discussion just completed, that this is not exactly the right picture. Choosing and awareness are timeless aspects of the cognitive-agent component of our constructed self. Let us now turn to another threat to our view that seems to arise from what some will see as our claim that timeless entities interact with timeful entities.

An ordinary human, when lifting an arm for example, thinks of their self as being aware of that arm, making a decision to move it, and then so moving it. This seems to suggest, given our view, that the cognitive agent is aware of a physical part of the physical agent, makes a decision about that physical part of the agent, and then causes the physical agent to change. Given that a cognitive agent is not in space and time—only physical agents are in space and time—this seems to imply that our view faces the same objections that Cartesian dualism faces. In short, how can we account for aspects of the mind bringing about material consequences in The Block Universe, where human beings (and their bodies and brains) reside?

We turn to our earlier generalization of Aristotle's four causes for the solution, and more specifically to the fact that imitation is one of the ways that telos manifests among particulars. An entity undertakes a task, for example, by conforming itself into a form that makes its doing such a task possible. A metaphorical example of this is the artifact. An artifact is designed to undertake certain tasks by virtue of its design, which imitates an archetype. By virtue of this imitation, it embodies a teleology. This phenomenon is not, as it might appear to be, something that only occurs among designed artifacts. Instead, it is something that is "cosmically large": imitation occurs everywhere among particulars. There is a sense in which imitation can be called a "mechanism" by which teleology manifests among particulars. "Mechanism," however, is a bad word to use here, because it is suggestive of efficient causation. Imitation, however, is not a form of efficient causation; instead, it is a manifestation of final causation. Our solution to our version of the "dualist's dilemma" is not to introduce some specious notion of efficient causation by which a cognitive agent causes effects in a physical body. Rather, our solution invokes teleology, with the accompanying notion of imitation. The cognitive agent to which a physical agent is self-tied does not efficient-causally influence that physical agent. Rather, according to the definition of self, the physical agent *imitates* that cognitive agent.

A possible confusion must be avoided. To speak of an agent imitating something else is not (necessarily) to describe that agent as conscious (only God is conscious), or even as aware, and as making a decision about what it should or shouldn't imitate. Such talk is only appropriate with cognitive agents, and not always even then. In any case, as we have just indicated, imitation is more fundamental, metaphysically speaking, than the intentionality that arises with respect to cognitive agents. And we insist: imitation is not a causal process, at least not in the sense of efficient cause, for there are many ways that things come to be like other things apart from efficient causation. Imitation is, rather, a teleological process.

Given the foregoing, what kind of account is to be given of the relationship between the awareness and volition of a given cognitive agent (*CA*), who is outside of The Block Universe, and the physical events due to the given physical agent (*PA*) who is self-tied to *CA*? Let us use the example of the intentional movement on the part of *CA* of *PA*'s arm. Here is how it goes:

1. *CA* is aware of *PA*'s arm. *CA* chooses to move *PA*'s arm. It follows that *CA* is aware of the movement of *PA*'s arm.

2. *PA*'s eyes are efficient-causally affected by *PA*'s arm. The event of their being so affected imitates *CA* being aware of *PA*'s arm. This, in turn, efficient-causes events in *PA*'s brain that in turn efficient-cause the movement of *PA*'s arm in space. These events correspondingly imitate *CA*'s choice to move *PA*'s arm, as well as imitating *CA*'s awareness of *PA*'s arm.

The following points need emphasis. First, as we have noted already, the description of (1) is not temporally extended. The words "it follows that" describe a timeless relation between *CA*'s awareness of *PA*'s arm, *CA*'s choosing to move *PA*'s arm, and the awareness on *CA*'s part that follows (timelessly). Second, the causal events described in (2) are temporally and spatially extended. They are purely physical events that imitate the events described in (1). This fact is highly significant, insofar as it helps us to understand what constitutes physical agency in The Block Universe. This capacity to imitate shows that, in this respect at least, physical events can be characterized in terms of telic causes. Agency likewise is a telic process, like Aristotle's notion of final causal explanation; it involves doing something for some end. Without pretending to provide a complete explanation of physical agency here, we note merely that the system we have developed gives us resources for speaking of physical agency that are lacking in systems consisting of efficient causes alone. Of course, in the present system there can be no possibility of conflicts between efficient and telic causes; as we have shown above, they represent different aspects of explanation.

On our account, then, an event in The Block Universe, such as the movement of *PA's* arm, is sequentially explained as something that a given cognitive agent brings about in The Block Universe. The explanation involves a sequence of both efficient and telic causes. The problem of cognitive agency, which the Cartesian dualist fails to resolve, is for us dissolved by denying the dualist's implicit restriction of his tools for explaining cognitive agency (and for explaining events in the physical universe) to efficient causation. The Cartesian dualist has implicitly denied the cosmological significance of final causes: such for him arise only in the context of explicitly designed artifacts. This is simply not true on our view.

Let us return to the timeless nature of cognitive agents, as that is something that may still be bothering some readers. We have described cognitive agents as aware of aspects of the physical agent to which it is self-tied. But then it seems that if a cognitive agent is really aware of these aspects, it must be aware of the passage of time. But how are such temporally infused instances of awareness of the cognitive agent compatible with the timeless nature that we have attributed to these cognitive agents?

The key to understanding a cognitive agent's relationship to temporal processes is to keep in mind that cognitive agents are simply *aware* of temporal objects. Just because an agent is aware of a temporal object does not mean that the agent itself must be temporal as well. Take, for example, a cognitive agent's awareness of, say, an apple, and then of a peach. The notion of one experience "following" another does not have to be understood as intrinsically temporal, even if such awareness does correspond to temporal events in a brain. Here, exactly as in the example of the Socrates syllogism given in Part 1, a temporal inference corresponds to an atemporal implication. In the case of the apple and the peach, there is absolutely no implication that the awareness of the peach is based upon the awareness of the apple; they are separate occurrences. Therefore, the temporal flow, the experience that A follows B that we intuitively associate with our experiences, is not essential. The content of an experience, minus the temporal element, can be intelligibly and rationally replicated by a concept of “following” that is entirely atemporal.

The point is actually less controversial than it might at first seem. Consider the *velocity* of a car. This is a relationship between what the car is doing in time and what it is doing in space. This relationship can be represented entirely atemporally by a physical graph without any loss of content, even though velocity is intrinsically temporal. In exactly the same way, all experiences of a cognitive agent that we intuitively think of as temporal can, in fact, be expressed by atemporal means without any loss of content. They correspond to something temporal, but they do so in exactly the way that a graph of the velocity of a car corresponds to something temporal.

Thus, when we speak of a person being aware of a nearby table, our natural way of speaking masks many complications. The body and brain of the person are next to the table, and various causal relationships take place between the eyes of that body, its brain, the table, and the illumination in the room. The person’s mind—a notion we more or less equate with that of a cognitive agent—is that which is aware of the table. It is not next to the table at all, since that mind does not exist in space and time. Corresponding to the tensed event of light being reflected from the table, striking the eyes of the body, and causally affecting its brain is a non-physical, timeless event: the awareness of the table on the part of that mind. That experience of the mind is ontologically dependent on the tensed event; but it is also (we claim) metaphysically distinct from it.

Cognitive agents, as we have already indicated in a number of ways, are vitally important to the process of coming to understanding. (Again, note in Diagram 1B that they are the parts of its material aspect.) That cognitive agents are finite in number would appear to follow, since otherwise each individual contribution (although not their collective contribution) would be morally and philosophically insignificant. We claim that cognitive agents are relatively unconstrained in what sorts of concepts they can construct. On any objective account, they and these concepts have to be evaluated in the end according to the standard of how well they have served God’s *objective* purposes. The relationship of these concepts to metaphysical particulars—how much they lead to an awareness of the truth of metaphysical particulars—will be relevant to this evaluation.

To indicate how important cognitive agents are to God, let us be a little more explicit about certain properties of His. We noted earlier that, even though on our view God's Understanding is vast, He is not omnipotent in the sense usually maintained by the Abrahamic traditions. More radically, we have maintained that although God is a person, He is not a cognitive agent, for He does not make choices and He cannot directly intervene in the affairs of cognitive agents. In this sense, He is in fact utterly powerless and completely dependent on us to do His work. Nonetheless, it is not unreasonable to describe God as in some sense affecting the decisions of cognitive agents, for everything is in some sense within God and caused by God. One way to understand how this is possible is to understand that the large-scale structure of everything is due to God. This is true in two respects: God is the efficient cause of The Block Universe (God's Body), as we discussed in Part 2; moreover, as we have noted, some particulars in The Block Universe imitate cognitive agents, which are elements of God's Mind. It cannot be said, however, that God *chooses* this, for the notion of choice requires that a being have two options. Nevertheless, that God is, and that His Attributes are what they are, is due to Him.

(3.5) Life and Death

Let us start by reminding ourselves that although cognitive agents have awareness and choice, they don't, properly speaking, desire anything—*desire* is a faculty of the psychological aspects of particular physical agents. A cognitive agent is merely *aware* of the desires of its animal brain and body and makes choices based upon what it is aware of. Second, recall that as we think of selves (ourselves and other selves), we tend to perceive their properties as inclusive of both the properties of cognitive agents and the properties of physical agents. Also recall that our ordinary notion of self is in most cases not a veridical image of what selves actually are, but is instead a self-image, a picture of our metaphysical components and what they do that is distorted in a number of ways. With these preliminaries in place, let us begin our discussion of *death*.

The soul is typically described as that which survives a human being's death. Given our view of God and reality as a whole, we agree in the sense that something important "survives our death" if we have been sufficiently good over the course of our lives. That is, when a human person dies (its life come to an end), its life may correlate with a soul—its sacrificial gift to God. That soul, and it alone, will reside eternally within God's Consciousness. A fuller account of this involves four metaphysical particulars, all of which are affected by a person's death: (1) a *human body*, (2) a *cognitive agent*, (3) *the eidos Souls (God's Consciousness)*, and (4) *God*.

By the "death" of a self, we mean *that moment (in The Block Universe) after which no events in The Block Universe imitate the cognitive agent of which that self is (partially) composed.* Many understand the process of dying to lead to a human self ceasing to exist. But it is a consequence both of our four-dimensionalism, according to which the past, present and future are all on a par with regard to existence, and our timeless view of the cognitive agent of which each self is (partially) composed, that the human self, as such, does not cease to exist. It merely ceases to have further spatio-temporal agency. The self's life is complete (in the sense of finished) with regard to its agency, but it does not cease to exist. All human bodies exist eternally in The

Block Universe; all cognitive agents exist eternally as well—in fact, even more clearly so—for they exist entirely external to The Block Universe, and thus never "cease to exist" in any sense.

Nonetheless, death, as we have defined it above, is very important, especially for God. For it is only with respect to the moment of death that the net balance of the person's having served or harmed God's Will is quantitatively fixed. An infinitesimal iota, on balance, to the good of serving God's Will results in a soul; this is that person's ultimate sacrificial gift to God. If, however, there is an iota less on balance, no soul arises: God receives no gift, and, in essence, that particular life has been wasted.

A cognitive agent's life is best understood as unfolding within the divine Being, but *not* as unfolding within The Block Universe where the trajectories of human agents unfold. Persons' lives unfold in the *form* of Being, *Coming-to-Understanding (God's Mind)*, while human bodies unfold within the *matter* of Being, *The Block Universe (God's Body).* We also refer to God's Attribute, the eidos Coming-to-Understanding (God's Mind) as *the process of Coming to Understanding*. The unfolding of this "process" is, keep in mind, atemporal. Although it is ontologically dependent on The Block Universe, the process of Coming to Understanding is formal (though as with any eidos it does have both material and formal sub-eide). And so it follows that the awareness, the cognitive agency, and the choosing that are so crucial to Coming to Understanding are also atemporal. Notice that the eidos Coming-to-Understanding (God's Mind) structures the eidos The Block Universe (God's Body) and, furthermore, has the eidos Cognitive Agents as its matter.

The reason that the death of a Person—although not that of a mere self or even a person—is so important to God is that His Will is to understand Himself. But His only route to understanding is through His Consciousness; and that, we have seen, consists of souls, i.e., the contributions of (some) cognitive agents. Recall that the eidos The Truth About God is the form of the eidos The Goodness of Personhood. We mentioned earlier that there can only be finitely many cognitive agents, since if there is an infinite number, the significance of any given cognitive agent reduces to zero. Given that the number of souls cannot be larger than the number of cognitive agents, every single possible soul is important to God. It is therefore imperative that we learn how best to serve Him: that is, by helping other persons to be Persons, and by being aware of metaphysical realities and verities. We return to the question of serving God's Will in more detail in Part 4.

Serving God is ultimately a person's most important moral obligation. Serving God encompasses everything that almost anyone would take to be morally good. (We discuss this topic in next section.) What does a person serve when they serve God? They serve God's Will by assisting Him in coming to know Himself. Either one serves God by becoming aware of the metaphysically real, or else one serves God by bringing about cognitive agents who are aware of the metaphysically real. Doing either of these things involves being oriented along the primary telic trajectories of Being and The Eide (God's Attributes). These telic trajectories are exhibited in Diagrams 5A and 5B.

Diagram (5A): The Telic Trajectory of Being

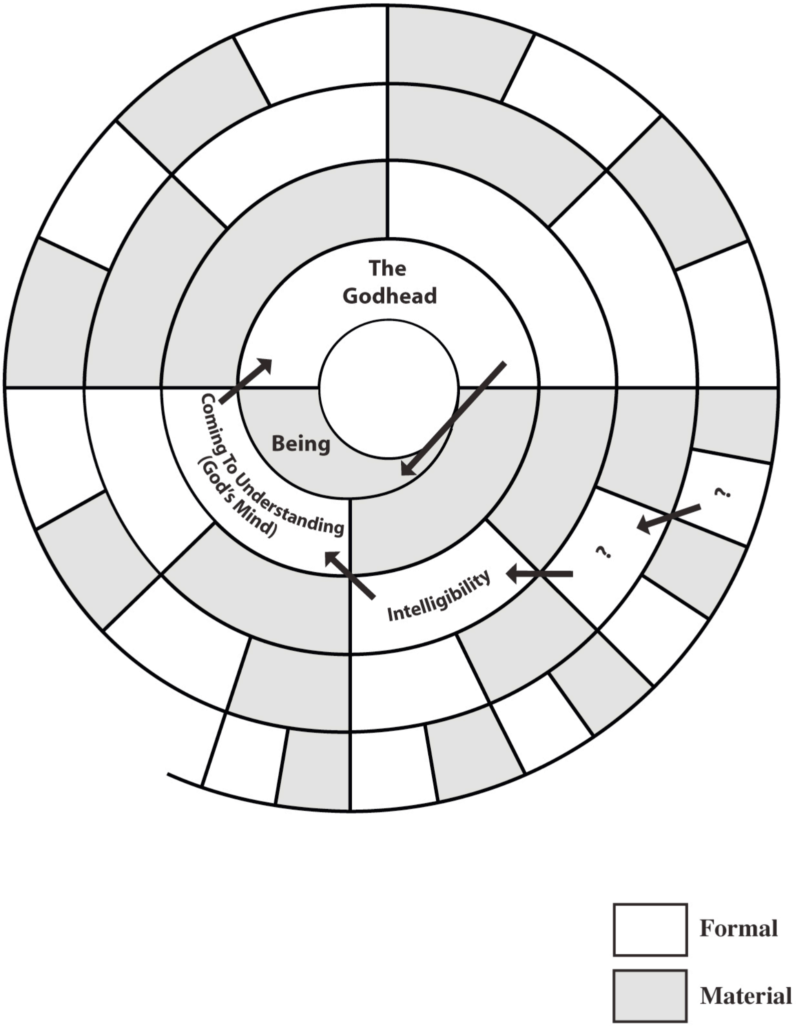
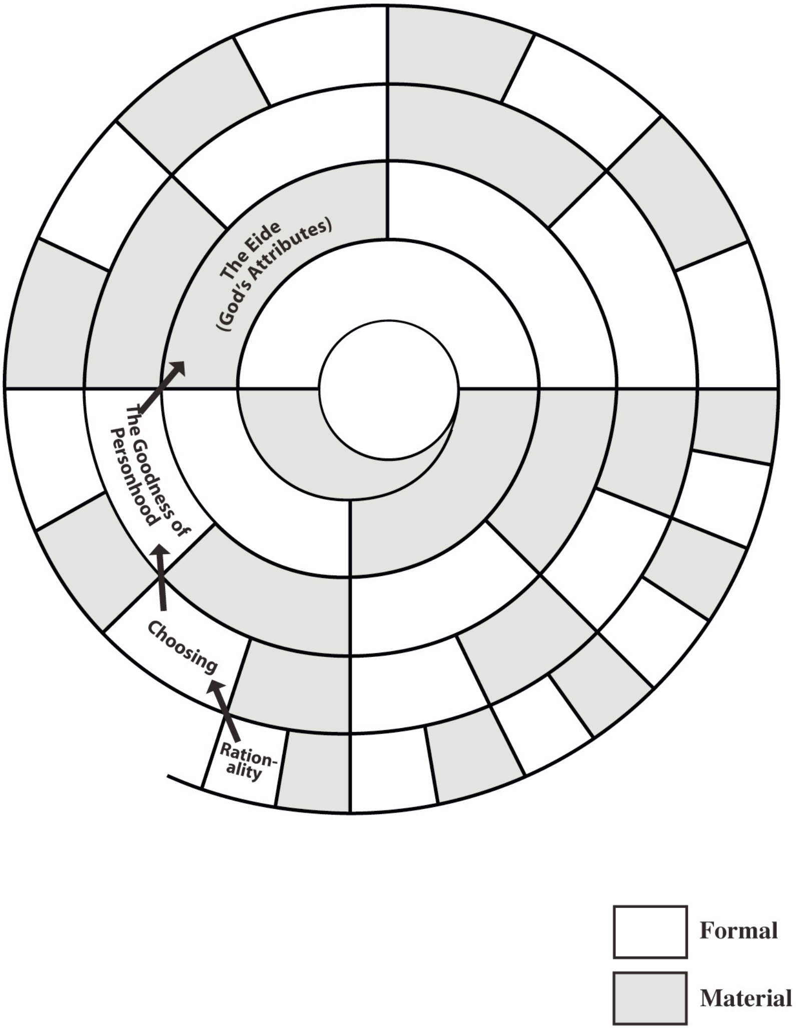

The Godhead
Being
Coming To Understanding (God's Mind)
Intelligibility
?
?
Formal
Material

Diagram (5B): The Telic Trajectory of The Eide (God's Attributes)


The Eide
(God's Attributes)
The Goodness of
Personhood
Choosing
Ration-
ality
Formal
Material

The importance of these two trajectories cannot be overstated. In Diagram 3 we traced three of the most important emanations of efficient cause, which show (respectively) how God brings about The Block Universe (and thus, indirectly, Cognitive Agents and Souls), how the Godhead brings about States of Affairs, and how Being brings about The Eide. For an existing metaphysical particular, such as an individual cognitive agent, the task is very different. Our task is to increase our understanding and to ascertain what constitutes good action. The telic trajectories presented above offer a basis, a sort of metaphysical map that helps to orient thought and action. Recall that in the present system telic causes are real; thus telic explanations offer genuine (though of course not complete) explanations of why certain states of affairs are as they are. Knowing these relations helps cognitive agents to orient themselves vis-à-vis metaphysical reality, and as a result helps them to know how they should exercise their agency. To know these things is to understand what serving God means, which, we have suggested, is our raison d'être.

At this point it becomes possible for us to speak in somewhat more detail about *the nature of the unfolding of the life of a given self.* The roles of such lives are best understood using the concept of a *game.* We define a *game* as a structured activity understood to consist of the following:

1. Players or teams (one, two, or finitely many)
2. Rules
3. A definitive beginning
4. An end or goal, established at least in part by its rules
5. Legitimate moves, established by its rules
6. An agreed-upon domain within which the game is played (the surface of a chessboard, a field, a space, etc.)
7. Abstract or concrete accoutrements—its various tools, equipment, tokens, points for keeping score, etc.

In his insightful description of human language, Wittgenstein famously discovered the curious importance of the concept of a game. Wittgenstein's insight, it turns out, was but the tip of the iceberg. We claim that *thinking of a self as the player of a game* enlightens almost every concept we have of selfhood. Thus it is only natural to call this game *the game of life*. In describing the trajectory of a life as a game—an activity usually associated with children—we are not in any way suggesting that such trajectories are not serious. Games can be very serious, even ultimately serious. War in all its horror is, by our definition, most definitely a game. The whole of the activity of any given institution is a game. Seeing one's *self* correctly as the player of such a game, and recognizing its importance to other selves, reveals a huge responsibility—the responsibility of properly serving God.

Imagine two people playing a board game. The course of the game is partially a result of each player's awareness at a given stage in the game, and partially a result of the choices that they make throughout the game. The resulting trajectory through space and time is a blend of both the players' decisions and the inevitable presence of luck and necessity. Luck and necessity characterize the nature of any game, together with its rules and the "geography of the board" itself (so to speak).

To some extent, we can distinguish the two different cognitive agents who are manifest in the game. We do not mean that we can distinguish the two individual people making moves in the game. Rather, the moves that the agents make in response to their opponents can be distinguished as such. These moves are the features of each cognitive agent as he or she becomes manifest within the trajectory of the game. Furthermore, each of the two persons playing the game is to some extent a product of his or her cognitive agent's awareness and choices, combined with the game's environment and the other player's choices.

In playing any game, one can always attempt to see one's own self selfishly; that is, one can attempt to believe that one's choices are made in response to the environment and nothing else. The selfish player is external to, and thus indifferent to, the other self that is behind the other player's choices. We claim that it is more accurate to see the game one is playing as *inclusive* of one's self rather than outside it. More accurately still, and most beneficial to all, including God Himself, is to see the game as inclusive of all other selves, and to realize that there is an objective hierarchy of games and engaged selves, which includes everything. As Proust poetically puts it:

> . . . as in the game wherein the Japanese amuse themselves by filling a porcelain bowl with water and steeping in it little pieces of paper which until then are without character or form, but, the moment they become wet, stretch and twist and take on color and distinctive shape, become flowers or houses or people, solid and recognisable, so in that moment all the flowers in our garden and in M. Swann's park, and the water-lilies on the Vivonne and the good folk of the village and their little dwellings and the parish church and the whole of Combray and its surroundings, taking shape and solidity, sprang into being, town and gardens alike, from my cup of tea.

The whole of this hierarchical unfolding is, of course, none other than Being, the matter of which is The Block Universe (God's Body), and the unfolding of which can now be understood as *The Game of God's Life* or *The Game of Coming to Understanding*.

Cognitive agents, selves, *persons*, *souls* and *games* are notions of supreme importance for understanding God or reality as a whole, and even more so for understanding how we are to serve God. Like God Himself, *persons are engaged in the Game of Coming to Understanding*. Of course, there are smaller "games within games" within the larger, all-encompassing unfolding of God's Life; each of us thus plays his or her own game of life within the Life of God.

(3.6) Love, Teleology and Beauty

As the title of this final section indicates, the topic that we must consider next is the theologically essential notion of love. In the eighth century BCE, Hesiod depicted *Eros* as the first god to emerge from chaos and the god that draws or binds all things together. Eros is identified as the binding force of the entire universe and thus as external to that which it binds. (Interestingly, the root of the word "religion" is *religio*, meaning, "to bind together.") It is not until Plato that the binding or drawing together of Eros is more closely linked with sexual attraction and desire. This element of desire serves as an integral, internal partner force residing within that which is bound by Eros; it functions to bring about that which is most important—unification. Significantly, Plato retains the more general notion of Eros as the force of attraction or binding together in general (cf. Empedocles' two powers of Love and Strife); thus he links the Greek concept of *eros* with *telos*. That *eros* and *telos* are closely linked is true of our system as well.

Recall our Definition 1 of a person, here repeated:

> A *person* is a particular with three structured sets of capacities:
>
> (i) referential capacities (being aware, or being conscious),
> (ii) volitional/purposeful capacities (having a will, and/or making choices in accord with goals or purposes),
> (iii) the capacity to love (being able to exercise the first two sets of capacities in accord with God's Will).

The characterization of love in (iii) may seem alien to how we talk about love in the contemporary setting. The contemporary picture of love accentuates the emotional dimension: the sometimes sudden being drawn together of two human beings, or, more commonly, one human being struck or smitten by another. Lust is sometimes distinguished from love—but only in the sense that the emotion of love is seen as directed towards more of the human being than the physical body. Even so, on the view of many people love is fully characterized by its being described as an emotion. Emotion, however, is nowhere present in our definition of a person. Indeed, if we consider our second definition of a person, which differs from the one repeated above by the single insertion of the word "metaphysical" between "a" and "particular," and if we recall that emotions are described as entirely due to the physical agent and not to the cognitive agent, then it seems clear that love is mischaracterized when it is described as an emotion.

Notice that even ordinary talk of love is not usually restricted to the pure description of emotion. A commonly articulated additional requirement in the characterization of what is seen as *genuine* love is *commitment*. For example, a ubiquitous element when expressing love (in popular music or in poetry) is the claim that the love in question will last forever. But then this cannot be the description only of an emotion, since no emotion lasts forever. What is also being expressed is a commitment to the other person. Commitment, however, is not an emotion; it is a decision—a choice. It is something the lover *volunteers* to undertake. By contrast, when love is seen only as an emotion, it is interpreted as involuntary, as something that seizes the lover despite everything else. We suspect that Commitment is an eidos, and more specifically, an eidos that occurs as a sub-eidos of the eidos Choosing, but we shall not pursue this speculation any further in this book.

What is true of human beings is this: no human being is capable of commitment without emotion, and indeed, without positive emotions in the neighborhood of what we often describe as love, veneration, respect, and so on. It is striking that all of these words of natural language are ones that are simultaneously descriptive of *two* states—one an emotion that is due entirely to the physical agent, and the second a teleological/normative state of an awareness of the value of the object of love, along with a commitment *to* that object of love. This is because human beings are composed of both human bodies and cognitive agents.

The human body is the source of the emotion. The cognitive agent, however, although aware of the emotion, is engaged in an act of decision. In such cases, the cognitive agent is making choices based on considerations of values. If these considerations facilitate its seeing realities more clearly, and/or involve facilitating such possibilities for other cognitive agents, the cognitive agent is engaged in something that satisfies the teleological needs of God. That is, such a cognitive agent is expressing its love.

This should make clear that although emotions are crucial to *human* selves being persons, and indeed even to their being Persons, in general emotions need not be crucial to cognitive agents being persons or to their being Persons. This is because not all physical agents are human bodies or even animal bodies, and therefore not all physical agents are the loci of emotions. Consider, for example, an institutional agent. Imagine that such an institutional agent satisfies the first two constraints on being a person; that is, it qualifies as being a self. Yet note that such an institutional self is a composition of an institutional body (human beings, buildings, legal rules, etc.) and a cognitive agent. There is no reason, however, to suggest that the institutional body is itself a source of emotion. There are human beings, of course, who belong to that institutional body, and such human beings will naturally have emotions. Yet even so, it does not follow that the institutional self *itself* has emotions. Despite the absence of emotion (or perhaps even because of the absence of emotion) such an institutional self may have the capacity and discipline to conform its referential and volitional/purposeful capacities to God's Will. In that case, such an institutional person will be able to express its love, even though its love will not be accompanied by any emotion.

In general, human selves are incapable of love—of conforming their referential and volitional/purposeful capacities to God's Will—without the presence of accompanying emotions. Indeed, the fact that human selves need emotion even to commit themselves to an institution is verified by the words we have for such emotions: loyalty and patriotism. As we well know, there can be negative aspects to these emotions. Some humans are so psychologically tied to specific institutions—they experience such extreme forms of these emotions—that they become fanatics, prejudiced only towards a single institution or set of institutions and perhaps towards the humans in them as well. But this tendency simply illustrates the point that we are making here: there can be no commitment—no love in the sense in which it has been characterized in this book—by human persons without an accompanying emotion by the human bodies that partially compose those human persons. We suspect this is true of any self with a physical agent that is an animal body, since emotions are linked to the hormonal arousal systems that have evolved in, for example, the bodies of all mammals.

A similar point can be made of human persons who love God. When human persons love God, this will invariably be accompanied by emotion, and indeed sometimes by great emotion. Prayer is a typical expression of this love; more generally, worship is a form of this kind of love. We define "worship" as follows:

> *Worship* is love expressed by human persons towards something they take to be greater than themselves. The expression of worship occurs in part through the actions of their animal bodies, though it often occurs in social settings as well. In most cases, worship occurs with the hope of some sort of recompense from the objects of worship that the love is directed towards.

Sociologically, worship is ritualized activity ranging from the simple kissing of and bowing towards the objects of worship by groups of worshippers to cultic rites and liturgies. Some common objects of worship are god(s), idols, material objects (e.g., a beautiful work of art), abstract objects (e.g., a symphony or poem), ordinary persons (e.g., a hero, leader or spouse), and ideas or ideals (e.g., freedom, or the omnipotence of a deity). We shall discuss these phenomena further in Part 4.

A question that arises naturally at this point is this: What about God? Does God love? Does God, in particular, love us—or at least some of us? Recall that God always fully expresses His love because He is always in accord with His own Will. But this does not answer our second question: does God, in particular, love *us*? Recall that God is conscious of us only insofar as we are Persons and we are aware of ourselves—for God is conscious of anything real only insofar as Persons are also aware of it. Therefore, God is genuinely committed to us only insofar as we are either Persons aware of ourselves or we are selves or persons of which other Persons are aware.

Furthermore, not only is it true that God loves us only insofar as we are Persons who love one another and ourselves; it is also true that He loves Himself only insofar as we Persons love Him. Do we Persons love Him? Does He therefore love Himself? The answer is yes, because there are Persons who are aware of Him and who love Him. But now the following question can be asked. We—human Persons—can only commit ourselves to God's Will if we experience the emotions that accompany love, as well as veneration and respect, towards God and towards God's Will. But if we experience love only with emotion, does it follow that God also experiences love only with emotion?

It does not follow. God's Consciousness is always in accord with His Will. Therefore, God always loves whatever He is conscious of. For God to love Himself only requires that Persons be aware of Him. But if we are Persons, it follows by definition that we love God if we are aware of Him. God is also conscious of the physical agent on which a cognitive agent is ontologically dependent. Therefore, God can also be conscious of the emotion that accompanies a cognitive agent's love. But for God to be conscious of such an emotion does not require that God Himself have that emotion. And, of course, He does not. God Himself has no animal body—The Block Universe is God's Body—and so He has no emotions whatsoever.

It is natural at this point to briefly contrast our view with the Christian view of love—or at least, a certain dominant Christian view of love. This is the idea that love must be utterly self-less and utterly giving in nature. According to this view, when one is filled with Christian love, one is charitable towards everyone; one gives everything one has to others. One might even be living in poverty because one has given away all one's earthly possessions to others in need.

Our view is that this is not love; in fact, our view is that such behavior is often vicious. The reason is simple. Love is the conforming of a person's referential and volitional/purposeful capacities to God's Will. God's Will, in turn, is whatever best facilitates His Self-Revelation. This is a consequentialist view because what best facilitates His Self-Revelation can vary greatly from circumstance to circumstance. In particular, because God's Will is best facilitated by the actions of individuals within institutions, the behavior of persons must be the kind of behavior that encourages members of institutions to cooperate with one another.

Radical altruism of the kind just described does *not* enable members of institutions to cooperate maximally well with one another. This is simply because radical altruism invites the temptation for others to exploit the altruist. If a community contains too many altruists, that community will invite exploitation. (Being selfish in such a community will be too profitable for some members to resist.) A community that is instead composed of individuals who are willing to cooperate with others *only when* they are willing to cooperate *in turn* is a community that will be far more successful because it resists exploitation by those tempted to be selfish. (Being selfish is not particularly profitable in such a community because only cooperators are rewarded with benefits in return—the dynamic described as “reciprocal altruism” by biologists.)

The findings of biology suggest that the aforementioned Christian ideal is not, in general, a role for persons that is in accord with God’s Will because it too strongly invites the temptation to selfishly exploit others. No behavior is in accord with God’s Will if that behavior ignores the evident facts about human beings—in particular, that human beings are composed in part of animal bodies. Christian charity as described above is otherworldly precisely because it ignores the realities of human agency. But no practice can be a good one, that is, no practice can be in accord with God’s Will, if it ignores *realities*.

It is ironic that Christian morality recognizes the evil of temptation when it comes to sexuality, but that it is blind to the evil of temptation when it comes to utter selfishness. Yet it *is* to tempt others to selfishness if one makes a strict habit of always turning the other cheek (that is, always responding to exploitation by beckoning the exploiter to yet further exploitation rather than unpleasant repercussions).

Let us turn, now, to the third topic of this section. Plato and his followers famously equate beauty with truth and goodness, and they tie this threesome to the topic of love. We readily admit that our account of *love* is glaringly lacking in “beauty,” especially in comparison to the Christian love expounded in Chapter Thirteen of Paul's *First Epistle to the Corinthians*, or the erotic love described in Plato’s *Symposium*, or the deviant love portrayed in Proust's *Swan's Way*. However, our quest has been one for truth not for beauty. Nonetheless, we need to address this lack of "beauty" in our account of God's Will.

First, let us point out that, notwithstanding the historical Platonic tradition of likening and/or linking *truth*, *goodness* and *beauty* to each other, we believe that beauty—unlike truth and goodness—does not correspond to metaphysical realities. It is not an eidos, nor does it involve an order of particulars. Instead, it is a notion directed largely towards illusions. When, however, metaphysical realities are seen as "beautiful," this is only a way of looking at them to which humans are prone, but not one that captures the metaphysically real. God—we claim—is never conscious of beauty.

Despite the great investment in this universal by so many in their everyday lives (especially artists, designers, hormonally-charged romantics, incurable Platonists, and the like), we hold that beauty has no deep metaphysical or theological significance whatsoever. Notwithstanding our emotional response to "beautiful" human beings, artifacts, scenes of nature, certain cathedrals designed to be as attractive and moving as possible (for certain persons, at least), and so forth, only Truth and Goodness really matter when it comes to serving God. The so-called Platonic reality of the "beauty" of a certain object of, say, someone's erotic desire is purely fictional. The object is desirable because we are psychologically and socially disposed to respond in this way; but it has no further metaphysical property of being beautiful above and beyond the disposition itself. Beauty is quite literally, as the saying goes, "in the eye of the beholder"; or, as Shakespeare so poetically waxes, "Beauty is bought by judgment of the eye."

Notwithstanding this conclusion, there is a way in which the unfolding of God's Coming-to-Understanding and The Godhead are of a sublime "beauty." Nevertheless, they are so only because we (and not God) see them that way. As a result, "beauty" is viewer-relative; what one person considers "beautiful" may not be so for another individual.

Permit us, if we may, to make a somewhat awkward yet remarkably apropos analogy. Consider the case of the termite colony and its queen: a legless, immobile, slimy, four-inch pulsating glob with millions of tiny worker termites feeding and grooming her and carrying away the hundred million or so eggs produced in her lifetime. Though *awareness* of her beauty (or any other special features that she might possess) is unlikely to apply to termite workers, there might be cognitive agents that see her (and her worker termites) as things of beauty.

In the same way, some cognitive agents may see their service to God as a beautiful thing, just as they may see the God whom they serve as beautiful. (An object of worship is usually seen as beautiful by those who worship it.) One might complain that the comparison is invidious because termites are not *aware* of their service to the queen (they have no awareness). However, awareness of their service to God is not something that most cognitive agents have either, even though they have *other* forms of awareness. Like God, the termite queen is utterly helpless to do anything for herself. *She is completely dependent on her workers.* In turn, serving her is the whole purpose of their existence. The termite queen is the supreme creator of her world, the efficient cause of its existence.

We have three reasons for having injected this perhaps surprising analogy at this point. First, it is a strong way of conveying the element of viewer-relativity present in the notion of beauty. Second, it introduces the topic of gender into our discussion about God. In most religions, God is imagined, depicted and presented as male, mostly because the cultures that have produced these religions are historically patriarchal. Prior to this section, we too have been deferring to these religious traditions and referring to God with the gendered pronouns of “He” and “His.” Despite the challenging and controversial history that this rendering of God brings along with it, for ease of writing for the author and for clarity of understanding for the reader, some gendering of personal pronouns has seemed helpful. These days, issues of gender and sexuality are being crucially examined in all quarters, with language, culture and religion representing only a few of the hotly debated fields. Given the all-too-apropos example of the queen termite and her colony, it seems appropriate to us to suggest that God and God’s Attributes are more closely aligned with this female gender than one might imagine. The role of the helpless termite queen with regard to those ceaselessly serving her is remarkably similar to God and those who serve “Him.” Like the termite queen, God is completely dependent upon us to fulfill the divine telos, and yet surely God is the supreme person of all persons and the efficient cause of their world.

The third reason is connected to the second. We believe that any gendering of God is arbitrary and constructed; it is a primitive affectation no longer applicable on any proper account of God. Thus, even though it may impede our ability to more easily articulate and communicate a description of God from time to time (for example, when talking with more conservative followers of the Abrahamic traditions), we believe that it is important to keep any discussion of and claims about God's gender neutral. As we do for certain cognitive agents, we define God as a person. However, our definition of a cognitive agent does not involve gender; gender is irrelevant (or perhaps even nonexistent) in this regard. Therefore, we shall hereinafter only refer to God with gender-neutral language, and thus we forewarn the reader of some awkwardly stated phrases and descriptions.

This said, we now return to the topic of beauty and conclude Part 3. What we mean by saying that God's Coming-to-Understanding unfolds as a thing of great "beauty," or that The Godhead (God's own Form) is a thing of sublime "beauty," is that *we* as human persons are disposed to respond with favorable emotions to the explanatory power and coherence of our account of the process of Coming-to-Understanding. It is the kind of thing that causes us to resonate with the poetic imagery of Plato when he writes:

> The place beyond heaven, none of our earthly poets has ever sung or will sing its praises enough! Still, risky as it may be, I must attempt to speak the truth about it, especially since Truth is my subject. What is in this place is without color and without shape and without solidity. Found there is the Being that really is what it is, the subject of all real Knowledge, the soul's steersman, which is visible only to intelligence. A god's mind is nourished by this pure Knowledge, as is the mind of anyone that is concerned to take in what is appropriate to mind. Such a person is delighted at last to be seeing what is Real and watching what is True, and so feeds on all

this and feels wonderful, until the circular motion brings it around to where it started. On the way around it has a complete view of Knowledge. This is not the knowledge that is close to change, the knowledge that becomes different as it knows the different things that we consider real down here. This is instead the Knowledge of what really is what it is.

Phaedrus, 247c – 248a.

Part 4: The Implications of God’s Will

(4.1) The God of the Old Theology

Revelation aside, the only way to pursue theology is through an adequate philosophical understanding of the *theos*. Understanding God, the ultimate metaphysical particular, and thereby knowing God’s Will, is crucial for understanding how we as cognitive agents should think and live. It allows us to understand the telic trajectories that structure what we are and what is of highest value (see the diagrams in section 3.5 above). Unfortunately, such an adequate understanding has proved difficult to achieve, in part because of the checkered history of “God.” That is, because the idea of God has been forced to play a variety of conflicting roles, the various religious worldviews now exhibit numerous tensions and contradictions. Many doubt that a partnership between religion and the philosophical or metaphysical quest is even possible any longer.

Why has there been this apparent need to impose a range of conflicting roles on a single entity? Monotheism—the notion of the one God that is common to all three of the Abrahamic religions—arose in each case by granting a special and unique status to one or another of the gods of the earlier polytheistic religions. It could have been Marduk or Baal, but it turned out to be Yahweh that was elevated in this way. Allah, it turns out, also had a pre-existence we seldom hear of as a moon god. Even the Christian God, transplanted from its Hebraic context, acquired new roles in the Graeco-Roman world that stretched and strained his earlier Hebraic identity. The result is that the one who became “God” in each case was truly a one *from* many. In each case the many gods had a variety of qualities that then had to be perfected and concentrated in the one God.

Consequently, it is not surprising that when one subjects the Abrahamic conception of God to scrutiny by means of a so-called “philosophical theology” one discovers *mirabile dictu* that the embedded conception of God is inconsistent: God’s supposed goodness and omnipotence is incompatible with the extent and nature of evil, God’s foreknowledge is prima facie incompatible with human freedom, and so on. These things are only to be expected, given the complex cultural histories involved.

What are some of the roles that "God" has played in the Abrahamic religions, when they are viewed across the entire sweep of their histories? First, "God" has often been pressed into the role of a superhuman personal power with specific concerns and attitudes towards this or that individual or group of individuals (jealousy, affection, anger). It is not just that God is seen as responsive to prayer, or that God is taken to manifest himself to specific chosen ones (for example, to the prophets of the Hebrew Bible). It is also that the acts attributed to "God," in particular God's commandments and promises to created beings, are supposed to indicate the point or the meaning of those created beings; they explain what the Chosen People or the servants of Allah or the followers of Christ should do with their lives.

Second, "God" has also been utilized to unify the identities of entire peoples or tribes, even those of small towns or geographic areas. Tribal or ancestral gods invariably play this kind of role, of course, but in the Abrahamic religions the First Principle was given the job of unifying the cultural identity of a group of people and explaining the meaning or importance of the specific practices and behaviors of that group. The cult of Yahweh is especially interesting in this regard, for Yahweh appears to have started out as one among many others in a pantheon of gods, playing precisely this role for a specific group of people. Even when the belief in Yahweh evolved into the belief in the One and Only True God, and even when God's devotees had come to believe that other gods—even those explicitly mentioned in the oldest portions of the Hebrew Bible—were lesser beings or mere myths, God continued to play the same role of justifying the "Chosen People."

Third, and related to the role just mentioned, "God" has often been used to explain the course of particular historical developments—to explain why things, both good and evil, happened in the way that they did. Such a role for "God" is central in the Hebrew Bible, the New Testament, and the Koran; in all three, "God" directly causes events to occur. The causal efficacy of gods is, of course, a staple of mythology. For example, in Greek, Indian, and Babylonian myths, purported historical events (the Trojan war, or the founding of Athens) are described as directly due to the actions of gods.

Fourth, “God” has often been invoked as the basis for moral obligations. These are supposed to be grounded in God’s nature or in his attitudes towards created beings. They are expressed in the form of God’s commandments, which, in “His” self-revelation, have their moral force because of God’s power and might, as in the book of Job and throughout the Koran.

Fifth, access to “God” can allow an ecstatic escape from the demands of ordinary life. Influential mystical traditions have held that God transcends the ordinary cognitive methods by which one recognizes the operations and laws of the world. These traditions have held that it is by means of one or another occult process of getting in touch with the divine, revealed only to the initiates and their followers, that one can escape into another world.

Sixth, by way of an expansion of the third role described above, “God” frequently became a central figure in primitive cosmologies, eventually playing a crucial causal explanatory role in the metaphysical structure of the universe. God thus appears, for example, as the creator and upholder of the universe. When God is pressed into this proto-scientific role, the intelligibility of the notion of God is often compromised; for example, from “God’s” being loving and all-powerful, the existence of the whole universe is explained as something that necessarily follows.

And, seventh, related to the fifth role but in some tension with the sixth, the notion of God has often been central to maintaining the mystery and the incomprehensibility of the cosmos. In these cases God comes to be seen as something indescribable, and thus as something that transcends any possible human understanding. This move supports mysticism, but it also has the side effect of undermining the explanatory power of the notion of God, and hence is in tension with God’s proto-scientific role. One can hardly appeal to the ineffable properties of “God”—if those are the only properties God is taken to have—in the explanation of the origin of the universe. Still, even an ineffable God can play the cosmological role of encapsulating the intrinsic mysteriousness of the universe; the universe is eventually seen as something that is in principle unknowable because its Maker is unknowable—indeed, not even to be categorized or compared to other things.

This particular view of God is at one extreme of a range of conflicting views that run through the history of the notion of God—a history that, as we have seen, has had a confounding effect on religious and philosophical reflection about God. On the one hand, for God to be immanent, for God to be in the universe and to be the ground for the distinction between what is right and what is wrong, God must be in principle characterizable by the same language that is also used to describe the universe; hence God must be knowable by at least some of the methods that are used to know about anything else that can be known in the universe. This is the *immanence* of God. God is present in the universe, and knowledge of God is therefore available to advanced sentient beings such as humans.

On the other hand, an equally powerful tendency in the history of the notion of God is the view that God transcends the cosmos. Just as God's presence in the universe has taken many forms, so too God's absence from the universe has taken many forms. For example, it can take the form of the skeptical but still religious view that ordinary methods of knowing about things do not apply to the real God at all. Or it can take the form of the thesis of intrinsic incomprehensibility: the essence of God is unknowable, not merely insofar as humans cannot fully know what God's properties are, but in the more dramatic sense that *none* of the terms of any human language can truly apply to God. Some take this ineffability thesis so seriously that they deny that one can even describe God as existing—not even *existence* is a concept that applies to God. God is "without Being," that is, God is even beyond the dichotomy of existing or not existing.

To the extent that "God" is taken to be immanent, God is sometimes treated as a being just like other beings, as a causal force in the world whose effects can in principle be studied and described like anything else. To the extent that God is transcendentalized, God becomes something that one cannot study and can never understand, even in principle. Often, a notion of supernatural religious experience is then imported in order to relate believers (paradoxically) to the totally transcendent God. Yes, God can be experienced after all, but in that experience something happens (psychologically) that again cannot be characterized in ordinary terms. In this way, God fully plays out the fifth role—but then God is incapacitated, to some extent, from performing other roles. A softened version of this transcendentalizing of God is found in talk of faith in God as lying beyond what mere reason can deliver, and thus as immune to considerations of the weight of the reasons for and against (cf. "Faith is the assurance of things hoped for, the conviction of things unseen," Hebrews 11:1).

This list of paradoxes and tensions in religious conceptions of "God" makes one thing amply clear: We need to begin again, not merely by uncritically rehabilitating traditional ideas of "God," but by reflecting deeply on how God can best be understood. We also need to understand how it is that we are to serve God—both in religious practice and in ways that go beyond traditional religious thinking. Our guide in these endeavors will be the account of God that we educed in Parts 2 and 3—not because we dogmatically presuppose its final truth and adequacy (we do not), but because it represents the most sophisticated understanding of the metaphysical ultimate that we have been able to educe. As we aim to show, it is possible to begin with this conception at the same time that we remain open to, and indeed encourage, further discussion and debate on this ultimate matter. At any rate, our aim in this next and last part of the book is to show what our account of God reveals about human obligations to God. We will also speculate about what new (or revised) kinds of religious institutions would be most appropriate for the metaphysical views to which our arguments have led us.

We round out this section by recalling some of the properties of God derived in the preceding pages, as well as by noting some implications of these properties for our obligations to God. Recall that everything besides God is either an Attribute of God, an *eidos*, or it is a part of an eidos. God's eide stand in *teleological* relations (among five other relations) to one another, to God, and to other particulars (the parts of eide). From these teleological relations that govern all the metaphysical particulars (including God), it is possible to educe an objective teleology governing everything that there is. The most fundamental purpose of the universe that we have discovered is understanding—specifically, understanding that is directed at God's

Attributes and their relations, The Godhead. God's Self-Revelation is thus an objective goal or "telos" toward which everything should be oriented. (Given our more philosophical approach, it is more natural for us to think of natural theology as the typical means by which God is revealed to cognitive agents. Still, as we will see, there may be other ways in which God and God's nature are revealed to particular agents in the world.) As persons and in our various institutional roles we are obliged to be the *agents* of God's Self-Revelation, so that we fulfill our telos or destiny to the extent, and only to the extent, that we are the vehicles of God's Self-Revelation. Conversely, looked at from the perspective of God's Consciousness, the governing purpose of the universe is God's coming to Self-Understanding. We, as persons executing our various teleological roles, behave rightly—or, equivalently, *piously*—when and only when we (directly or indirectly) promote that process.

Clearly such notions resonate with traditional religious views. Less traditional is the notion, defended throughout this work, that although we are ontologically dependent on God, God is entirely dependent on us to bring about God's Self-Revelation. On our view, God is not just another efficient cause in the world, a powerful cosmic agent who can directly bring about whatever God wants. (God is the efficient cause of the world, but this is not to be confused with the miraculous divine action that some traditions affirm.) To put it metaphorically, it is not that God is there to answer our prayers; it is rather that we are here to answer God's prayers. God can only "act" in the world indirectly: both by God's Will being revealed to us in and through our own endeavors to discover that Will, and by our piously carrying out that Will. In short, God's Self-Revelation is only possible indirectly—by *our* becoming knowledgeable about God.

Many features that have been preserved in the Abrahamic religions are the relics of mankind's religious childhood, and current cases of squabbling between competing forms of religious fundamentalism are best understood in this light. One can respect these traditions—indeed, one can even describe oneself as a practitioner of one or another of them—without having to endorse every aspect of their history or current beliefs and practices. In their more fundamentalist forms, the Abrahamic religions encourage their adherents to look on their respective gods as all-providing father figures. One byproduct of this childish outlook is that what we have described as the real needs of God are never mentioned, indeed never realized. What these religions hallow as one's personal relationship to God is suspect if the grounds for connections between God and the world, and hence for real relationships between them, are missing. How can there be a personal relationship between two parties if the needs of one of those parties never come into view because that one is conceived of as all-perfect and all-powerful, and hence as *needless*? The only model of such a relationship that we know of is that of the infant child to its parents.

And indeed, this *is* where the Abrahamic religions have left some of their followers: in an infantile moral and religious condition. Where that occurs, they are properly criticized by Freud and other critics, who describe such religions as forms of childish wish fulfillment. What then is needed: reforms within the existing religions, or a new religion altogether? Many in the contemporary scene argue that the world would be a better place with no religious institutions at all. Here in Part 4 we will defend the view that *both* God and human beings need religion. We will explore the hypothesis that there can be a mutuality between God and finite cognitive agents, even though the two types of particulars gain vastly different things from this relationship. More precisely, what is needed in the contemporary setting is a new understanding of religion that for the first time recognizes and responds to *the needs of God*.

Before turning to our discussion of this proposal, it will prove helpful to have in mind the contrasting case of religious practice in some traditional religious institutions (which we discuss briefly in the next section). We call this a contrasting case because, as we shall argue, a religion based on a genuine quest for understanding (of the sort that we hope this book has exemplified) gives rise to the need to reform traditional religious institutions or found a very different sort of religious institution. In the pages that follow we explore these contrasts. It is our hope to provide a more positive vision of the possibilities for the future of religion than many in today's culture are willing to countenance.

(4.2) The Role of Worship and Scripture in Traditional Religions

The word "worship" is English in origin, and originally it simply implied acts prompted by veneration. Over time it came to refer to the whole spectrum of human religious behavior and the institutions—their religions—that have evolved in part as a consequence of *homo religioso's* instinctive needs. As the concept of worship became more and more all-encompassing, it came to convey not just religious activity, but also the underlying beliefs and attitudes that prompt this behavior. Notice that because of the powerful presence of emotion in worship, there has been a certain tendency in traditional religious worship to focus not on the moving or affecting of cognitive agents but instead on the effects that worship has on the physical agent (the human body). Indeed, historically a significant proportion of religious practice has been oriented towards physical agents and their bodily needs, rather than towards any of the needs of the cognitive agent.

No better illustration of this point can be found than in the way in which practitioners of the majority of religions focus on sacred objects in their worship. Among such objects are the idols, statues or depictions of gods, which in some ancient religions are even seen as the actual gods themselves. Other examples of sacred objects are stones, relics, or supernatural items that purportedly possess powers (such as staffs or tablets) as well as ordinary objects that are suffused with supernatural significance by means of one or another ritual. All such sacred objects are taken to be endowed with something very akin to magic, that is, powers that can enable them to heal, grant the hopes and wishes of believers, and so on. Usually, believers ascribe to such sacred objects a history that explains their powers—say, by an original proximity to, or use of, the sacred objects by a god, or even by the object itself being a former part of the god (as in the case of the many relics of Christ's body-parts that were trafficked through centuries of the history of the Catholic Church).

The appeal of such objects to some believers is rooted almost entirely in their physical animal responses to the world: their fears and needs, as well as the fact that the human animal is attracted to beauty and drama (in a word, to spectacle). Sacred objects are mysterious in their powers, and this makes them attractive to traditional religions, both because they enable the exploitation of normal human superstition, and because they give authority to those representatives of the religion who appear able to wield these powers.

An additional crucial element of these objects is their sanctioned permanent status and importance in a given religion. Sacred objects become the fixed points of religious worship, enjoying an official antiquity, even a foundational role. When they take on such a role, they are unlikely ever to be discarded.

Some sacred objects are seen to be sacred solely because of their subject matter. Religious art, for example, often has this status. It is not that the stained glass windows in a church are themselves taken to have supernatural powers; rather, they are accorded great respect because of their depiction of significant and symbolic religious events.

An extremely important kind of sacred object in the Abrahamic religions is the sacred scriptures of these traditions: the Torah in Judaism, the Old and New Testaments in Christianity, and the Koran in Islam. In fact, a sacred quality is often associated with the physical instantiations of the various scriptures: papyrus, scrolls, books, and so on. But in addition, and very significantly, the words themselves have long been treated as sacred. Believers memorize these words, they chant or pray using them; such words, by sheer virtue of being words from a sacred text, are frequently taken to be efficacious in various ways.

Apart from this, these sacred scriptures have come to be *the* centerpiece for religious practice because of the variety of roles that they play. (Some of these qualities are peculiar to the Abrahamic traditions; others are found within non-Western religious traditions as well.) First, the Hebrew Bible, which is authoritative for all three traditions, presents a cosmology. A cosmology provides a description of the universe, and more specifically, a presentation of supernatural figures: God, angels and demons, along with various presentations of how the supernatural world intersects with, and makes sense of, the prosaic world in which human beings live.

Second, each sacred scripture presents a narrative, or rather, a collection of narratives. The cosmology, for example, is given by the description of a series of sacred or holy events, often starting with the creation of the universe. It is not formally presented (in terms, for example, of laws, truths and definitions). Instead, it is learned as sacred history by means of stories, genealogies and parables.

Third, each scripture presents a moral classification of beings and events. That is, beings and their actions are evaluated implicitly and explicitly as good or bad. This usually occurs in the course of a narrative, e.g., the betrayal of Jesus by Judas, or Moses leading his people to a new land. Good deeds are often explicitly identified as those of God (or the gods), or as deeds that God (or the gods) have commanded. Evil deeds, by contrast, are those of human beings who transgress these commandments, or are the deeds of supernatural figures, such as satanic tempters, who entice their victims into wrongdoing.

Fourth, each sacred scripture presents models and recipes for being a good person. These can occur as parts of narratives, when the narratives are appropriately interpreted, or they may occur explicitly as moral injunctions in lists.

Fifth, a sacred text is often used as a source of proscriptions and prescriptions for dealing with the trials and tribulations of everyday life: job loss, sickness, the death of others, the anticipation of one's own death, and so on. The words of the Bible, for example, are used as a sort of salve for healing the wounds of life, and its stories are used to give hope, to produce strength, and to provide models for handling these difficulties.

Sixth, the Bible or Koran can itself become a locus for worship. This is because its words are often treated as eternal fixed points in the worship practices of a religion. The Bible is to be quoted, interpreted, and memorized. It is the first authority to be appealed to in religious disputes, and both its words and its physical presence come to be central in religious rituals. In some cases it has become the ultimate centerpiece of a given religious tradition.

Seventh, a tradition's sacred scripture gradually comes to play a central role in sustaining religious institutions. It does so because it is a common element upon which all believers rely. When certain representatives of the religion (and not others) are allowed to determine the appropriate interpretation of their scriptures and can dictate how its words are to be applied, they have the means to establish and retain control over the rest of the believers in that religion.

Eighth, and related to the seventh role, a shared scripture minimizes regional and cultural differences: differences of language, ethos, culture, and so on. This is because the sacred stories and symbols used in the religious community, when they become authoritative, trump all “merely” cultural stories and beliefs, rendering them merely secondary or derivative. As a result, other stories and cultural artifacts are either shunned altogether or reinterpreted in appropriately scriptural terms. An example is how the early Christians re-characterized the Greek gods, Aphrodite and Zeus, not as myths but as demons.

As a result of these qualities, the language of believers is “fixed” in many respects by the dominant qualities of the language of their sacred texts. Names for children are often drawn from its pages; sayings and recipes in daily life utilize its quotations; even its language—the original language—becomes central in many of the serious religious practices, such as ritualized events of worshipping. A sort of sacred language emerges from the centrality of the sacred text to the religion, one that can constrain and influence vulgar speech as well as the thinking of its practitioners.

We acknowledge that beliefs, attitudes, and practices in some of the other world religions are different than in the Abrahamic traditions, which are often referred to as “the religions of the Book.” Although we do not consider these other religious traditions in detail here, it should be obvious that they also sometimes appeal to various sources—scriptures, priests, practices—as authoritative, even unquestionably so, in ways that are analogous to the tendencies that we have summarized here. We also acknowledge that there are huge ranges of beliefs and practices within Judaism, Christianity and Islam: liberal or revisionist practitioners are not the same as traditional or orthodox practitioners, and both are to be contrasted with fundamentalist adherents. It should be clear from this discussion that it is primarily the co-opting of the superstitious tendencies of humans—in particular, belief in magic and magical objects—that leads to “bibliolatry” and to other extreme forms of religious practice and religious authoritarianism.

In what follows we presuppose that there is no magic and no infallible, direct verbal self-revelation of God to humanity. The need of religion to serve God, we claim, is consistent with the central motif of this book, serving God through contributing (directly or indirectly) to the process of coming to understanding. Religious practices—practices that are oriented towards knowing God—ought not, we claim, be based on irrational beliefs and superstitions. In particular, notions of worship based on magically controlling God, on gaining boons through blind obedience, or on individual self-interest can play no role in this approach to religion. Appeals to magic, mystery, or infallible authority must be replaced in the future of religion with very different practices—practices of concern, contemplation, and commitment, among others. We discuss these reforms further in section 4.6.

(4.3) Re-conceiving Religious Institutions

Before one can really understand what religious institutions have been and may need to be in our context, we need to more fully understand the nature of institutions in general. Fortunately, the system presented in the preceding three parts provides a number of crucial resources for this task. In order to produce the needed account, it is necessary for us to revisit some of the distinctions we have previously drawn among selves and persons, as well as to indicate a couple of additional distinctions. This is a glossary of terms that the reader can reference when needed.

Recall, first, that:

1. A *cognitive agent* has

   (i) referential capacities (being aware),
   (ii) volitional/purposeful capacities (having a will, making choices in accord with goals or purposes).

2. A *self* is a constructed particular composed of a cognitive agent and a physical agent, where the former is ontologically dependent on the latter, and where the latter imitates the former.

We next repeat our two definitions of person:

> Definition 1: A *person* is a particular with three structured sets of capacities:
>
> (i) referential capacities (being aware, or being conscious),
> (ii) volitional/purposeful capacities (having a will, and/or making choices in accord with goals or purposes),

(iii) the capacity to love (being able to exercise the first two sets of capacities in accord with God's Will).

Definition 2: A *person* is a metaphysical particular with three structured sets of capacities:

(i) referential capacities (being aware, or being conscious),
(ii) volitional/purposeful capacities (having a will, and/or making choices in accord with goals or purposes),
(iii) the capacity to love (being able to exercise the first two sets of capacities in accord with God's Will).

When we speak of "persons" in what follows, we almost always mean the word in the sense of Definition 1 and not Definition 2.

Recall the following six corollaries:

1. Anything that is a person by Definition 2 is a person by Definition 1, but not the reverse. Selves can be persons by Definition 1, but because they are constructed particulars, they cannot be persons by Definition 2. Some cognitive agents are persons by Definition 2.

2. All persons are cognitive agents, since by definition they meet the two requirements for cognitive agency: they have referential capacities (they are aware) as well as volitional/purposeful capacities. But the only cognitive agents who are persons are those who have the capacity to love, that is, who exercise these capacities in accord with God's Will.

3. The vast majority of selves that have human bodies as their physical agents are persons by Definition 2; we call them

"human persons," or sometimes, when the intended meaning is clear, we use "person" to designate them.

4. By "human" we mean human selves or human persons.

5. By Definition 2, there are exactly three kinds of person: God, individual persons (for example, human persons), and institutional persons.

6. If a person is sufficiently good to engender a soul, we designate it by the term "Person," where "p" is capitalized.

What about institutions? *Institutional persons* and *institutional selves* differ from *individual persons* and *individual selves* in that the former have members that are either individual selves or individual persons, and the latter do not. *Meta-persons* or *Meta-Persons* are institutional persons that have at least some institutional selves or institutional persons among their members; *Meta-selves* are institutional selves that have at least some institutional selves or institutional persons among their members.

With these important clarifications in place, it now becomes possible to recognize what positive and negative roles religions have played in the past and what forms the religious institutions of the future must take if they are to be positive forces in the process of coming to understanding.

In their inherited form, the Abrahamic religions are the institutional products of a much earlier time. Their reliance on holy texts and other sacred objects to cement the authority of their representatives, and their tendency to treat the contents of their scriptures as the infallible words of God (even to the point of calling a specific text "the" Word of God), were necessary tools—perhaps the only tools then available—to forge religious institutions. Apart from the ties of family and tribe, and the threat of force utilized by various kinds of states, there were no other ways for organizations to solidify and sustain themselves during the time in which the Abrahamic religions first developed and then matured.

The contemporary situation is very different. Most people, if they try to name the one thing that makes our current age so different from the worlds of humans a hundred or five hundred years ago, will focus on the transformations due to science and scientific knowledge. There is no denying the profound ways that our world has changed because of science. But there has been, in addition, a deeper change in human society, one that in fact made science itself possible.

This change was the emergence of the many new kinds of social organizations that humans can now belong to, which go far beyond the traditional family, tribe, state and religious institutions that were associated with and supported these institutions. Such new social organizations started to emerge in Europe as feudalism ended. They first arose in the form of various professional guilds, along with the various political and social organizations that could play the needed functional roles required by the newly independent towns and cities. In the West in the centuries after the fall of Rome, examples of such organizations are hard to find. Apart from family, tribe, and state, the other kinds of organizations that existed were weakly united bands of humans with common interests. Such groups, although often significant and powerful—one thinks, for example, of the Praetorian Guard during a certain period in the Roman Empire—were nothing like the powerful, intricately structured and integrated nation-states, business corporations, unions, hospitals, universities, "think-tanks," etc. of our contemporary world.

Contemporary organizations differ in two crucial respects (among many others) from earlier, more primitive organizations. First, the humans that belong to contemporary organizations exercise a rich variety of quite different and specialized roles, corresponding to the many different tasks in which the organization itself is engaged. The tasks of any given organization reflect its practical aims, the ways that it expresses itself, and the ways that it interacts with individual humans outside of itself and with other organizations.

Second, today's organizations are composed not just of the humans that have the needed variety of specialized skill-sets, but also, increasingly, of a large number of non-human items such as machines, computers, and paperwork. In addition, property—buildings, material resources, etc.—is often owned by the organization but not by any individual human that belongs to that organization. In this strong sense, organizations have come to be composed of physical agents that extend widely beyond the humans that belong to them.

Correspondingly, contemporary humans are marked by their ability to adopt many different roles in many different organizations. Indeed, what has emerged is that organizations provide "jobs" to individual humans. These correspond to the various functional roles that an organization needs to satisfy—not entirely unlike the various functional roles that the organs of human bodies play for human beings. In taking a "job," a human being (a cognitive agent) submits its referential and volitional/purposeful capacities to that of the organization—at least during the time-cycle of the job. This structural intricacy of contemporary organizations goes far beyond the kinds of organizational structures that were available to humans five hundred or more years ago.

A loose conglomeration of humans—a hunting party, say—is not a self. (Recall that a self is a constructed particular composed of at least one cognitive agent and one physical agent, where the former is ontologically dependent on the latter, and where the latter imitates the former.) We can describe the physical basis of that conglomeration as the humans themselves and their accoutrements: clothing, weapons, and so on. The individuals in the hunting party may be slightly specialized: some flush out the animal, others track it, and others carry home the dead prey. Nevertheless, there are no grounds for describing the hunting party itself as differing in its knowledge from that of the individuals in the party; hence there is no cognitive agent for the physical agents to imitate. When an organization becomes intricate enough in its structure, when the roles of the humans that belong to it become so specialized that each human knows enough to execute its tasks but not enough to describe in detail (or even at all) what the organization as a whole is doing, and when enough of the knowledge of that organization occurs in nonhuman form, such as in instruments and computer software, only then do we have the emergence of an *institutional self*. For only then does a new cognitive agent emerge—one corresponding to the physical agent, the physical agency of the organization as a whole.

In describing the emergence of so many kinds of intricately structured and integrated organizations as a relatively new phenomenon, we do not want to give the impression that institutional *selves* are completely new. We do think that *large* institutional selves are quite new. We believe, however, that small institutional selves have existed for millennia—perhaps as long as humans themselves. We think, in particular, that certain *couples* of humans—*marriages*—and the families that such marriages usually produce are institutional selves. The two married individuals play specialized roles in the marriage; the marriage itself has social or legal powers that go beyond those of the individuals; and the marriage itself interacts with others and can be said to know things and have abilities that go beyond those of each individual alone. We discuss the significance of this important example further in section 4.5.

If institutional selves can emerge, then it is possible, at least in principle, for institutional *persons* to emerge. (Recall that a third condition, the capacity to love—to exercise its capacities in accord with God's Will—must be met for this to occur.) It is a subtle question whether, in fact, institutional persons have emerged in the contemporary setting. We believe that certain marriages are not merely institutional selves, but actual institutional persons.

In any event, the emergence of large institutions that possess intricate internal organizational structures, and which therefore produce highly integrated and specialized roles for the humans belonging to them, has dramatic implications for religion. What the new kinds of institutions suggest is that the old structures and hierarchies—the ones that originally constituted the Abrahamic religions—may no longer be necessary; they no longer appear natural and inevitable in our new context. Religious organizations can now take forms that were once unimaginable.

However one may ask: why are religious organizations needed at all in the contemporary setting? This is a crucial question, since many today are convinced that religious organizations are no longer necessary or helpful. Religious organizations are needed because many human persons cannot fulfill God's Will without belonging to an organization. Only in a religious organization can such persons fully express the love that they are capable of expressing. Concomitantly, God needs religious institutions that are *themselves* Persons. Only then will God be fully conscious of all that God is capable of being conscious of regarding certain times and places. In being conscious of the awareness of a Person, God is therefore conscious of the metaphysical realities and verities of which that Person is aware. Indeed, it is clear—today—that the awareness of metaphysical realities and verities had by institutions far exceeds the awareness of metaphysical realities and verities that any human person is capable of having.

Let us dwell on this point, since it is pivotal to the argument that follows. At one time, information and knowledge were only transmitted in oral traditions. To pass on the accumulated wisdom of a group to the next generation, an apprenticeship was required: younger individuals needed to learn directly from the elders of the tribe. Otherwise, the knowledge and wisdom of the tribe—embodied as it was only in the minds of those elders—would be lost. In the contemporary setting, however, information and knowledge are not to be found exclusively in individuals. They are to be found in institutional networks of humans coupled with books, computers, and the mechanized operations of various devices. Information and knowledge have moved beyond individuals and into larger institutional complexes within which those individual agents still function as essential components. The examples are too many to list. In our age, it would seem the choice is either to participate in the emerging institutions or to fail in our quest for greater knowledge and deeper understanding. (For this reason it is doubly ironic that individualism and anti-institutionalism have been so pronounced in the late modern period.)

Thus we claim that institutional Persons (assuming such Persons exist) can have unique kinds of understanding—kinds that are not available to individual Persons and that therefore can add importantly to God's knowledge, thereby better conforming to God's Will. Only a trans-generational institutional person, for example, can escape the limiting effects that the shortness of human persons' lives has on what those persons can know (even across an entire lifetime). Thus by human persons subsuming their activities, information, and knowledge to that of the institutional persons to which they belong, they can sometimes do far more to satisfy God's Will than they can on their own.

Consider the most visible example: the scientific information and knowledge that is developing at an ever-increasing pace in the contemporary setting. This is a crucial and significant part of the process of coming to understanding. But it is clear that such understanding is no longer located in any one person. Rather, this understanding, and the accumulating knowledge that accompanies it, now manifests itself in the awareness of a very large institution—something we call "the Institution of Science." The Institution of Science is appropriately described as aware of certain things and not others; it is also appropriately described as engaged in various studies and activities and not in others. The philosopher, Karl Popper, speaks aptly of the growth of knowledge as a third "world," distinct from the world of objects and the world of human subjects. Individual scientists acknowledge that the location of scientific information and knowledge is not in themselves but in the institution or culture of science. Scientific progress is a collective achievement scattered among technologies, research papers, and individuals. All this progress is unified enough that, should the research develop practical applications, it will be applied by the Institution of Science to improve or save the lives of individual persons. Thus it is more appropriate to speak of science and many of its resulting technologies as the achievements of an institutional self—that which we have called the "Institution of Science"—and not as the achievements of any individual human.

We have claimed that the Institution of Science is a self; this is, perhaps, also true of some of the other scientific institutions that belong to it. We claim, however, that neither the Institution of Science nor any other scientific institution is a person. This will be explained in section 4.5. There we shall argue that in fact none of the large institutional selves that have emerged in modern times are persons, although some once were.

This we admit: Science is the clearest model of institutional knowledge that currently exists. We do not deny scientific knowledge; we only deny that it is the *only* knowledge. Therefore, even if a scientific institution were a person, and even if it were a Person, it would still not know enough to represent the totality of God's purposes at this time. *For* *the entire study area of science is restricted to the quadrant of The Block Universe and does not encompass the other three quadrants of God's Attributes.*

What is needed are institutions that qualify as Persons (as we have defined the term) and that are aware of God and as many of God's Attributes (along with other realities, such as metaphysical particulars) as it is possible for such a Person to know at that time. Such institutional Persons will have to know the realities that the Institution of Science knows (viz., The Block Universe), but also other kinds of metaphysical realities as well.

One of our important aims in Part 4, and specifically in the present section, is to sketch some of the properties of the institutional Persons that our argument has just revealed to be needed, but which are missing at present. In order to accomplish this task, we must first recall and clarify some of the requirements that God's Will places on human persons. These requirements build on conclusions established in Part 3. But they are supplemented now by the (perhaps surprising) conclusion that we have just reached: at this time and place human persons seem to be obliged by God's Will—by the process of coming to understanding itself—to participate by reforming existing institutions of every kind, if and where possible, or by forming new sorts of institutional Persons to that end. At present, the only institutions focused on God are religious ones. Accordingly, we claim that they stand out as being most importantly in need of reform or ultimately if necessary, being superseded by new kinds of religious institutions—ones capable of achieving Personhood.

Let us start by noting that given the fallible nature of science and of metaphysics, the needed new (or reformed) religious institution(s) cannot focus solely on any infallible sacred text or scripture. For that matter, as we realized in our analysis in section 4.2, religious institution(s) should have little room for venerated sacred objects of any sort. Although sacred texts and objects might still play a role in these institutions, more central, one would suppose, would be books of a philosophical nature—for example, Plotinus's *Enneads* or Spinoza's *Ethics*, or by way of a contemporary example, Mark Johnston's *Saving God*. What is required, in other words, as a centerpiece for the conforming to God’s Will and for coming to understanding would be a series of books that contain the best current resources for coming to understand God’s Self-Revelation, and that convey the process and the methods of coming to understanding. Such a series of books would stand in place of a single sacred text and should contain (1) the most sophisticated currently available metaphysical descriptions of God, and of the other significant metaphysical realities that ontologically depend on God; (2) the best available metaphysical descriptions of persons, and more specifically, Persons; (3) summaries of what science has come to know about The Block Universe; (4) the best available descriptions of the various roles required of all persons—both institutional and human—who wish to facilitate God’s Will; and (5) the best available current descriptions of what an institutional Person that could enable God to have the fullest Self-Revelation possible.

The reader will have noticed that this very book seeks to satisfy most of the conditions just stated, with the exception of (3). However, we aspire to much less. The present work is intended only as a whetstone upon which to begin sharpening ideas about these matters, and to illustrate the sorts of books that are needed for coming to a deeper and more adequate understanding of God. In this sense, it is meant to be self-transcending, in that it allows for, and even encourages, further reflection that builds upon it and eventually renders it (or parts of it) obsolete.

The use of “current” in the formulation of the five conditions above is required because, as we have so often stressed, everything is open to revision. We can be wrong about anything that is affirmed here about God, about metaphysics, or about what must be done by persons for them to be Persons. As we have stressed before, this is something that is generally true of metaphysical doctrines; it is also true of conceptions of God. (The humility of recognizing one’s own fallibility, and the fallibility of one’s metaphysical ideas, should be seen as the first and primary philosophical virtue.) Moreover, selves and persons—both human and institutional—are always changing, and their circumstances are always changing as well. This means that what is claimed as appropriate for one time and place can cease to be appropriate at a later time and place. Therefore, even religious institutions must be ever-evolving institutions—changing according to new circumstances in whatever ways best enable it to conform itself to God's Will. (The theologians of the Protestant Reformation expressed this requirement when they urged that the church see itself as *semper reformans*, as always reforming.)

The goal for religious institutions is not just to be selves, but Persons. They should strive to be the best possible institutional Person at that given time and place.

What is demanded for an institutional self to be a person is always far greater than what is demanded of human selves. The reason is easy to see. A person has the capacity to conform its referential and volitional/purposeful capacities so that they are in accord with God's Will. But the more powerful a person is, and the greater the scope of that person's referential and volitional/purposeful capacities, the harder it is to succeed at this task. Institutional persons always have greater powers than any human person, except in those cases—increasingly rare in the contemporary setting—where one or more human persons entirely control an institution. Religious institutions can be no exception to this fact: their responsibilities will be great indeed, if only because said institution will have a great influence on the behavior of the selves and persons that belong to it, as well as on human society as a whole.

One requirement on the documents that will help to shape the awareness of religious institutions in the future—the documents that chronicle the means and results of the Self-Revelation of God—is that they supply an ethical classification of actions and persons. Within this classification, far more of the evaluative focus is directed toward institutional persons rather than human persons. As we have seen, institutional persons will have to play a much greater role in the process of coming to understanding than individual persons—as institutions of all sorts have in modern times. Another requirement on the documents stems from the contextual nature of when actions are in accord with God's Will. Whether or not a particular action is in accord with God's Will depends significantly on the specifics of the persons in question and the circumstances in which they find themselves. As a result, the ethical classification of actions and persons cannot take the form of one specific set of commandments that fits all persons, such as the Ten

Commandments in the Hebrew Bible. Rather, what is required to be a Person—either human or institutional—must be indicated in a far more nuanced way.

In describing certain entities that are part of the Self-Revelation of God as “documents,” we stress the fact that a wide variety of cultural products could be acceptable as well, at least insofar as they recognize the need for human selves to retain the various ornamental and psychological trappings by which they characterize their self-images. This is one of the more striking differences between the traditional Abrahamic religions and the needed religious institutions of the future: the latter must recognize and respect the contingent realities of the human selves of which it is composed. Indeed, no religious institution can succeed in becoming a person, let alone a Person, if it does not respect the differences among the persons that compose it. (The same has been true, of course, of successful institutional persons throughout human history.) This is something that was simply not true of the Abrahamic religions when they came into existence. In order for those ancient religious institutions to function fully as institutions, they had to force humans into certain standardized political and psychological patterns. The primary tool for this purpose was a rigid religious ideology and an authoritarian power hierarchy. As we have noted, such methods are no longer appropriate or effective in the present context.

It should be clear that our having thought our way to a new understanding of God and God’s needs in the course of this work requires concomitant transformations in many of our fundamental ethical and theological concepts. We now turn to a discussion of the relationship between two important notions that clearly illustrate this point: piety and morality.

(4.4) The Metaphysical Basis of Piety and Morality

One of the traditional functions of God in human discourse is to provide the basis for morality or the force of the moral "should." Non-cognitivists, such as A. J. Ayer, tell us there are no moral facts; an assertion that we should not sexually molest children is just the expression of a feeling we happen to have. Notoriously, it appears that some lack this feeling, and non-cognitivists have found it exceedingly difficult to explain why someone's lacking this feeling *should* strike us as horrifically wrong. Subjectivists go further and allow that moral facts exist; but they claim that these are only facts about our own tendencies to evaluate things positively and negatively. Bertrand Russell sought to refute this view when he quipped, "Whatever the objection to wanton cruelty is, it is *not* that I tend not to like it." Similar refutations apply to the popular "conventionalist" view of morality as a variety of systems of tacit and explicit agreement among rational agents, agreements that have survived because they coordinate human behavior in effective ways. The objection to wanton cruelty is *not* that it violates the conventions we have adopted to coordinate our behavior; it would remain wrong even if our conventions allowed it.

Could the basis of morality then be a set of purely natural efficient causes, so that moral obligations amount to nothing more than those behaviors that evolution has caused members of our species to prefer, presumably based on their tendency to increase biological fitness? Perhaps the first and most plausible account of human morality, understood as a purely natural, species-specific teleology, was proposed by Aristotle. Our final end, he reasoned, is *eudemonia*—happiness or flourishing. Unfortunately for Aristotle and for us, the psychological study of happiness has shown that we as a species do not seem to be designed by evolution to be particularly good at promoting our own happiness. The extent to which one is capable of happiness is largely an arbitrary matter of inbuilt temperament; changes of circumstance, studies show, have little or no effect on long-term happiness. Aristotle's naturalistic account of the basis of morality has thus been deeply undercut by recent discoveries in empirical psychology. The functions we have been endowed with by evolution do not seem directed towards the aim of making us—as individuals—happy.

Kant rejected Aristotle's eudemonistic ethic, taking the view that persons are the sole acceptable ends of moral action, in the sense that all morality derives from the requirement that persons are never to be treated merely as means to some other end. But why should persons have this special status? From the point of view of science, when it views the world simply as an arena of efficient causes, persons have no special significance. They are only conduits or aggregates by which certain ambient efficient causes produce effects. To be sure, they may also be sites of awareness and choice; but what is it about these particular features that confer a special status on persons? Even primitive organisms carry out the same functions. Kant offered this response to science: persons are (or are correlated with, or presuppose) noumenal selves or souls outside time, working out their concerns with "God, freedom, and immortality" in time. But then it seems natural to claim that the morality-determining value of persons actually derives from their capacity to take up a divinely ordained purpose.

If so, what *is* our divinely ordained purpose? We have educed a general answer to this question—one that applies to all persons—in Parts 2 and 3 of this book: it is (1) to see metaphysical reality as truly as possible (for any particular person at any particular time), and (2) to directly or indirectly facilitate the bringing about of souls. That is, our (collective) divinely ordained purpose is to facilitate God's Self-Knowledge. We have educed this result by reflecting on God, on God's Attributes, and on the particulars of some of those Attributes, among them cognitive agents and souls. As we tried to work these matters out in a metaphysically rigorous way, we found that the telos or aim of the eidos Intelligibility is the eidos Coming-to-Understanding (God's Mind); the aim of that eidos, in turn, is the eidos The Godhead; and the aim of the eidos The Godhead is the eidos Being. (See Diagram 5A: The Telic Trajectory of Being.)

It is natural to use the word *piety* to characterize the behavior of a person that is in accord with that person's divinely ordained purpose. How much a person's behavior is in accord with its divinely ordained purpose determines the rightness or wrongness, and thus the degree of goodness, of its behavior. A good person is one whose pattern of choices is pious—that is, sufficiently guided by its service to God. This general characterization leaves open, of course, just what is required of any particular person to be good—what the person's service should amount to in specific instances. We have already indicated, in a broad way, that service is a matter of being truly aware (as much as possible) of metaphysical realities and verities, and of bringing about other Persons who are truly aware (as much as possible) of metaphysical realities and verities. To endeavor to do this is to promote God's Will. But this is not to say much in detail about exactly which behaviors are pious—that is, exactly what a person must do to be a Person. That is something we shall have more to say about later in this section.

Contrary to the manipulative suggestions of Calvinism and the other theologies of predestination, persons are not inherently good or bad, damned or saved. Persons *become* good or bad depending on how effectively they have promoted God's Will, relative to their endowments and station in life. Only a person whose net contribution to this end has been sufficiently positive—that is, more positive than negative—contributes a soul to the matter of Coming-to-Understanding (God's Mind). Those who are bad, on balance, are simply not part of God's Consciousness.

One objection that can be raised at this point (and, in fact, *was* raised by Alister McGrath in response to an earlier version of this work) is that someone who takes obeying God's Will to demarcate true piety, one who makes *it* the arbiter of what is right and wrong, runs afoul of Plato's argument in the *Euthyphro*. In that dialogue, Euthyphro—a man known for claiming to be a religious expert—is challenged by Socrates to explain the nature of piety. Euthyphro answers that acts are pious just when they are loved by the gods. Socrates' reply, which is widely supposed to be crushing, is that on this view the gods love certain acts *because those acts are pious*; this feature of the acts—their being pious—allegedly *explains why* the gods love them. But, he continues, it is no explanation merely to say that the gods love certain acts because they love them. So an act's being pious cannot just amount to its being loved by the gods. Piety must be characterized in a different way, specifically, in a way that justifies or makes sense of the gods' loving it.

Analogously then, the objection continues, being pious cannot *just* amount to obeying God's Will, for that would mean that God just wills things because God wills them, which is no explanation. Instead, being pious, it is claimed, must be independently characterized; only then can it illuminate *why* obeying God's Will is pious. In particular, it must be shown that (and it must be shown why) what God wills is good. It cannot be *made good* solely by God's willing it.

However, this objection is not persuasive. Because of the way that language works, one can always ask of the things we call "good" or "pious" (and indeed of any such normative term), "Is that really good?" or "Is that really pious?" At first glance, such questions will always seem to be significant ones that deserve an answer. This is the way that the language game of philosophy, and presumably other linguistic games as well, are usually played. Philosophers play them such that iterated questions are taken to be meaningful, and the questioner assumes that they always can (and presumably should) ask for a deeper reason or meaning. Linguistic practice allows one to ask, of any particular description of the good, "but *is* that kind of thing good?" The mere asking of this question gives the impression that what is needed is a characterization of "good" that is independent of, or transcends, all metaphysical definitions.

But in fact iteration does *not* always take us further. Sometimes one must say, with Wittgenstein, "Here my spade is turned"—here I can go no further. McGrath's objection does not reveal a problem with the appeal to God's Will as ultimate; it reveals an intrinsic problem with the assumption that one can always iterate questions and ask for reasons for each definition. Some stipulations represent not definitions but axioms, natural resting points in the quest for metaphysical understanding.

Our description of piety in terms of God's Will, however, is not a *definition* of the word "piety." It is a metaphysical discovery about what piety in fact is. Concomitantly, it is a metaphysical discovery about the Good—not the offering of a definition of the word "good"—that to be good is to do as God wills. Thus, when we say, as we do, that what God wills is good, we are expressing a metaphysical fact. The reason that it may not at first appear to be a metaphysical fact is that the meaning of our word "good" disallows any simple definitional characterization of the Good. This is a problem with the word "good," and not a problem with the theory of the Good that we have developed. Therefore, the objection does not undercut the metaphysical result we have established *pace* Socrates that something *is* good ultimately because (and only because) God wills it. If our word "good" were used in a metaphysically adequate way, we would understand it as meaning, by definition, what God wills—more strongly, as meaning *whatever* God wills.

Plato's *Euthyphro* raises another issue we should discuss. In that dialogue, Plato has Socrates demolish each of Euthyphro's attempts to define piety, and he ultimately suggests a definition of his own, namely that piety is a species of the genus of *the just or the right (justice).* In the introduction to his translation of Plato's *Republic*, Robin Waterfield sheds important light on the topic of justice for twentieth-century readers of English translations of Plato and Aristotle:

> In this translation, *Republic* is about morality—what it is and how it fulfills one's life as a human being. Some readers, however, may have encountered translations which make it a treatise on 'justice'. But Aristotle says (*Nicomachean Ethics* 1129b – 1130a) that *dikaiosunē* — the Greek word involved—refers to something which encompasses all the various virtues and is almost synonymous with 'virtue' in general; my own experience of the relevant Greek words confirms that Aristotle is not indulging in special pleading to make some philosophical point. To most people, 'justice' means (roughly) 'acting fairly and impartially towards others': this is a part, but not the whole of *dikaiosunē.* There were times when the translation 'justice' would have sat better in the text, but I found it preferable to use a single equivalent throughout, so as not to mislead a Greekless reader.

The clear suggestion, in Aristotle and Plato, is that piety *is a part of* "the right" (right thinking and behaving), and hence of morality more generally—a unity, an eidos, which they in turn take to amount to a kind of knowledge. Though we agree that piety is both an eidos and a kind of knowledge, we disagree about the relationship between it and morality. We claim the opposite is true: *morality is a part of piety*. This is because, unlike either Plato or Aristotle, we have argued that it is more metaphysically adequate to characterize right behavior of any sort as behavior that is in accord with God's Will. The natural word for *this* is "piety," and the result is that piety is the most general characterization of the good. It is a metaphysical discovery, therefore, that "goodness" is coextensive with "piety," and we affirm this conclusion on the strength of a persuasive metaphysical argument. It follows as a consequence of this conclusion that morality, as it is ordinarily understood, is a subspecies of piety.

Let us be more explicit about this result by offering two metaphysical characterizations, one of "pious choice" and the other of "moral choice":

> *Pious choices* are those choices that are made in accord with God's Will.
>
> *Moral choices* are those pious choices that are specifically concerned with interactions among human beings.

Notice that we have characterized piety and morality in terms of the choices that a person makes. Piety and morality should not be understood as properties that a person possesses, except insofar as they require that a person engage in pious or moral acts (specifically, choices). Notice, also, that because pious choices are made in accord with God's Will, they are choices that enable or facilitate God's Self-Understanding. Moral choices, although in accord with this Self-Understanding, are directed towards other humans. Finally, we should observe that although piety and the goodness of persons are related, they are quite different things. We understand "goodness" to be truly predicated of *persons* by virtue of the pious actions that *they* perform. That is, goodness is not an adjective we intend to apply to choices or actions (except when speaking informally and imprecisely); so too, as we have just mentioned, “pious” is not a term we intend to apply to persons, except derivatively. By describing a person as “pious” we mean only that all or a sufficient proportion of their *actions* are pious acts.

Moral theories have been almost exclusively concerned with moral choices. Because they do not properly situate morality within piety, there is a tendency among moral theorists—ancient and modern—to attempt to ground morality directly in the properties of persons. This attempt utilizes, as evidence for moral theories, our moral intuitions about good and evil. The resulting “conventional morality”—the basis from which nearly all moral theorizing starts—is a hodge-podge of “virtues” and “vices” such as the following:

Virtues		Vices
Love	Temperance	Hatred
Wisdom	Non-violence	Ignorance
Sincerity	Patience	Idolatry
Frugality	Humility	Arrogance
Fidelity	Justice	Injustice
Obedience	Forgiveness	Disobedience
Tolerance	Moderation	Intolerance
Faith	Prudence	Immoderation
Rationality	Fortitude	Irrationality
Industry	Truthfulness	Laziness
Charity	Chastity	Miserliness
Resolve	Selflessness	Selfishness
Compassion	Orderliness	Dishonesty
Cleanliness	Celibacy	Debauchery
Optimism	Cheerfulness	Cowardice
Tranquility	Civility	Rage

Two things should strike the reader about these two lists. First, there do seem to be patterns here. Vices and virtues often complement one another: ignorance *versus* wisdom, fortitude *versus* cowardice. Furthermore, many virtues and vices seem to match each other in the way that Aristotle indicated that they should: the virtues are moderate behaviors and the vices are extremes along the same scale. This model for organizing virtues and vices, however, does not easily accommodate all cases. For example, can there really be too much wisdom? Is a certain amount of injustice nevertheless a virtue? Other attempts to find a principled way of organizing these lists face similar problems. Although many persons have fairly strong intuitions about right and wrong, this alone does not provide principles from which we might educe the basis for our moral intuitions about virtues and vices and, more importantly, give reason for why such moral intuitions should even be trusted.

The second thing that should strike the reader about the lists that one typically encounters is that it is not true that all readers at all times will agree with the location of the various virtues and vices on the list, or with a given author's claims about the relative importance of particular items. In Medieval Europe, for example, chastity was certainly seen as a cardinal virtue—at least for women—as it is still in many contemporary cultures. But it is hardly taken seriously as a crucial virtue in the contemporary West; if anything, chaste individuals are, in our day, frequently considered to be psychologically troubled. Similarly, cowardice is far more significant in warrior cultures than in a culture that abhors violence.

Ethical subjectivism and moral relativism are natural responses to the realization that cultures differ radically in their moral intuitions concerning what should count as virtues and vices and which are the most important among them. "Projectivist" meta-ethical theories, famously advanced by philosophers such as David Hume and Ludwig Feuerbach, assert that right and wrong are the projections of our desires and our subjective emotional responses onto the universe. The closely related "conventionalist" meta-ethical theories see morality as a variety of systems of tacit or explicit agreement among rational agents that have survived because they coordinate human behavior in effective ways. A point in favor of both views is that they explain the apparent variability in our moral attitudes by the fact that conventions and emotional responses change depending on the cultural setting.

We object, however, to over-extending this line of thought—a widespread tendency that we diagnose as arising from a mistaken starting point. Ordinary moral intuitions, and the ordinary conventional morality that is constructed based upon them, have their source not only in the recognition of moral facts, but also in the diverse (indeed, widely discrepant) prejudices of individuals. Such prejudices can be shared by large groups of people who share a culture, and who consequently stamp their morality with those prejudices. There is no doubt that a contemporary of Aristotle would regard it as a virtue for a slave to obey his master; few contemporary Westerners would share that attitude. Once the role of bias in human moral intuitions is taken into account, we suggest, the variability in moral intuitions across cultures is sufficiently explained. By contrast, when human persons are focused on what they *should be* focused on while attempting to understand right and wrong, there will be no variations in their judgments.

One lesson should be clear. It is not adequate to begin a study of morality merely by listing purported virtues and vices. The only sufficiently rigorous procedure is to first ground morality in metaphysics. Only then can one see clearly enough the status of our various moral intuitions about vices and virtues, where these intuitions are merely conventional, and where they are of enduring value. Only then can one discern which should be kept and which should be discarded.

There is another important point to be drawn from considering the list of virtues and vices given above. Notice that all of them are concerned with the interactions of human persons with one another. If our argument to this point is correct, however, such lists cannot suffice for a full account of moral obligation because the scope of our obligations extends beyond the interactions of humans with one another. The behavior of humans towards one another is moral behavior *only when* it is pious behavior. Pious behavior, however, is behavior that is appropriately oriented towards God. There is no way, therefore, to directly understand the full extent of our moral obligations until one is clear about what is pious and what is not.

Let us start, accordingly, by considering the relationship between a human person and God, and then seeing what follows about interpersonal morality, that is, the appropriate behaviors of human persons towards one another.

A useful tool for guiding this inquiry is an important requirement on all normative thinking, which can be given its briefest formulation in the phrase *ought presupposes is*. Any requirements on a human person's having an appropriately pious relationship with God must take account of what a human person is, at this time and at this place. That is to say, any such account has to include relevant biological facts about human bodies, various cultural facts about groups of humans, and specific facts about the abilities and capacities of each individual. These are the elements and requirements that are constitutive of piety.

Recall the important fact that humans naturally bond into groups, such as marriages, families, tribes, organizations, countries, and so on. A key part of being functional human persons, therefore, is that one is able to perform in the context of such groups. Many of the virtues and vices listed above can be justified by the mere fact that if human persons are to function successfully within groups, they need to behave towards one another in ways that allow the group to operate as a unit—as a self—as well as allow everyone to function successfully within the group. Virtues such as "justice," "humility," "patience," and vices such as "arrogance," "hatred," and "laziness," often express solutions and problems (respectively) either in the successful functioning of a group as a self or in the successful functioning of individuals within that group.

The key word here, however, is "often." It is hard to find any item in the typical lists—either among the virtues or among the vices—that must *always* be exemplified by all individuals in all groups at all times. In point of fact, depending on the context of the group and the abilities of the human beings in that group, the exemplification of a particular "virtue" may actually harm the group (or individuals within that group), and the exemplification of a particular "vice" may help the group (or individuals within it).

We have been engaged in characterizing much of morality as arising from the "is" part of the "ought presupposes is" equation. Given the biological, cultural, and social features of human selves, they must belong to groups in order to function. Belonging to such groups, in turn, requires many of the standard virtues and avoidance of many of the standard vices of conventional morality.

We should now take account of the other end of this equation, the “ought” part. Recall again the conclusion of our earlier inquiry: moral behavior must be pious behavior; what we do must be in accord with God’s Will. This requirement indicates, in another way, that lists of virtues and vices can only reflect at best “rules of thumb”: characterizations of moral behavior that have—and must have—many exceptions. Because these rules-of-thumb characterizations of virtues and vices are true of most human persons most of the time, it is difficult to think of ways in which facilitating God’s Will would fail to be in accord with the obligations of conventional morality. To function successfully among other human beings, it is certainly *generally* the case that one should have a family, honor one’s obligations to friends, be honest in business dealings, exhibit temperance and restraint in interactions with others, and so on. Indeed, within the confines of serving God, one’s role in one’s community should usually be a role in accord with conventional morality.

One mistake of conventional morality, however, is the presumption that “normal” morality—e.g. Aristotle’s doctrine of the mean (moderation in all behavior) and the conventional list of other appropriate behaviors towards others—implies ethical rules that are binding upon *all* human persons in all circumstances and at all times. Recognizing that morality is a subspecies of piety, that the primary obligation of all human persons is to facilitate God’s aim of Self-Understanding, implies however that there may always be exceptional circumstances, circumstances that conventional morality will not be able to recognize or predict. Pious behavior is not a set of rules, apprehended by reason, which applies at all times and in all places and to all persons. Consequently, at different times and places different kinds of behavior—even kinds of behavior that may violate conventional morality—may be exactly what is required by God’s Will.

To take one dramatic historical example, Isaac Newton had a number of unusual intellectual and temperamental character traits. Perhaps a person with this mix of characteristics had never before existed. Newton’s blend of a capacity for single-minded intellectual obsessions (in mathematics, physics, alchemy, theology, etc.), and the great intelligence and creativity with which he pursued those obsessions, facilitated advances in physics that perhaps would have failed to materialize without him. Despite the personal unhappiness that he caused himself and others—characteristics that he exhibited by being quite immoral in the conventional sense—he enabled the creation of scientific institutions that perhaps also would not have been possible without him. The vast number of good souls brought about and enhanced by his work over time have probably more than offset his counterproductive effects on selves with whom he personally interacted. Thus, on the divine scale of goodness, Newton's behavior is probably quite pious, even though it is simultaneously also immoral (at least according to the dictates of conventional morality). This kind of case, however, is rare. The vast majority of persons can (more or less) guarantee the piousness of their behavior towards others if they ensure that it fits within the dictates of conventional morality.

We have stressed earlier that moral behavior, as it is conventionally understood, is concerned primarily with the right behavior of individuals towards one another. We have also shown that human functionality is optimal only when humans are functioning within groups. That there is so little concern with the role of individuals in institutions, therefore, is a profound error in the perspective of conventional morality—one that, in the long run, impedes pious behavior. As our argument in 4.3 showed, an individual person's relations with institutions play a large role in piety. We now turn to this topic.

(4.5) Institutional Selves, Institutional Persons, and the Future of Religion

Recall from section 3.6 that our characterization of love centers on commitment and not on the emotions that usually accompany that commitment in the case of human persons. Love as a bond—as a commitment—is in turn necessary for the joining of many persons into an institution that succeeds in being a self or a person. It is almost always required that human persons join together into institutional selves or persons. This resolves an important puzzle that arises when one inquires into how an individual is to best satisfy God's Will.

Recall that God's Will involves two general requirements. The first is that a person must try to be aware of metaphysical realities and verities as much as possible. For it is by this means, if such a person engenders a soul, that God also becomes conscious of those metaphysical realities and verities. Second, is the requirement that a person facilitate the engendering of souls. By this we do not mean merely that the individual person is to engender a soul by being so good that God becomes conscious of that person; we also mean—and sometimes primarily mean—that such a person is to facilitate *others* becoming Persons. The difficulty is that these two demands often pull in different directions. For example, we can imagine someone wondering whether to spend every moment studying or instead to spend every moment teaching others. The resolution of this conundrum is contextual; there is no single answer when the dilemma is posed in the abstract. An answer is only available by means of an examination of a particular person, its skill-set, and its abilities, in the context of an environment that contains other selves and persons. Only when one examines all of these things together does it become clear what any one person should do to best facilitate God's Will.

For almost all human persons who are part of the contemporary Western World, something more specific can be said about how they should serve God. *The vast majority of persons can best satisfy God's Will by belonging to an institution and by fulfilling specialized functions within that institution*. Only in the context of its institutional role or roles will it become clear what each person must do to best enable that institution to serve God's Will. In particular, especially in the contemporary world, it is not required that human persons themselves attempt the hopeless task of trying to be aware of as many metaphysical realities and verities as they can in order to directly contribute to God's Consciousness. Clearly, awareness of an enormous number of metaphysical realities and verities and of how they bear on each other is a job best carried out by institutional persons. Thus, what is usually required of human persons by God's Will is merely that they be aware of as many metaphysical realities and verities as is relevant for them to function successfully in their roles within institutional persons, or in their roles within institutions that in turn belong to institutional persons.

It is possible to be even more explicit about this last point. Often humans function best not directly within institutions that are themselves persons, but rather within institutions that belong to institutional persons. It may be appropriate, for example, for a human person to fully function as a clerk within the accounting department of a company—even though that department is not itself a person, and perhaps not even a self. However, because that department belongs to a company that, let us suppose, is a self or a person, the individual in the accounting department is indirectly functioning within an institutional self or person. Institutional selves and persons are often—although not always—meta-institutions; and it may be that the appropriate role of a human in an institutional self or person is very indirect, mediated through a number of intervening institutions that belong to that institutional self or person.

There is one case, however, where human persons can belong directly to an institution that is itself a person, and even a Person. This is when that person joins another in the institution of a *marriage*. Notice that we are using the phrase "a marriage" to describe a particular institution, one to which, in our culture, only two individuals belong. In characterizing a marriage this way, we do not mean to imply that the two individuals have to be legally joined in matrimony. Although this is certainly common in Western societies, we have in mind the commitment of any two individuals who are bound to each other in a way that involves romantic emotions that they experience towards one another but that also goes beyond these emotions.

We consider a marriage, in this sense, to be a model in miniature for how human beings join together in institutions. Because only two individuals are involved in marriage as we know it, and because the emotions of the physical agents involved are primarily directly towards each other and not towards the institutional self that the two individuals are actually creating, there is a tendency not to recognize marriages as further distinct entities above and beyond the individuals involved.

A second reason that the marriage of two people as a distinct third entity is largely unrecognized is that a large number of marriages (if not most) fail to be institutional selves. Rather, they remain at best two individuals bound together by romantic emotions, by other emotions, by convenience or mutual benefit, or by laws or conventions—without ever achieving the stable integration of compatible and specialized behaviors that is so crucial to the emergence of a new institutional entity. When a marriage is "successful," however, the emergence of a third self (an institutional one) is exactly what happens: the two individuals are enhanced by, and grow through, the unique institution to which they belong through the marriage, and their behaviors complement each other in ways that would be impossible without this bond. The institutional self that emerges as a result—we might call it the *marriage-self*—can then engage in activities that go beyond what the married individuals themselves would otherwise be capable of. Only then is it the marriage-self, and not the married individuals, that raises the children; only then is it the marriage-self, and not the married individuals, who takes care of hearth and home; and finally, indeed frequently, it is the marriage-self that both knows more than the individuals that are in the marriage and that is capable of what the individuals alone are not.

When a marriage is successful, that marriage is a self that is aware of things that may differ from the awareness of each individual; certainly it makes decisions that are not the decisions, necessarily, of either individual. Such decisions are usually called "compromises" by outsiders, but in fact something more complex is at work. It is often the case that what the marriage-self does is quite different from the sum of the decisions that the individuals would have made on their own, if—for example—they had taken turns making decisions, or if they had otherwise pooled their resources without joining themselves more or less seamlessly into an institutional self.

It is important to realize that many marriage-selves submerge themselves into yet larger institutional-selves, namely *family-selves*. (Some readers will recognize here overtones of Aristotle's position in the early books of the *Politics* and of Hegel's position in, for example, the *Phenomenology of Spirit*.) Indeed, one purpose of many marriages is to create new human beings and to develop new persons—a crucial expression of piety that we began to explore above. These human beings do not only belong to the marriage, but also to a new institutional entity, a family.

If a marriage-self (or a family-self) operates sufficiently in accord with God's Will, then it will be an institutional Person. It is important to realize that the requirements for a marriage-self to succeed in being a person (let alone a Person) are usually greater than the requirements for the individual human beings within the marriage to become persons. This is because a marriage has more power; it influences not only the human beings that are married, but also the family itself. Because it has more power, it has more responsibility. That means that its ability to conform its referential and volitional/purposeful capacities to God's Will must have a greater reach than the corresponding abilities of the individuals within it.

The same point—that differences in capacities affect whether or not a self is a person or not—can be made about human beings with differing referential and volitional/purposeful capacities. Suppose that one human being A is capable of being much more aware than another human being B; suppose A is smarter than B, or more sensitive to its environment than B. Suppose also that A's ability to influence its environment is greater than B's ability. In other words, suppose that A has more power in the world than B has. In such a case, the criterion for being a person—for being capable of conforming one's referential and volitional/purposeful capacities to God's Will—is harder to satisfy in A's case than in B's case. B may simply have to do much less to bring its referential and volitional/purposeful capacities into accord with God's Will. Indeed, it could be that, if A had B's referential and volitional/purposeful capacities instead of its own more powerful ones, A *would be* capable of conforming its own referential and volitional/purposeful capacities to God's Will. It is because A has greater capacities to rein in that A is incapable of being a person.

It is easy to conceive of specific examples. Imagine that A has *some* capability to avoid temptations. As long as A is relatively poor, and lives in a relatively restricted environment, A can easily discipline itself. But imagine that A becomes rich, powerful, or famous and as a result begins to face many more temptations than before (one naturally thinks here of movie stars and sports celebrities). Under these new circumstances, A might be incapable of functioning any longer as a person. Generally speaking, institutional selves have greater referential and volitional/purposeful capacities than human selves. For one thing, institutional selves often have the capacity to influence and control the humans that fall under their ken. As a result, it is much harder for an institutional self to be a person than it is for most human selves.

Human persons often fail to be Persons because they under-reach their potential. They are capable of much more love than they exhibit, that is, there is usually more they can do in their interactions with others or in the expression of their functions within institutions than they manage to accomplish during their lives. We can describe most human persons as usually committing *sins of omission*. Some human persons, of course, over-reach. They find themselves in positions of great power, and they fail to use that power appropriately. They do much more damage because their behavior is more in defiance of God's Will than it is in accord with it. They commit *sins of commission*. Most human persons fail to be Persons because of what they fail to do rather than what they succeed in doing.

If a human self is incapable of reining in its referential and volitional/purposeful capacities so that it satisfies God's Will, that self will not only fail to be a Person, it can also fail to be a person at all. Because most human beings do not do as much as they could, we suggest that the most common deficit among human beings is not the failure to be a person, but the failure to be a Person. Note that when we talk about the possibility of this failure, we are not introducing an elitist ethic, an ethics of perfectionism or what is called, in the technical literature, an ethics of supererogation. It is not only those individuals who are perfect who qualify as Persons on this view. As we saw in section 4.4, a good person is one whose *pattern of choices* is pious—that is, sufficiently guided by its service to God. More precisely, we argued in section 3.3 that a Person is present wherever, on balance, a person has produced more good than bad. There we maintained that "an infinitesimal iota, on balance, to the good with regard to serving God's Will" is sufficient for the presence of a Person, whereas if there is an iota less on balance, no Person is present.

It may be that most common among individual persons are *sins of omission,* but the opposite is the case, we suggest, with most institutional selves. By virtue of being *institutional*-selves, such selves often have more power than they have the capacity to handle. As a result they almost invariably exercise their power in ways that are incompatible with God's Will. Their sins, therefore, are sins of commission. We claim that this is true of the Abrahamic religions, as well as the various institutional selves that belong to these meta-selves. We claim that something similar is also true of the *Institution of Science* meta-self. We further claim that the Institution of Science itself has never been a person; the Abrahamic religions, however, once were persons, although in our view they no longer are persons. Let us take up the Abrahamic religions first. In the contemporary context, it is all too easy to find fault with them. Nevertheless, one can justifiably make the following charges.

First, over the centuries these religions have been rife with self-deception and the deliberate weakening of the critical rational impulse. Their dogmatically propagated creeds were often claimed to have been derived directly from the words of God and God's chosen prophets. As a result, even today their creeds are not acknowledged as fallible, as *attempts* at understanding God's Will, that, like all human efforts, these attempts are flawed and open to improvement. Instead, each religion represents its own scriptures and creeds as the fixed expression of revealed eternal truth, even when it is obvious that these documents contain leftovers from ancient Near-Eastern magic and cosmology. When reason is denigrated, irrational faith comes to be treated as a cardinal virtue. In this way the institutional denial of fallibilism inevitably makes the religious institution *a school for irrationality.*

Creedal dogmatism, infallibilism, and contempt for reason-based inquiry thus go hand in hand.

Second, in order to shore up the dogmatic and superstitious elements of these religions, certain institutional roles have been invested with near-to-absolute authority. When priests, rabbis, and mullahs are identified as special servants and infallible spokespersons for God, they are placed on a superhuman pedestal and defined as standing above reproach. This kind of authority is deeply corrupting, precisely because it gives the occupants of the relevant institutional roles a sacred status independent of the value of their actual achievements in the realm of piety.

Third, when an infallibilist creedal dogmatism is allowed to pervade the Abrahamic religions, it attracts certain kinds of authoritarian personalities to the central institutional roles in these religions, people who prefer things be fixed and in place. Such persons invariably ossify the institutional structures of the religion; perhaps worst of all, they ossify its forms of worship. When this occurs, the religious establishment engages in an unwitting process of selective recruitment of the least flexible and the least imaginative.

Fourth, the unwitting selection of the authoritarian, the inflexible, and the unimaginative by religious institutions makes them liable to be overtaken by bigotry and defensive violence. When two such ill-selected "tribes" confront each other, they do so not as fellow seekers of the truth who happen to be approaching it from different historical and cultural traditions, but in the context of a struggle between true believers and infidels. To authoritarian, inflexible, and unimaginative personalities, the very existence of an alternative way is a profoundly threatening insult. This explains the characteristic association of the Abrahamic religions with sectarian violence—crusades, inquisitions, pogroms, jihad, and the like.

Nevertheless, it is our view that, despite these five negative tendencies, *during the times in which each of the Abrahamic religions was created and during which they matured*, there was no possibility of other institutional persons. The Abrahamic religions were superior to the institutions of the Roman Empire, and superior to the later feudal institutions that succeeded the Roman Empire in the West. This is because, despite the abovementioned flaws, the early Abrahamic religions focused human beings on God, and were concerned with right behavior. Furthermore, there was no better possibility for learning verities than within the various mosques, churches, and temples, or within the theocracies that, from time to time, grew out of these religions. Life outside of these religious institutional contexts was too harsh to be conducive to coming to understanding.

Despite the evident crudeness of these great religions, we suggest that nothing better could have been achieved by way of institutional personhood in those times. Therefore, the Abrahamic religious institutions were more than selves; for a time, each religion was among the very best institutional persons that it could have been. For a time, therefore, each was a *Person*. We are able to criticize the Abrahamic religions as we have done above only because the possibilities for institutional Persons have changed drastically. The recent emergence of scientific institutions has opened the way for the possibility of institutional Persons of great power that are nevertheless flexible and fallibilist about their ideologies.

It may seem surprising that an entity can be a person or even a Person at one time and place and then cease to be so at a later place and time. This is no surprise, however, if one keeps in mind that institutional selves can change greatly in their capacities over time. Such changes can easily lead to their losing control of their own capacities, and thus losing the ability to stay within the dictates of God’s Will. External circumstances also change; and, as we have seen, changes in such circumstances can change the demands for personhood—raising them so much, for example, that an institution that met them at one time can fail to meet them at a later time without changing intrinsically in any significant way.

This is precisely what happened to the Abrahamic religions in Western Europe, starting at about the time of the Renaissance. At that time, human persons and nascent institutions began to arise that, and they better facilitated an understanding of God, God’s Attributes, and metaphysical particulars. It is no surprise, therefore, that modern philosophy—with its simultaneous focus on God and on science—developed outside of the context of the Abrahamic religious institutions (even though it remained far more deeply in dialogue with their theologies than is often acknowledged). In addition, it is no surprise that some of this new science and philosophy had to develop in the face of strong opposition from the Abrahamic religions. By and large, the religious institutions became victims of their own ideological inertia. Instead of changing what they were aware of and seeking to incorporate new knowledge and methods of coming to understanding, they chose to blind themselves to the new scientific verities that were being discovered by others, and even began to fight against them.

Certain beliefs in particular—*ideologies*—that were held by the Abrahamic institutional selves were primary sources of this inertia. These beliefs had served them well in an earlier time, but now ceased to do so. Therefore, in the post-Renaissance world the Abrahamic religions ceased to be Persons. They even ceased to be persons: they ceased to have the capacity to serve God's Will because of the ideologies of the institutions themselves.

While it is not inconceivable that the Abrahamic religions could again be persons, and even Persons, it would require changes in those religious institutions that seem (at least to many observers) highly unlikely at present. It would require, in particular, a genuine openness to science on the one hand, and an admission of fallibility on their part. Given the institutional inertia that we have described, such shifts in the ideology of any of the Abrahamic religions do not seem likely.

As the Abrahamic religions ceased to be persons, did the mantel of personhood in turn fall upon the scientific institutions? Perhaps some of the smaller scientific institutions have succeeded in being persons. But it is our contention that the emerging meta-institutional self, the Institution of Science, never became a person. The reason is that, almost from the very beginning, the Institution of Science spurned certain notions that are crucial to the understanding of God—in particular, teleological ones. The Institution of Science made it a centerpiece of its own methodology that only efficient causation is to be taken seriously.

By itself, this is no sin. Selves that are specialized in what they do, and even in what they think, are not by virtue of that fact alone prevented from being persons. If the Institution of Science—as an institutional self—restricts its knowledge only to efficient causation, there is nothing in that practice that prevents it from being a person, or even from coming to be a Person. Instead, what prevents the Institution of Science from being a person is the ideological view that in fact *there is nothing more to knowledge than knowledge of efficient causation*. Following standard usage, we call *Scientism* the view that scientific knowledge is the only knowledge that exists. It is the acceptance of Scientism by the Institution of Science that prevents the latter from becoming a person.

Let us next make a distinction between methodological naturalism and scientism:

> *Methodological Naturalism*: Scientists should always and everywhere seek to find efficient causal explanations of phenomena in terms of natural entities and their properties.
>
> *Scientism*: All that there is in the world are the items and properties that would be described in a complete fundamental science, plus those items and properties that can be reduced to the items and properties that would be described in such a science. All that can pass as knowledge are explanations given in terms of the most fundamental natural entities (presumably those of microphysics), together with the natural laws that determine their behavior.

Methodological naturalism is a basic norm for scientists to follow; it is partly definitive of science. *Scientism* goes further and claims that the network of natural causes and effects, as well as the natural laws that describe them, constitute all of reality.

Because Scientism leaves out so much of metaphysical reality (including God), it fails to be a person: it willfully influences other persons not to pursue certain classes of metaphysical truths and not to be aware of important verities. Furthermore, its scientistic attitudes can prevent its own incorporation into a meta-institution—a meta-Person—

that can correctly see the relationship between the important study of The Block Universe quadrant and the study of the rest of the Attributes of God. By adopting Scientism as its ideology, the Institution of Science therefore both prevents itself from being a person and prevents itself from belonging to an appropriately religious meta-Person.

And lastly, what about the newer, more secular—and, as of yet, less successful—quasi-religious institutions such as the Ethical and Humanist Culture Societies or the Unitarian Universalist Association, are they more likely to achieve personhood? Or success? They seem to be better candidates given the system explicated herein. It will be useful to briefly consider one of them by way of example—the Unitarian Universalist Association. Instead of sacred books, seven (fundamental) principles are given as that which their "congregations" are required to "affirm and promote":

1. The inherent worth and dignity of every person;
2. Justice, equity and compassion in human relations;
3. Acceptance of one another and encouragement to spiritual growth in our congregations;
4. The right of conscience and the use of the democratic process within our congregations and in society at large;
5. The goal of world community with peace, liberty, and justice for all;
6. Respect for the interdependent web of all existence of which we are a part.
7. A free and responsible search for truth and meaning;

Except for the intentionally nebulous word "spirituality" in the third, the first three principles, as listed (our order, not theirs), are more or less in conformance with both the beliefs of the Abrahamic religions and our educed notion of serving God's Will. With regard to the fourth, notwithstanding its context-dependent political merits, the Abrahamic religions and our ideas about serving God's Will are more or less indifferent to the merits of democratic process, as such, and both implicitly deny that democratic process, as such, inherently serves God's Will.

The fifth principle and the prior four are each plainly a principle of morality, not a principle of piety. As such, they are especially conditional and context dependent. They are not principles of religious practice. They can never achieve that level of force that religious practice achieves. They are substitutes for religious principles revealed to us by God. Despite the inclusion of some ritual and certain other "religious" trappings in its "services", the Unitarian Universalist "Church" clearly intends that these principles be just that—substitutes for religious principles by which we serve God's Will. Their elevation of certain agreed upon moral values to the rank of being fundamental to their "religious institution" is but to substitute principles of morality for principles of piety—by convention!

Six is more or less tangential to the interests of the Abrahamic religions, and seven is counter to them. However, with regard to our educed prescription for institutional personhood, six and seven—irrespective of their vagueness—are clearly groping towards its heart.

Notwithstanding the brevity and excessive simplicity of this analysis, what already emerges is that the Unitarian Universalist Association and its "congregations" are far more likely to achieve personhood than are the current Abrahamic religions, but because they focus on serving human persons, not God, they are far less likely to ever be genuine religious institutions. Notice, however, that by simply embracing principles more like those expounded in this book, it would be far easier for the Unitarian Universalist Association to accomplish the status of a genuine religion than it would be for any of the Abrahamic religions—as they currently stand—to accomplish genuine personhood, for the Unitarians do at least pay lip service to the importance of the rational quest for truth.

(4.6) The Ultimate Imperative

We begin this final section by recalling some significant metaphysical characterizations of those constructed particulars that are selves and those that are persons. First, there are the *individual* selves and persons that are not themselves composed of either selves or persons; we include among them human beings and human persons. We have suggested that some non-human primates, and perhaps many other animals as well, are also selves, and that some of them may even be persons. We have also suggested that, in time, certain forms of artificial life—for example, robots of some sort—could be selves or persons.

The other category of persons and selves that we have distinguished are those *institutional* selves and persons to which individual selves and persons belong. Institutional selves and institutional persons that have smaller institutional selves or persons as constituents are *meta-selves* and *meta-persons*, as discussed earlier in 4.3. We have described the contemporary Abrahamic religions and the contemporary Institution of Science as meta-selves, but not meta-persons. Certain corporations may also be selves, and some of them may even be persons. We have also suggested that there are marriage-selves and even marriage-persons, although these may be rare.

We have been somewhat vague about what it means for a self or a person to belong to an institutional self or person—to be what we shall call, for the purposes of this discussion, a *member* of that institutional self or person. It is not required that a member of an institution operate solely within that institution in the way that the cell of an organism operates solely within that organism. Instead, one is a member of an institution when the awareness and volitional/purposeful capacities of the institution itself can be traced, in part, to one's activities. Those selves and persons on whom the functioning of an institution depends are its members. In practice, individual humans often have "jobs" in institutions, such that they operate within those institutions primarily during "work hours" (although this is not the only possibility). In addition, the same individual humans can belong to other institutions as well—to churches, for example, or families, or marriages. Nothing prevents an individual human from belonging to several institutions at once, all of which may be selves or even persons by virtue of what that individual human does in those various institutions. It is perhaps rare for an institution to belong to more than one meta-institution—but this is not impossible either.

Now recall from Part 3 that God is conscious in virtue of, and only in virtue of, souls. That is, when a cognitive agent is a Person, then and only then is God conscious of that cognitive agent's awareness—a state of affairs that we describe by saying that that Person brings about a soul. As a result, God is also conscious of the metaphysical realities and verities of which that particular cognitive agent is aware. In this way, a cognitive agent who is a Person directly implements God's Will. For God's Will is that God be maximally conscious of metaphysical realities and verities—which means that God be self-conscious, conscious of God's own Attributes, and conscious of the metaphysical particulars that are the parts of those Attributes.

Because these metaphysical realities and verities are not isolated items that can be apprehended independently of one another, it is necessary that each metaphysical reality and verity not merely be an item that some cognitive agent is aware of. What is required is that God apprehend their systematic unity and interconnectedness. But this requires, in turn, that the same be true of at least some cognitive agents; for *only* in this way, we have seen, can God be conscious. We have indicated (and this is something that is manifestly obvious in the contemporary setting) that no single individual human is capable of being aware of the large number of metaphysical realities and verities available to be known. *Human knowledge* has become *communal knowledge*; we know what we know collectively, and not individually, simply because there is so much to know.

This fact drives *the ultimate imperative*: to strive towards bringing about an institutional Person that is both aware of the maximum possible number of metaphysical realities and verities from among those that humankind has become aware of, and moreover, is aware of how these realities and verities are interconnected. We thus understand an *Ultimate Person* to be is a Person that has a group of communally aware cognitive agents as its members and who is maximally aware of metaphysical verities and truths, such that no other Person having some of the same members is aware of more. If across the totality of God's cognitive agents, the contributors to God's Consciousness, there is more than one Ultimate Person, then each is maximally aware relative to (the limitations of) some particular group of communally aware agents.

The *ultimate imperative* of humankind must be the attempt to bring about or contribute to an *Ultimate Person of Humankind*—an institutional person that is flexible in its ideology, that encompasses all human knowledge (scientific and otherwise), and that remains always open to change.

At this point, of course, we only know of the existence of humans and of the need for them to help bring about institutional Persons. Whether or not we are alone in The Block Universe in our quest, our goal is nonetheless still supremely important to God. For us, it is only the serving of God's Will—by us as individuals and by the institutions to which we belong—that enables progress towards an Ultimate Person. And it is only this end that gives our strivings a significance that can extend beyond our own lifetimes.

One possible way for the Ultimate Person to possess the awareness that God's Will requires is that every self and every person—both individual and institutional—belong to it and fully share what they are aware of with each other and with the institutions to which they belong. For example, even if the institution of science only remains a self, the knowledge that it possesses would also be known by the Ultimate Person. In this way, individuals and institutions that are not Persons, and the metaphysical realities and verities of which they are aware, would be visible to God in virtue of those entities belonging to the Ultimate Person.

Unfortunately, this direct way of achieving God's Will is not a likely scenario. For example, if the Institution of Science continues to fail to be a person—say because of its scientistic assumptions, or if it becomes a person but fails to become a Person—then it is not likely that it will willingly join with other institutions in a meta-institution that is dedicated to becoming aware of God, God's Attributes, and the particulars that belong to those Attributes.

However, there is another way that the Ultimate Person of Humankind (if it arises) could achieve what is needed to maximally satisfy God's Will without all persons and institutions belonging to it. In order to make this possibility clear, two definitions are necessary:

> The *degree of internal transparency* of an institution is the degree to which the awareness of selves and persons within that institution and the awareness of the institution itself are both available to be mutually shared.
>
> The *degree of external transparency* of an institution is the degree to which the awareness of that institution is available to be shared with selves or persons who do not belong to that institution.

If the degree of internal transparency of an institution is very high and that institution is a self, then, in general, what the member-selves and member-persons of that institution know is known by that institution as well. If, in addition, that institution is not only a self but also a Person, then God too will know what the selves or persons who belong to that institution know. Even more strikingly, when the degree of transparency is sufficiently high, the institution may not only know what its members know, but it may also systematically interconnect that knowledge in ways that none of its members are capable of managing on their own. In that case, God too will be conscious of what all the person-members of a sufficiently good institution are aware of, and moreover God will also be conscious of how this knowledge interconnects—making that knowledge even more valuable to God.

A couple of clarifying points are in order. First, it is a striking fact that an institution might be sufficiently good to engender a soul even when it includes among its members only humans who are not persons as we have defined them here. This is because it is possible for a human being to appropriately function within the context of an institution during the hours in which that human is officially playing a role in that institution. Yet outside of that context the human being may fail to develop the *capacity* to conform its referential and volitional/purposeful capacities to God's Will. Even so, God will be conscious of that being's actions within the confines of the institution to the extent that that being shares its awareness with members of the institution who *are* persons and, ultimately, with the institution itself. Of course, in practice, it is unlikely that an institution can succeed in being a person, let alone a Person, without at least some of its members being Persons as well.

Second, we have characterized "transparency" in terms of "sharing awareness." This is not, of course, to be understood in a mystical fashion, for example as implying the telepathic transference of the experiences of one self to another. Rather, we have in mind the perfectly ordinary ways by which knowledge is transferred from one agent to another: informally, by verbal and written communication, and more formally, by teaching and publishing.

Third, "awareness" can be understood both in a strictly immediate sense—what a cognitive agent is immediately aware of at any given moment—as well as in a broader sense—what that cognitive agent can bring to immediate awareness by thinking about it. We can describe someone as aware that they are at a desk, and as aware that the desk is not an elephant, even if they are not currently immediately aware of that particular thought, and indeed even if they never become immediately aware of that particular thought. What a cognitive agent is aware of, in this broader sense, depends in part on the scope of the physical agent on which the cognitive agent is ontologically dependent. In the case of human beings, for example, what are involved are the neurophysiological concomitants of the particular memories to which they happen to have access.

In the case of an institutional self, matters are a bit subtler. A library, located in a central room of the building in which all the members of an institution work, constitutes part of the "working memory" of that institution. Therefore, the contents of the books in that library are part of what that institutional self is aware of, at least to the extent that some of the members are aware, if only roughly, of their contents. If, however, some of the books are placed in an attic and subsequently forgotten by everyone who works for the institution, then those books are *not* part of what the institution is aware of. Similarly, if a human being is struck on the head and permanently loses a number of its memories, we similarly say that it is no longer aware of them. A human being, for example, can come to lose some of the words that it knew at one time by means of an injury.

It is worth noting that generally God does not need to be conscious of the small details of a given self's life—even if that self is an institution. Much of what a self is aware of—even an institutional self—are neither metaphysical realities nor verities; most selves, and even persons, are trapped in the awareness of mere objects.

We have been discussing the first definition—the degree of internal transparency, or transparency within an institution—and how it affects the range of God's consciousness. The second definition, external transparency, is equally important to God's Consciousness. As an illustration, let us consider the important knowledge-gathering institution The Institution of Science, and more specifically, the institutions that are members of The Institution of Science, such as universities. In general, scientific institutions have both a very high degree of internal transparency and a very high degree of external transparency. That is to say, much of their knowledge is not treated as proprietary. Rather, it is available to anyone who is willing to take the time to master it. It is accessible, for example, in publically available courses of study.

It is an ideal of the Institution of Science (as a meta-institution) that its member-institutions enjoy both a high degree of internal transparency and a high degree of external transparency. Thus, even if the Institution of Science continues its adherence to Scientism, it is possible for God to be conscious of everything that the Institution of Science is aware of. Moreover, it enables God to be conscious of how that scientific knowledge is integral to the fuller understanding of the metaphysical realities and verities that God's Will requires. This also means that members of Institutional Persons will have access to scientific knowledge, either by directly belonging to these institutions, or externally by learning about scientific knowledge from publications and other texts. It is not necessary that the Institution of Science or any of the institutions that belong to it be direct members of the Ultimate Person of Humankind in order for God to be consciousness of that which the Institution of Science is itself aware.

That scientific institutions have high degrees of both internal and external transparency serves God's Will. Indeed, transparency is an appropriate ideal for other institutions as well, including (even especially) the Ultimate Person of Humankind itself. We are not claiming, however, that total transparency is an appropriate ideal for every institution. Many businesses cannot survive without proprietary secrets; obviously, nation-states cannot enjoy total internal transparency or total external transparency. As businesses and nation-states are often competitive with, and even hostile to, one another, too much transparency can be fatal.

As the aim of the Ultimate Person of Humankind is to directly satisfy God's Will, a high degree of transparency, both internal and external, is clearly a great value. What is required in the case of the Ultimate Person of Humankind—as in the case of scientific institutions—is not that *every* member of the Ultimate Person of Humankind knows everything that the Ultimate Person of Humankind and all its other members know. (Note that we use "members" here in the technical sense in which we have defined the term, and not in anything like the traditional sense of institutional membership, such as church membership.) Rather, what is called for is only the *potential* for such knowledge. Any member of the Ultimate Person of Humankind should be able to learn anything it wants about the Ultimate Person of Humankind and anything of which the Ultimate Person of Humankind is aware. This requirement is compatible, of course, with a certain amount of privacy for some of the members of the Ultimate Person of Humankind—at least with respect to their private lives and their roles, if any, in other institutions. In general, all that a member of the Ultimate Person of Humankind is obligated to learn—as a member of the Ultimate Person of Humankind and, for that matter, with respect to its membership in any institution to which it belongs—is that which will enable it to properly exercise its role in those institutions in accord with God's Will.

We have just finished exploring one of the ways in which the Ultimate Person of Humankind and membership in it is quite different from that of membership in traditional religions, and specifically from that of membership in the Abrahamic religions. The Ultimate Person of Humankind—because it is directly involved in facilitating God's Self-

Consciousness—focuses on awareness of metaphysical realities and verities. Therefore, its aim is not to cloister its members within itself, cutting them off from the worlds of science, business, and politics, nor is it to force them to be aware only of the Ultimate Person of Humankind's specific beliefs and practices. Rather, the Ultimate Person of Humankind needs to welcome open-mindedness and encourage its members to belong to other knowledge-gathering institutions. Only in this way can the awareness of the Ultimate Person of Humankind be rich enough to maximally satisfy God's Will.

We turn now to a discussion of some other ways that the Ultimate Person of Humankind will differ from traditional religious institutions. (We warn the reader again that our discussion must be understood as preliminary and cautious in its predictions.) First, let us examine the need to be pious that each human person faces. Sometimes we have the impression that making ourselves good persons is something we can achieve largely in isolation from others. As long as we treat others and their projects with respect, doing nothing to hurt anyone else in the course of pursuing our own projects, we see ourselves as essentially good. Moreover, we have a tendency to think that by making ourselves as aware of metaphysical realities and verities as possible—so that, if we are good enough to bring about a soul, God will be conscious of those metaphysical realities and verities—we are being ideally pious as well as good. However, this is not the case.

The contextual element of what one can do for others and for institutions cannot be ignored if one truly wants to be good. This is because it is something of an illusion to believe that any given human person—no matter how intelligent and how assiduously it gathers knowledge and strives to learn what is true—can become aware of enough on its own, that it is, *by itself,* to be of real service to God. Limitations of time and space, not to mention the relative puniness of any given individual's cognitive capacities, restrict what is possible for any one individual human to know. As we have seen repeatedly in these pages, coming to understanding for human persons is almost intrinsically a social or societal endeavor.

This adds a further requirement on overall pious behavior: sharing one's knowledge with others. Teaching is one way. Publishing—

as scientists and scholars do—is another way. The mentoring of others so that they can acquire skill-sets is yet a third. For an individual to be aware of a great deal and then die without passing it on to others is not to have lived as a Person.

But as our foregoing comments about institutions have made abundantly clear, merely sharing one's awareness with others is—at least for most of us—insufficient. We must contribute to the awareness of institutions; for only institutions are capable of the breadth of awareness that can achieve a connected and systematic understanding of the metaphysical realities and verities of which we are collectively aware.

There are two lessons to draw from what we have just noted. The first is that, at least in the vast majority of cases, a given individual's contribution to institutions matters most for that individual's goodness. These contributions do not have to be intellectual ones; they do not even have to be contributions to awareness. There are many functions that individual persons can fulfill in institutions, and many of these are indispensable to an institution becoming a Person (or, at least, to becoming an appropriately behaving contributor to a meta-institution's becoming a Person). It is also through the contribution of individual persons that institutions can assist human persons in becoming Persons (e.g., through libraries, non-profit organizations, and civic organizations).

We have uncritically inherited the idea from many sources that certain vocations are intrinsically higher or more valuable in and of themselves, independent of the ends to which they are directed. So the philosopher looks down on the scientist, the scientist looks down on the entrepreneur-businessman, the entrepreneur-businessman looks down on the professional doctor or lawyer, professionals look down on office workers, office workers look down on janitors, etc.—all in endless attempts to shore up the inevitable insecurities that are produced by a system of prestige and reward that is not sufficiently aware of the vast variety of ways that various job-activities actually facilitate God's Will. Indeed, the janitor and the sanitary worker may save more lives than doctors by protecting us from germs and disease; they may thereby be more effective servants of God simply in virtue of the sheer numbers of Persons they enable to survive.

In a very real sense, focusing on the goal of institutional awareness of God, God's Attributes, and other real metaphysical particulars democratizes the activity of facilitating coming to understanding. It is not a process to be engaged in by lonely philosophers, by a small oligarchy of wise men, or by scientists and scholars engaged in pure research. It is something in which a whole community must be involved. This means that *whatever people do to facilitate coming to understanding, according to their abilities, is good.* And this includes not only directly increasing the awareness of institutions, but also helping to build and maintain the infrastructure of all the communal institutions in which we collectively participate. Plumbing, waste-removal, the construction of highways, computer programming, agriculture, scientific research, child-rearing, education, and the like are all ways that people function valuably to facilitate coming to understanding.

According to this picture, hierarchies of Persons emerge in accordance with their abilities to serve God. These hierarchies contain individuals at the bottom, and ever more inclusive institutional entities above them, culminating in whatever institution has the fullest understanding of God and God's Attributes, what we have been referring to as the *Ultimate Person of Humankind*. From the standpoint of serving God's Will, this is the most significant hierarchy that we can identify. But there is another kind of hierarchy—one among individuals—where individual persons are valued differently depending on the roles they take in the institutions to which they belong. It is not so much that persons themselves are differently valued, but rather that the roles that they play are valued differently. If someone is paid well because they run a successful business organization, they are being compensated for their role in that specific organization; they are not being paid well or valued for their role as a good parent or for their contributions to the community. There are times in history when such valued roles were treated as inalienable for the persons playing them—for example, royalty—but almost without exception in modern times it is the case that persons play more than one role and that they are seen, at least in principle, as distinct from those roles. Many challenge this hierarchy of persons. For example, it is thought that—as Karl Marx put it, and as later socialists have taught— “from each according to his ability; to each according to his need.” That is, the rewards of the various roles that people play should not be as inequitably structured as they are—especially in capitalist societies. Although the basic point is accurate, we leave the details of such reforms for others to sort out.

It is not difficult to see how this second kind of hierarchy is inappropriate from the point of view of coming to understanding. If the janitor is as crucial to coming to understanding as the surgeon, why should the rewards in life be so meager for the janitor and so fulsome for the surgeon? If the best schoolteachers facilitate coming to understanding more successfully than the best athletes, why should those teachers be paid so much less? The response is that such hierarchies, although needing adjustments in various ways, are due to the nature of the selves that humanity is made up of at this time and place. In attempting to recognize what is required for facilitating coming to understanding, one cannot simply abstract away from the rich and complex nature of the selves that are the vehicles for coming to understanding in the context of humanity. An unfair hierarchy of rewards and deprivations—one based partially on supply and demand—is virtually a corollary of the emotional needs of the human body. Human persons are, after all, creatures who have emerged from an evolutionary history that, in turn, severely restricts what they are capable of and what is capable of motivating them. Not surprisingly, then, a hierarchy of material rewards is currently an essential element in the process of coming to understanding. At some point in human history, material rewards and the hierarchical value systems that humans crave may cease to play such a fundamental role in human societies. The reasons to expect or to be skeptical about such a transformation we leave for others to work out. We should add, however, that ultimately the only real hierarchy that matters is the one consisting of selves, persons, and Persons and the associated hierarchy of understanding.

We mentioned that there are two lessons to be drawn from our discussion of how individual human persons are to attempt pious behavior. The second is that transparency in what one is aware of—what one knows—has turned out to have a deep theological significance. For internal transparency and external transparency are only the visible aspects of the needed sharing of awareness that is required of individual persons if they are to be Persons. Transparency of knowledge is what enables persons to help other persons in becoming Persons; equally, it is what is needed for the institutions of which these persons are members to become Persons themselves.

For all we know, there *may* well be many institutional Persons spread throughout the vast reaches of space and time, each composed of institutional persons that are composed, in turn, of individual selves and persons who strive to enable the institutional Person of which they are members to understand and conform to God's Will. Each of these could well be making equally important contributions to God's Will. Consider any group of individual selves who can—at least in principle—share their awareness with an institutional person. For example, humanity at the present moment is, arguably, such a group. Several thousand years ago, we were not such a group because we were scattered over the earth in such a way that we were prevented—given our abilities to communicate and travel at that time—from sharing knowledge with one another in this way.

Let us call a group of individual cognitive agents who share knowledge *a group of communally aware cognitive agents*. We understand that such groups of communally aware agents correspond to, and are constrained by, physical agents in time and space. Accordingly (and this is an empirical claim), such groups are limited in the number of their members by the finiteness of their corresponding physical agents, which, for example, may last only a finite number of generations or occupy only a limited region of The Block Universe. Consequently, the number of communally aware cognitive agents that can be encompassed over the lifespan of any such group is always finite. In fact, the number of *all* God's cognitive agents is likewise limited. Nevertheless, groups of communally aware cognitive agents are able to conserve what they learn, for example by passing it on from agent to agent—through teaching, art, and written records. Such knowledge becomes the awareness of institutional selves, persons and, ultimately, Persons. And all that Persons know becomes a part of, and is thus preserved in, God's Consciousness.

Our recognition of the increasingly important role of institutions, together with our realization that science, by its very nature, is not able to provide knowledge of all things that can be known, has led us to reflect deeply on the strengths and weaknesses of religious institutions. Our speculations about the Ultimate Person of Humankind, preliminary as they may be, should be read in this light. Though later authors, teachers and leaders will improve upon our efforts, the task itself has become indispensable.

We now live in an age in which the ultimate metaphysical questions—questions about God, God's Attributes, and God's Will—have become entwined with questions about the nature of personhood and the unique role of institutions in the pursuit of knowledge. Institutions, persons, and ultimacy can no longer be separate topics, as we strive to fulfill the Ultimate Imperative: bringing about the Ultimate Person of Humankind.

Part 5: Critical Reviews

Review 1: Gordon Graham

Some Reflections

Coming to Understanding (*CTU*) is a very ambitious book that ranges widely over a large number of topics. It extends an essentially Neo-Platonic conception of metaphysics into the realms of philosophical theism, and explores the implications of such a development for social understanding, morality and religious practice. The aim of these reflections is not so much to examine detailed aspects of individual arguments, but to offer some broader comments on the central concepts and topics with which it is concerned. I identify these, in what I take to be a descending order of (logical) importance to the overall thesis of the book, as follows.

1. Agency
2. Reason
3. Persons
4. God
5. Time and Eternity
6. Metaphysics and Philosophy
7. Science
8. Beauty
9. The Ultimate Person of Humankind

Section 1: Agency

On pp.147-8 *CTU* makes reference to Wittgenstein.

> In his insightful description of human language, Wittgenstein famously discovered the curious

> importance of the concept of a game. Wittgenstein's insight, it turns out, was the tip of the iceberg. We claim that *thinking of the self as the player of a game* enlightens almost every concept we have of selfhood (emphasis original).

Wittgenstein's appeal to language games has not always been understood correctly. Often 'language game' has been used interchangeably with another of Wittgenstein's concepts—form of life'. But this is a mistake. The point that Wittgenstein wants to make, above all others, is that in speaking a language human beings perform a variety of actions. When human beings reflect on the nature of language, they have a common and constant tendency—reinforced, Wittgenstein thinks, by the grammatical forms of language—to construe all these uses in terms of one basic use, which is then modified by different 'operators' to perform the variety of uses that are easily differentiated—describing, commanding, praising, denying, wishing, commending, criticizing, and so on. This 'basic' use is assumed to be that of assertion—stating facts about the world. This tendency is one that he himself takes to its most complete articulation in the *Tractatus*, which tries to construe language exclusively in terms of elementary propositions that 'picture' facts about the world to which they correspond. Having subsequently come to doubt the foundations of this project, Wittgenstein then spends the *Philosophical Investigations* countering it. The thought that drives this revision (not a complete abandonment) is to be found most clearly stated in his last work —*On Certainty* §204 : 'it is not a kind of seeing on our part; it is our acting, which lies at the bottom of the language game'.

CTU's 'thinking of the self as the player of a game' is accordingly very close to Wittgenstein's most fundamental contention. Yet it is not clear that the thought of *CTU* is properly in accord with that contention. No doubt that is because the full implications of this remark have proved very hard to grasp. Since Plato, philosophers have generally operated with a picture of the human subject as essentially a perceiver of the world, and they have thought of action as an exercise of the will informed by perception; I perceive objects in the world, and then pursue them as objects of my will or desire. Human desire can be fitted into the picture in different ways—substituted for the will as in Hobbes, or added to the stock of facts that we apprehend, as in Hume. If Wittgenstein is right, though, it is not perception that is fundamental to human being, but agency. To 'think of the self as the player of a game' as Wittgenstein means this, is to acknowledge that we are first and foremost *doers* not seers or hearers. It is our *engagement with* people, places and things, not our perception of them, which makes the world in which we find ourselves, including the world of perception, a meaningful one.

Part of Wittgenstein's purpose is to counteract a deep-seated dualism about human beings that strikes us as obvious, and yet at the same time leads reflective understanding drastically astray. Cartesian dualism is one form of this, but by no means the only one. Both high Rationalists and 'scientific' empiricists can be found endorsing the same picture. Plato is an example of the former and Hume of the latter. Indeed, Plato's version is in many ways more paradigmatic of this picture than Descartes', since Plato construes understanding as a kind of intellectual 'seeing'.

Despite a resolute 'commitment to monism' (p.73), and somewhat contrary to the reference to Wittgenstein and games, the concept of agency at work in *CTU* appears to subscribe to a kind of dualism. The terminology is a little different, but in the formal definition of self two kinds of agent are linked—a cognitive agent, and a physical agent. Cognitive agency includes the volitional, but the separation of these from physical agency has important ramifications (as it does in Plato). While the mere linking of the two is declared insufficient to constitute an individual, and a third component - the capacity to love of God—declared necessary for personhood, it seems to me clear that cognitive agency, more narrowly construed—namely 'the knowing subject'—is fundamental to the general theme of *CTU*. The title of the book itself indicates that the principal task confronting human beings is one of bringing mere awareness to consciousness—coming to understanding—and this is primarily an exercise of their capacity as knowers. Accordingly, both volitional agency and love of God flow from this in a secondary way.

At the same time, in some places the text suggests that this cannot be quite right. The account of Choosing (p.82) allows volitional agency a role in patterning awareness—'to cleave reality in ways that mesh with our pragmatic purposes' (p.96)—and the account of Rationality in the same section gives reason a special role in this. Of course, it might be said that pragmatic divisions are not to be described as 'intelligible' in any deep sense, and rationality only has to do with intelligibility. But this raises issues about theoretical and practical reason (to which I will turn in the next Section).

There is a further problem in accommodating emotions within this dualistic structure. They are 'not genuine aspects of ourselves as cognitive agents' we are told (p.82), but properties of something external to the agent. A more obvious suggestion is that emotions are to be incorporated in the volitional aspect of agency, but this cannot be the *CTU* view either. The addition of the capacity to love God in the definition of persons is expressly distinguished from emotion as a capacity for volitional commitment. On p.113 emotions are said to be 'psychological states of physical agents generated by a human brain and body'. This suggests that emotions are to be located wholly within physical agency. Yet this conflicts with p.118, where hurricanes are cited as non-human physical agents.

The point of identifying these problems here is to note that they are just the sorts of problems that Wittgenstein thinks we can avoid, if only we can consistently think of human beings as *agents* first and foremost, rather than perceivers (or even knowing subjects with volition). That is to say, it is essential to grasp that from our infancy we act *within* the world and not merely *on* the world. Speech, which is so fundamental a feature of human life, is a manifestation of this activity, not simply a verbal record of the world as apprehended in mental awareness. Furthermore, for human (and other animal) agents the world has teleological content, i.e. it presents itself as *relevant to our needs*, already filled with resources—food and shelter—dangers and opportunities. If against this background, human beings are indeed properly described as 'physical agents', then the inclusion of hurricanes in the same category raises a question about the meaningfulness of the classification.

Section 2: Reason

In line with what I take to be its inherent Platonism, *CTU* gives priority to theoretical (or in older language, speculative) reason over practical reason. This is notable in a number of places. Early on the remark is made that

> [F]or Kant, our knowledge of God, such as it is, can only come from the practical side of philosophy The little we know of Him is exhausted by what we are pragmatically required to believe in order not to give up hope in this life. There is no metaphysical insight to be had into the structure of God's being. (p.17)

In a similar, but more positive spirit, a later passage tells us that

> [W]hen we comprehend the nature of the categories, the metaphysically significant relations among them and the equally fundamental relations between them and everything else, something about the nature and purpose of reality as a whole becomes apparent. Thus, the basis is laid for a strong and metaphysically grounded philosophy, theology and ethics. (p.48)

In Section 6 of these reflections, I shall raise some questions about the nature of metaphysics. For present purposes, it is sufficient simply to note first, that the description of Kant's reasoning (in the second *Critique*) is a little prejudicial. First, if we take seriously the possibility of *pure* practical reason, and the Kantian contention that it is a wholly adequate exercise of our rational capacity, then we will reject the description of it as 'pragmatic' in the everyday sense, since this implies what Kant expressly denies—that practical reason is essentially instrumental. Secondly, Kant subscribes to an ideal very like that advanced by *CTU*—'to make the highest possible good in a world the final object of all our conduct . . . through the agreement of my will with that of a holy and beneficent Author of the world' (*Critique of Practical*

Reason). Kant thinks that neither physics nor metaphysics can ground this ideal, and only pure practical reason can (and does) give us knowledge of God. If this is true, then knowledge of God obtained in this way is not properly described as 'such as it is'. It is complete, and to think otherwise is to continue to believe possible that what Kant thinks he has shown to be impossible—theoretical knowledge of God.

Not many people have been thoroughly persuaded by Kant's claims for practical reason. Yet, in the present context they have this further advantage; if we follow Wittgenstein in making agency fundamental to human existence rather than a bi-product of 'cognition' plus 'will', then practical reason, properly understood, takes on special importance. Kant did not claim for it any more than *equal* status with theoretical reason—the *postulates* of practical reason are the rational equivalents of the *hypotheses* of theoretical reason, he says. By contrast, in the *Nicomachean Ethics* Aristotle gives an indication of how *phronesis* (practical wisdom) must undergird *sophia* and *theoria* (scientific and metaphysical theorising). Viewed in *this* way, the deliverances of practical philosophy are further elevated within Reason. They are not a poor substitute for metaphysics—as *CTU* hints—but a necessary pre-condition of metaphysical thought.

Section 3: Persons

CTU devotes a lot of attention to the relation between agents, selves and persons. To some extent, these terms are given non-standard meanings for the purposes of setting out more clearly the general metaphysical vision that the book as a whole seeks to articulate. One interesting divergence from standard ways of thinking, however, is the relegation of 'self' to relatively inferior status, and the corresponding elevation of 'person'. A person is defined in terms of consciousness and volition together with the capacity to exercise these in accordance with God's will. By omitting any mention of feelings, this definition is in sharp conflict with modern sensibilities. But deliberately so. 'Emotion is nowhere present in the definition of a person' (pp.152-3). I take the last remark to be essential for a move that is crucial to the latter part of the book—namely the extension of personhood to social institutions, which cannot in any meaningful sense be said to have emotions. '[H]uman beings . . . who belong to [an] institutional body . . . will naturally have emotions, [but] it does not follow that the institutional self itself has emotions' (p.154).

It might be thought, of course, that for the purpose of extending personhood to institutions, including consciousness within the definition is no less problematic than including emotions. As I understand it, a distinction that *CTU* makes between individual 'awareness' and divine 'consciousness' is relevant here. I can be aware of fictions and phantasms just in the sense that they are 'phenomes' that figure in my mental life, but my awareness can figure in God's consciousness only to the extent that the phenomes of my awareness are genuinely referential i.e. have not merely grammatical objects, but real metaphysical counterparts. What this means is that the awareness that becomes 'consciousness' is a kind of knowledge. Since institutions collect and act upon information, they may be said to have such awareness. 'Indeed . . . the awareness of metaphysical realities and verities had by institutions far exceeds the awareness of metaphysical realities and verities that any human person is capable of having' (p.180). In this way, though institutions are ontologically dependent on individual human beings, they also transcend them.

It is not necessary to dispute this move to wonder whether *CTU* does not nevertheless attribute too much by way of personhood to what I shall refer to (in more traditional language) as 'corporate persons'. That there are corporate persons I take to be incontestable. Universities, commercial companies, golf clubs, States and so on, have an enduring existence that transcends the individuals who at any given time own, staff, run or otherwise comprise them. Furthermore, corporate persons can hold property, take decisions, perform actions and be held responsible in ways that are not reducible to the actions and responsibilities of individual human beings. Nevertheless, though all this is true, a question remains as to whether corporate persons are *metaphysical* entities, or merely *legal* ones. What makes a mere crowd of people a group? Some principle of organization, seems the obvious answer. What makes the organization a property owner, an employer or subject to liabilities? The answer, it seems clear to me, lies in the ability of corporate persons to enter into enforceable contracts, and this means enforceable by law.

It is legal existence that allows corporate persons to be responsible agents, agents that can cause things to happen. However, the identity of the corporate person is not the same as the identity of the institution. We can see this by noting that in addition to cognitive and physical agency, institutions can be said to have final causes. That is to say, generally institutions have intrinsic purposes that make them what they are. Institutional identity may change, however, while corporate personhood remains the same. A seminary that becomes a college, let us say, or more dramatically, a school that over time becomes a hospital, may retain possession of its property, its contractual obligations, even its personnel, and thereby at no point lose its legal status and identity. Its final cause has changed, though, and thereby it has changed into a different institution; it is no longer a school. This suggests an important difference with human persons. The final purpose of a human being (the activity of reason in accordance with excellence, if we follow Aristotle, or the ability to know God and enjoy him forever, if we follow the Shorter Catechism, or some other conception) does not change with even the most radical alteration in mode of life. The successful businessman who becomes a Trappist monk, or the hermit who becomes a socialite, remains the same person throughout. This is what entitles us to think of him/her as a metaphysical (or otherwise enduring) entity. The hospital that becomes a school (an actual example) retains its legal status, but is a different institution.

Might this seeming difference be eliminated by mapping the final cause of institutions on to the third element of the definition of personhood in *CTU*—the capacity to love God—in such a way that its concept of personhood can still be extended to institutions? *CTU* says ‘an institutional self may have the capacity and discipline to conform its referential and volitional/purposeful capacities to God’s Will.’ (p.154). The distinction just drawn between institution and corporate person makes it difficult to see how this would work. Suppose we say contingent circumstances favor hospitals over schools as better vehicles of God’s will, and that it is this perception that leads to the change in final cause. It does not seem (to me) correct to say that the legal entity itself came to a better understanding of God's will, as opposed to saying that those charged with its custodianship came to a better understanding. The main point is this, however. Even if we agree that a corporate person can have the capacity to serve God's will better, and that its cognitive and volition procedures may realize this capacity more adequately, whenever this necessitates a change of final purpose—hospital to school, for example—then the institution is not the same metaphysical particular (or even constructed object) as the corporate person with which it is connected in some way.

Section 4: God

CTU says that God is by definition a person, and the supreme source of being—the efficient cause of The Block Universe. However, though everything is thus ontologically dependent upon God as the source of being, God in turn is importantly dependent upon the things that derive their being from him. This dependency has two important aspects. First, God is cognitively dependent upon other persons.

> God is never conscious of objects . . . he is only conscious of the metaphysical particulars that a good cognitive agent is aware of insofar as that cognitive agent grasps those metaphysical particulars *truly.* There is no illusion or falsehood in God's consciousness. . . [I]f there is something metaphysically real that no cognitive agent is aware of, then God is not conscious of it either. (p.133)

Secondly, God is volitionally dependent upon other persons

> [T]hough God is the efficient cause of [the Block Universe] as a whole, He has no direct efficient causal power to intervene in any of the affairs within The Block Universe (God's Body). To the extent that intervention

> is required in the service of God's Will, it is we who must intervene on His behalf. (p.101)

CTU summarizes its view of God as follows:

> He is in fact utterly powerless and completely dependent on us to do His work. (p.143)

It hardly needs to be said that this view of God is dramatically at odds with traditional theology and religious thought more broadly, in which God is held to be Sovereign, that is, all-powerful and wholly independent of us. Of course, mere conflict with received opinion is no refutation. In any case, *CTU* is fully conscious of the conflict, and expressly intends to reject 'the God of the Old Theology'(p.162).

> [The] paradoxes and tensions in religious conceptions of "God" makes one thing amply clear: We need to begin again, not merely by uncritically rehabilitating traditional ideas of "God" but by reflecting deeply on how God can best be understood. (p.166)

In many ways this is an admirable ambition, since there is no doubt that both widely held and relatively sophisticated religious beliefs often rest, upon examination, on a debased and vulgarised conception of God—what Mark Johnston (in *Saving God*) has called 'spiritual materialism'. There are, nonetheless, some serious questions that *CTU* has to face on this score.

First, 'beginning again' is not possible in any absolute sense, for this reason. It is only in so far as *CTU*'s conception of God resonates with/ connects with the conceptions embedded in the major religions of the world and the history of the reflections these religions have prompted, that there is any reason to give *CTU*'s 'metaphysical ultimate' the name GOD. In fact, this condition appears to be met, since there are three key points of continuity between *CTU* and 'old theology'—that God is a person, that right action is action in accordance with God's will and that God is the focus of true worship. The crucial question, then, is whether these key elements can be maintained while making *CTU*'s most innovative move, namely abandoning God's sovereignty. I shall consider the three points of continuity in order.

God as person. It can be argued that there is a serious tension between attributions of personhood and 'utter powerlessness'. The definition of a person (in *CTU*) requires cognitive and volitional agency. It is (to me) somewhat confusing that God is declared to be a person, while being denied cognitive and volitional agency. Nevertheless, if I have understood correctly, God does have 'referential' and 'volitional/purposeful' capacities (p.116). This is sufficient to raise the first difficulty.

Consider the case of referential capacity (i.e. the ability to know). The nature of knowledge is of course one of the oldest and most intractable subjects in philosophy. It is hard, therefore, to say anything incontestable about it. But suppose we assume the traditional JTB account—that knowledge is true belief arrived at in some justifying way. This implies a consciousness of the epistemological status of belief, and not just awareness of its semantic content. Dogs apprehend the world about them, and make their way through it successfully, but there is a severe limit to the extent to which they can be said to *know about* the things of which they are aware. The dog's response to its environment is an intelligent one—unlike the reaction of the leaf that blows in the wind or the flower that turn towards the sun. But the intelligibility of this response does not depend upon the distinction between true and false. The reaction to a perceived danger is as intelligible as the reaction to a real one. Now it is hard to see how anyone could have the kind of consciousness that constitutes *knowledge*—God included—unless there was some awareness/understanding of the contrast with falsehood and illusion. We may suppose, certainly, that God never believes anything false or illusory; but this is not the same as saying there is no falsehood in his consciousness (if we take that to mean a consciousness of what is false). There must be, if he is to apprehend the true as true. I do not have knowledge if I am simply supplied with true beliefs by a third party. Accordingly, if it really is the case that God is cognitively wholly dependent on other agents, he cannot be said to be conscious any more than a computer can. A computer is programmed to respond to ‘information’ that is put into it. But the meaning of the word ‘information’ in ‘information technology’ is significantly different to its normal meaning. It refers simply to electrical impulses, both positive and negative.

A similar point can be made about volitional capacity and purposefulness. Purposefulness implies activity. If God is utterly powerless, can he be active? Leaving aside the efficient causation of the universe, it seems that God’s relation to the world is an entirely passive one. He is capable of ‘doing’ only what others do for him. To have purposes, however, it is not sufficient to express a will; one must also have the power (at least on occasions) to effect that will. Otherwise there is no distinction between willing and mere wishing. If God truly is wholly dependent on agents other than himself, he can wish to see the world this way or that, but he cannot be said to will that it be so. Traditional theology holds that God limits the exercise of his own powers so that human beings (unlike hurricanes and earthquakes) may also be agents. Their absolute dependence on God does not undermine their will, only because God limits his own action, thereby leaving them free. In *CTU* the order of dependency is the other way round, but without the critical counterpart possibility—that God should act without us. Nor does God’s role as the efficient cause of the entire Block Universe necessarily grant him agency. In order to be Creator, God must exercise his causal powers with knowledge and will. It is not the paint and canvas manufacturers that create the picture, though they are the efficient causes of the materials upon which the physical existence of the picture depends.

Right action and God’s Will. The difficulties that arise in understanding God’s ‘volitional/purposeful capacities’ relate directly to the second element of ‘old theology’ that *CTU* retains—God’s will as the measure of right action. If it is true that God cannot meaningfully be said to have a will (for the reasons given above) then it cannot serve as the standard by which right action is to be judged. It could still be true that human beings might act in accordance with (so to speak) God’s wish list. This would be like treating a dog, say, in accordance with what it seems to want. However, to the question ‘what makes it *right* to do what it wants?’ some other answer is required than that it simply wants it.

God as focus of worship. Traditional theology holds (as I do) that it is God’s perfection that makes him worthy of worship. This is closely connected to Anselm’s conception of God as ‘That than which nothing greater can be conceived’. This superior relation to other existents, Anselm takes to be of God’s essence. E J Lowe, among others, has recently revived Anselm’s ontological argument which uses this conception of perfection to deduce God’s necessary existence. But even if (as Kant held) we cannot infer existence from this description, it remains the case that the existence/non-existence of such a Being is what is under discussion when the reality of God is debated. In effect *CTU* wants us to abandon any such conception. It speaks (in at least two places) about the ‘needs’ of God, whereas that which is perfect lacks nothing, and hence has no needs (a point Plato makes much of in the *Euthyphro*). *CTU* aims to make ontological centrality play the role perfection plays in ‘old theology’—that is to say, God’s being the efficient cause of everything else. In itself, though, ontological centrality does not seem to me to generate any impulse to worship, or any ground by which to sustain such an impulse.

For purposes of illumination *CTU* offers us a ‘somewhat awkward’ analogy—the relation between a termite colony and its queen—‘a legless, immobile, slimy, four-inch pulsating glob with millions of tiny worker termites feeding and grooming her’.

> Like God, the termite queen is utterly helpless to do anything for herself. *She is completely dependent on her workers*. In turn, serving her is the whole purpose of their existence. The termite queen is the supreme creator of the world, the efficient cause of its existence. … The role of the helpless termite queen with regard to those who ceaselessly serve her is remarkably similar to God and those who serve “Him”. Like the termite queen, God is completely dependent upon us to fulfill the divine

> *telos*, and yet surely God is the supreme person of all persons and the efficient cause of their world.
> (pp.159-160, emphasis original)

Let us suppose—contrary to 'old theology'—that the parallel holds and that the relationships are indeed 'remarkably similar'. This question arises. Why should the termites *worship* the queen? Sisyphus was condemned by the gods to roll a stone up a hill, only to find that when it rolled down he had to roll it up again, and so on *ad infinitum*. Having become aware of the metaphysical structure of his world, together the relationship to the gods that goes with it Sisyphus has no choice but to acknowledge it. This much he might concede. Still, nothing requires him to rejoice in it! Far from praising the gods in an attitude of worship, he can curse them with a passionate loathing—a reaction many would find much more admirable. Similarly, adopting the parallel *CTU* offers us, we human 'termites' can look upon our 'queen God' as the 'supreme person of all persons and the efficient cause of [our] world' with loathing and contempt. We are not obliged to worship, and may refuse to do so precisely because She is so manifestly unworthy of praise and adoration.

Section 5: Time and Eternity

An important section of *CTU 1.3* concerns the contrast between temporal and atemporal. The puzzlement that some people see in relating Plato's enduring eide to the passing phenomena that imitate them 'has its source in a systematic confusion of temporal processes with logical ones'.

Consider an ordinary inference.

> All men are mortal
> Socrates is a man
> Therefore: Socrates in mortal

> Viewed in one way this is an inference that, like all inferences, we could perform in thought, in real time. We first grasp the premises, and then when we understand the premises we grasp a conclusion. But although this inference, which essentially involves grasping or appreciating the relation of logical implication between premises and conclusion, is carried out over time, there is an important sense in which temporality is irrelevant to the nature of the implication so grasped. We infer over time, but the implication we grasp when we correctly infer something itself holds atemporally. (p.35)

This distinction between the temporal and the atemporal is of some consequence at later stages in the argument, since obviously any conception of the relationship between human beings and God must somehow square our temporality with God's eternity. The comparison with logical (and mathematical) relations is clearly intended to provide some illumination here. However, it is worth observing that there may be more illuminating comparisons than this to be explored. The problem with logic is that the relations it determines are static. That is to say, when we *draw* inferences in time, though we are engaged in activity, there is no activity in the logical relations of *modus ponens* (the Socrates example), *modus tollens*, *reductio ad absurdum* and so on. Nothing *happens* in logic itself. Acting in accordance with God's will, by contrast, has to be a practical *activity*. While we might construe this as something like inferring in accordance with principles, this effectively leaves God's agency out of the picture. He gives Moses the Ten Commandments on Sinai (say), and then need be involved no more. But this leaves no scope for anything like 'life in or with God'.

It is perhaps worth observing, therefore, that in thinking about these things we are not confined to the temporal/atemporal distinction. We can also think about contrasting temporal orders. Take for instance, the interesting cases of musical compositions and fictional narrative. A piece of music, like a story, has a start, middle and end. Temporal relations are essential to the intelligibility of introduction, repetition, variation, reprise, coda and so on, just as they are to understanding the narrative. These temporal relations are not the same as relationships in real time, however. A theme has to come *before* a variation in every single performance. But in real time, obviously, the theme in a later performance comes after the variation in an earlier performance. Similarly, Lady Macbeth has to die before Macbeth gives his famous speech, but in real time the speech has been given thousands of times before Lady Macbeth's next demise.

Religious thought has often pondered the nature (and possibility) of 'eternity in time'. There is much to be said for the idea that the eternal and the atemporal are quite different concepts. Eternal *life* requires that they be so, and the alternative temporal orders of musical time, festival time, calendar time and ritual time are more likely to throw light on this than the atemporal relationships that pertain in logic and mathematics. Whether this distinction—between temporality and eternity—is relevant to *CTU* is not entirely clear to me. The closing paragraphs tell us that 'the ultimate imperative of humankind must be to bring about or contribute to an Ultimate Person' and that 'it is only this end that gives our strivings a significance that extends beyond our own lifetimes' (p.210). These contentions can be interpreted in ways that confine them entirely to the temporal order of everyday life, in which case the traditional religious aspiration to eternal life is irrelevant. But 'beyond our own lifetimes' can be interpreted to mean something other than posterity (the years immediately after our deaths), and direct us to a realm of being that transcends the confinement of temporality. From a religious (or spiritual) point of view, it is eternity not posterity that matters, since most of us leave no trace of our having existed within a very short time.

Section 6: Metaphysics and Philosophy

In this and the remaining sections I shall be less concerned with the details of the text, and more interested in the assumptions underlying some of the general philosophical concepts employed in *CTU*.

In common with every philosophy book ever written (one supposes) the aspiration of *CTU* is to make a significant contribution to metaphysics and philosophy. There are different ways in which intellectual significance can be conceived. A common conception of philosophical inquiry thinks in terms of advancing the subject, and solving problems that have hitherto evaded solution. This appears to be *CTU*'s conception.

> In keeping with our emphasis on the nature and revelatory power of categorical structure, we take a classic monistic point of view: the view that reality as a whole is the highest paradigm of unity, explanatory coherence, and independence. . . . This understanding of reality as one coherent whole has known progress and setback; it has made great and sometimes sudden advances and strayed at times onto false trails. Where we see these advances, we will build upon them; where we note problems, we hope to solve them in new and more fruitful ways. (p.48)

To think of metaphysics in this way, is to think of it as 'philosophical science', a once common expression that has largely fallen into disuse. It is a matter of speculation as to why exactly the term (and the idea) 'philosophical science' has gone out of fashion, but it is undoubtedly the case that its decline has been concurrent with the rising prestige of natural science (at one time, significantly, called 'natural philosophy'). The term 'philosophical science' invites comparison with 'natural science', and the simple truth is if we take natural science as a benchmark, philosophy does not compare with it very well.

To show this we only have to rehearse a few familiar, and incontestable, facts. First, philosophy never involves systematic empirical inquiry, either of a statistical or an experimental kind. Though philosophical arguments necessarily appeal to matters of fact, the facts they appeal to are matters of general knowledge, not special investigation. This means that there are no *results* in philosophy, though some philosophers show an occasional tendency to talk in this way. This explains the radically different relation that holds between philosophical publications, in contrast to the relation that holds between scientific publications. Most scientific publications build on others by taking as given the results established in the experiments that published papers report. In brief, scientific inquiry is cumulative. Nothing of this sort is true for philosophy. The commonest form of philosophical criticism, evident in any philosophical seminar, for the most part ignores the conclusions of the work/paper under scrutiny, and challenges the fundamental assumptions on which it rests.

It is this feature that often leads students (and others) to find philosophy frustrating and declare it pointless. Their understanding of ‘pointlessness’, however, just reflects a third key difference with science. Science is progressive; philosophy is not. It is the mark of intellectual progress that later work discards earlier work as no longer of any relevance. Thus, modern physics has nothing to learn from Aristotle’s *Physics*. Similarly, while Robert Boyle is widely regarded as a founding figure in chemistry, his *Sceptical Chymist*, published in 1661, has nothing to offer modern chemists. Only historians of science read these texts for the science they contain. So too with early investigations in geology and medicine; these have historical, but no scientific interest.

Philosophy’s relation to its history is quite different. It is not just intellectual historians, but contemporary metaphysicians who read Plato, Hume and Kant. Contemporary moral philosophers continue to read Aristotle and Mill, and contemporary political philosophers read Hobbes, Locke and Rousseau. How can this be? If there are ‘advances’ and ‘solutions’ such authors, like Boyle, should be of antiquarian interest only.

The answer (I suggest) is that philosophy can be said to undergo development, but without progressing. Philosophers do reach conclusions, but they never produce results that other philosophers can then capitalize upon. The kind of insight that is to be found in philosophical thought is never out of date, though it often needs reformulation in order to remain a part of the continuing conversation that is philosophy. It is a notable fact, certainly, that philosophers themselves often think otherwise. Hume, Reid, Kant and Mill, for instance, undoubtedly believed that they were engaged in a ‘philosophical science’, an intellectual inquiry in which they stood the chance of securing irreversible advances. Yet, subsequent philosophers have not hesitated to revert to positions they thought they had demolished. The almost continuous commentary that Hume and Kant have generated for over 200 years now plainly demonstrates that their work is of enduring interest and value. But it also demonstrates, and no less plainly, that absolutely nothing for which Hume or Kant argued can be considered to have been established. On the contrary, there is not a single element of these fundamentally opposed philosophical positions that competent judges have not questioned, and often rejected.

What are we to make of this? The state of philosophy is especially puzzling if we hold ‘science’ in our minds as the most obvious standard of comparison. But there are alternative models. One is visual art in the Western tradition. It is evident that this has developed over the centuries, but not at all evident that there is any sense in which it has progressed. People still admire and study the works of Old Masters, and sometimes they compare more recent artistic production with them quite unfavorably. Each generation passes fresh judgment, and all believe that there are better and less good styles of painting. The form of development, though, is more that of an expanding circle than a linear trajectory. Victorian realists thought the style of the Baroque excessive, while much Victorian art in turn became anathema to the mid 20th century. The hitherto dominant movement to abstract and conceptual art is now being mitigated by a return of the figurative, something that counts against the concept of artistic ‘progress’. Nevertheless it constitutes a development, because figurative painting is making a reappearance in a style quite different to that of (for instance) the 17th century Dutch school.

A similar conception of expanding development without linear progress can be discerned in the history of music. The piano developed from the harpsichord, but not in a way that rendered either the harpsichord or music written for it redundant. Baroque recorders have not been abandoned in the era of electro-acoustic music. Philosophy, too, can be conceived in this way. Plato is history, but philosophical Platonism regularly undergoes revival. Kant is history, but Kantianism can find new philosophical exponents; and so on. What might this say about the ambitious endeavour undertaken in *CTU*? I think the answer is that its references to metaphysical advances and philosophical solutions are both misleading and unnecessary.

> Metaphysics cannot aspire to the certainty of logic or mathematics. It must be content at each point in its history to educe what appear to be the best explanations available. And this is the character of the present enterprise. (p.43)

This suggests a measure of historical progress that philosophy cannot, but happily need not attain. Of course it is true that (for instance) Beethoven composed in a specific historical period, and that the style of his composition was a result not merely of his incomparable genius, but of the geniuses who preceded him, most notably Mozart and Haydn. Even so musicians and audiences two hundred years later are performing and listening to Beethoven, relishing the music, learning from it, being inspired by it, and perhaps finding ways to restate the musical values of classicism in a more modern idiom. Similarly, an enterprise like *CTU* can find a modern idiom in which to reformulate the basic structure of Plato's theory of forms, and revitalize it in interesting and illuminating ways. For my own part, I doubt if the prominent 'diagrammatic' element (of which it makes much) is truly a counterpart to mathematics in modern science, and I am not persuaded that eduction (if this means 'inference to the best explanation') is actually the method at work in it. But the fact that these are not properly described as 'advances' in philosophical method, does not deprive either feature of its ability to reformulate Platonic theses in illuminating ways.

Section 7: Science

The comparison with science, to which the previous section referred, prompts some consideration of the view of natural science that *CTU* adopts. A distinction is drawn between 'science' and 'scientism'. This is a distinction of great importance, and *CTU* rightly (in my view) holds that ‘scientism’ arises from the dogmatic error of supposing that the success of scientific inquiry and explanation in their proper sphere, licenses science as an authority in every sphere of human understanding. This is the gross error that underlies (for example) Richard Dawkins’ *The God Delusion*, and the popular pull of scientism is powerfully illustrated by the astonishing success of that book (and others like it).

Nevertheless, though aware of the *hubris* of scientism, *CTU* itself lends science greater importance than I think is warranted. It does so by conceiving of Science as ‘a very large institution’.

> Scientific progress is a collective achievement scattered among technologies, research papers, and individuals. All this progress is unified enough that, should the research develop practical applications, it will be applied by the Institution of Science to improve or save the lives of individual persons. Thus it is more appropriate to speak of science and many of its resulting technologies as the achievements of an institutional self—that which we have called the “Institution of Science”. (p.181)

To be warranted in describing it as an Institution, rather than a practice or a body of knowledge, we do have to be able to attribute to science a large measure of social integration. This exists where there is a deep interdependence between theoretical knowledge and its practical application, manifested not simply at an intellectual level, but in acknowledged ‘guilds’ by which theories and practitioners are trained, qualified and recognized. This kind of institutional integrity seems to me a marked feature of modern medicine. Here, scientific research and therapeutic healing, investigators and physicians, laboratories, medical schools and hospitals, drug companies and pharmacies, are all interdependent and intertwined. But the same picture cannot be extended to the wider world of science and technology. Many of the most dramatic successes in science have no corresponding technologies—cosmology, evolutionary biology, plate tectonics for example—and many of the most powerfully influential technologies have been very largely ‘science-lite’ (so to speak)—the motor car, the airplane, electric light, the telephone, radio and television for example. Darwin, James Clerk Maxwell, Einstein, Arthur Holmes, Stephen Hawking, I am inclined to say, belong to a world quite different to that of Thomas Edison, Henry Ford, Alexander Graham Bell and the Wright Brothers.

CTU says:

> Most people, if they try to name the thing that makes our current age so very different from the worlds of humans a hundred or five hundred years ago, will focus on the transformations due to science and scientific knowledge. There is no denying the profound ways that our world has changed because of science. (p.177)

If people had been asked this same question a hundred years ago, they would not have thought to mention science, but the industrial revolution. In our time, we are seriously misled on this point by two facts. First, the world of modern medicine, which broadly fits the model of a unified institution, has enormous and unprecedented importance in contemporary society—witness its prominence in political campaigns and government policies. It is thus easily (but wrongly) regarded as paradigmatic of scientific technology as a whole. Secondly, two hugely influential technologies—computers and genetic engineering—are both inconceivable and impossible without the theoretical bases that underlie them. Both are very recent, however, and come at the end of a long and dramatic period of technological transformation owed to the work of the inventors, not the scientists, of the 19th and early 20th centuries.

In short, *CTU* is alive to the phenomenon of science overreaching itself and claiming an authority beyond that to which it is entitled. At the same time, its conception of the ‘Institution of Science’ attributes to science a social and cultural role that only a much smaller and more limited phenomenon—medicine—truly warrants.

Section 8: Beauty

CTU departs significantly from Plato in at least one respect—and emphatically so.

> Notwithstanding the historical Platonic tradition of likening and/or linking truth, goodness and beauty to each other, we believe that beauty—unlike truth and goodness—does not correspond to metaphysical realities. It is not an eidos, nor does it involve an order of particulars. Instead it is a notion directed largely at illusions. When, however, metaphysical realities are seen as "beautiful" this is only a way of looking at them to which humans are prone, but not one that captures the metaphysically real. . . . [W]e hold that beauty has no deep metaphysical or theological significance whatsoever. . . . only Truth and Goodness really matter when it comes to serving God. . . Beauty is quite literally, as the saying goes, "in the eye of the beholder"; or, as Shakespeare so poetically waxes, "Beauty is bought by judgment of the eye" (p.158)

This passage—and especially the concluding sentence—reveals an assumption about beauty that has a long history, and is very widely shared. This is the supposition that beauty is a property of appearance, and the 'object' of contemplation, a supposition shared both by those think that beauty lies in 'the eye of the beholder' and those who hold it to be an inherent property. This assumption is frequently associated with Plato, though there is reason to think that Plato regarded beauty as an object of *desire* rather than contemplation. But whatever the truth about this, the assumption that human interest in beauty is a matter of contemplating appearances undoubtedly received a powerful stimulus at a much later period, namely the 18th and 19th centuries. The distinction between the 'fine arts' and the 'mechanical arts' that was common in the first part of this period was eventually subsumed within a distinction in which fine art became 'Art' and mechanical art was relegated to the realms of 'Design'. This new concept of Art (with a capital A) increasingly came to be thought best exemplified in painting, to the point that 'Art' in the singular now means 'painting' (or at least the visual arts) and is only taken to include music and poetry when more general reference is made to 'the arts'. This 'Invention of Art' (to use Larry Shiner's phrase) has led to the assumption about beauty that *CTU* endorses—namely its being a matter of visual appearance and an object of contemplation.

There is a good case to be made for thinking that this is an unfortunate distortion, however. Beauty cannot be a matter of appearance because, for example, beautiful music has *no* appearance. It has to be heard, generally (though we can also 'hear' music 'in our heads'), but its beauty arises from harmonic and melodic structures, not from sensory phenomena *per se*. Likewise, beautiful poetry has no appearance. Though a poem might be beautifully printed on beautiful paper, a beautiful poem transcends this appearance, and remains beautiful even if printed badly on poor materials (just as a poor poem gains nothing from fine printing). The poem's *intrinsic* beauty is inseparable from its cognitive content—what it says—and thus can only be appreciated through an exercise of the understanding. Anyone from anywhere can savor the beautiful appearance of a sunset, but only someone who understands Russian can properly appreciate the poetry of Pushkin.

The point of these remarks in this context is not merely to direct attention to a one sided view of beauty that is widespread in contemporary philosophy, and our culture more broadly. They also serve to challenge the distinction between beauty and design, and thus highlight an important dimension of action. Human actions have *style* as well as content, purpose and effect. When *CTU* says 'only Truth and Goodness really matter when it comes to serving God' this presupposes that the value of truthful statements and good actions can be assessed independently of the style in which they are uttered or performed. This is by no means evident. Scientists and mathematicians often take elegance and simplicity as marks of superiority in proofs and theories; some are even prepared to refer to such features as 'beautiful'. In practical life, too, value is often a function of style. It is not merely gifts in themselves that we value, but the manner in which they are given. Indeed arguably, some actions—those of politeness for instance—are *pure* style. Saying ‘thank you’ need have neither purpose (to gratify someone) or effect (their being gratified). It may of course have this purpose and this effect, but is intelligible and can be valued without them. Now if the stylistic dimension of an action—its gracefulness, simplicity, elegance, and so on—matters in relations between human beings, why should it not also matter in the service of God?

Perhaps there is a good answer to this question, but *CTU*’s relegation of beauty to metaphysical and theological insignificance rests upon a concept of beauty which, however widely assumed, is open to radical challenge. My own view is what I am calling ‘style’ is a crucial dimension of human action. Style is what turns lust into love, child care into parenting, feeding into dining, dress into fashion, fatalism into fortitude, and innumerably many other examples. In a religious or spiritual context, it is also what turns servility into worship.

Section 9: Ultimate Person

CTU concludes with reflection on the ‘Ultimate Person’. It is a feature of ‘the contemporary Western World’, p.198 tells us, that ‘the vast majority of [human] persons can best satisfy God’s Will by belonging to an institution and by fulfilling specialized functions within that institution’. The ‘Institution of Science’ is a contender for this role, but its potential is vitiated by the errors of scientism. The Church of old ‘Abrahamic’ theology, on the other hand, is no longer adequate, if it ever was. Hence the need for an ‘Ultimate Person’.

Let us assume, for the purposes of this section, that the general argument of *CTU* does sustain the idea that there is need for a new institution that will provide the structure within which individual human beings can best find their most satisfactory mode of life, which is to say, serving God’s will. There remains a question as to whether it is illuminating to call this institution an *Ultimate Person*.

One initial point to be observed is this. In order to distance itself from assumed allegiance to any one religious tradition, *CTU* expresses indifference between the terms ‘church’ ‘temple’ ‘mosque’ and ‘synagogue’. There is an important linguistic ambiguity here, however. The English word ‘church’ refers to a building set apart for the purpose of Christian worship. In this sense a Christian church finds a direct equivalent in the Islamic mosque, Jewish synagogue and Hindu temple. But none of these other religions has anything comparable to Christianity’s ‘ecclesia’, the Church (which I shall capitalize) understood as a ‘holy, catholic and apostolic’ successor to Christ. The Church in this sense is not a building at all, or even a corporate institution. It is a ‘mystical body’ of which the Risen Christ (not the historical Jesus) is the Head. This conception of The Church is uniquely Christian. It is not Abrahamic, and so has no counterpart in the other Abrahamic religions. The remarkable fact that Christians are divided into very many independent corporate entities (Catholic, Reformed, Anglican, Lutheran, Baptist, Orthodox, Coptic etc) while at the same time continuing to affirm (in the Nicene Creed) their belief in ONE holy, catholic and apostolic church, shows that the Church is not an ‘institution’ in any standard sense. Furthermore, since by most accounts, the Church comprises members both living (the Church Militant) and dead (the Church Triumphant) all of whom combine to form a ‘communion of saints’, the Church has historical manifestation, but not temporal existence. In addition, individual members of the visible institutional church (even prominent and authoritative ones) can, contrary to reputation and appearance, be agents of the anti-Christ (as protestants in times past famously alleged of the Pope). This means that we cannot identify any earthly corporate entity with ‘the Church’, and that is why it has to be thought of as a *mystical* body.

Here I am merely sketching the traditional theology of the Church, without seeking to defend or criticise it. Whether or not the Christians’ ‘Church’ is a metaphysically coherent conception, properly grounded in an adequate theology, is not the principal issue here. The question, rather, is whether *CTU* is in effect relying on a highly unusual and distinctive conception which—given *CTU*’s own metaphysics of persons and institutions—it cannot actually accommodate. On p.217, the reader is warned that the ‘discussion of some other ways that the Ultimate Person of Humankind will differ from traditional religious institutions . . . must be understood to be preliminary and cautious’. One preliminary investigation that seems to me essential relates to this question: Can the metaphysical vision of *CTU* retain anything like the traditional Christian concept of 'the Church' at all? If it cannot, just how does the new institution it envisions replace/ displace the historic institution that is the Christian church?

Summary

CTU is a highly complex work. In my estimation, the earlier chapters are more adequately worked out than the latter. In particular I think that more work needs to be done both on the Institution of Science and the 'Ultimate Person of Humankind'. In refining the metaphysical conception as a whole, the following questions seem to be those that chiefly warrant further reflection.

(a) What is the relation between language, thought and agency? Is the fundamental position from which CTU proceeds Platonic, or Wittgensteinian?
(b) Can metaphysical inquiry generate religious and ethical prescription without any engagement in practical reason?

(c) Can the concept of corporate persons be extended to include features customarily confined to individual human persons?

(d) How does CTU's conception of God motivate and sustain the practice of worship?

(e) Just what metaphysical features must an 'institution' have if it is to 'absorb' the individual in a mode of life of maximal service to 'ultimate purpose'?

Review 2: Dean W. Zimmerman

I. An Overview of Ammonius's Metaphysical System

What "Ammonius" (the pseudonym by which the author Marc Sanders insists on being known) offers the readers of Coming to Understanding (2010) is a grand metaphysical system; one that not only "limns the structure of reality" (as all ontological schemes must attempt to do), but also tries to explain "what it all means"—revealing the purpose of the universe and of persons within it.

The treatise has two aims: in the first half, the author develops and defends a quite original ontological theory, one implying that everything exists for a certain purpose: "coming-to-understanding"; and in the second half, he draws out the consequences of his conclusion about the purpose for which we exist, attempting to derive a positive moral theory from his metaphysics. My review essay also consists of two main parts. The greatest innovation of the first half of Coming to Understanding (and of the treatise as a whole) is the highly detailed theory of the eide—i.e., the fundamental constituents of reality, which, at least initially, appear to be something like Platonic Forms. Much of my criticism of the treatise will concern the role of the eide, and the relations that are supposed to hold among them. The other large-scale criticism I shall lodge, in the final part of my essay, concerns the derivation of ethical conclusions from the results of the metaphysical speculations in the first three parts.

But before plunging into a detailed critique of these specific aspects of the author's metaphysical system and methods, I shall briefly describe the broad contours of his metaphysics, indicating points of contact with other philosophers and theologians, and noting doctrines one will find nowhere but in this treatise.

The Basic Elements of Metaphysics

Ammonius is a Monist, in at least one sense of the word: He believes there is one thing (which he calls "God") upon which everything else depends. This being is a person who is conscious of some things, after a fashion; but Ammonius's Deity is outside of time, and not an agent intervening in nature in miraculous ways. In order for the Deity to be conscious of anything, less exalted persons, including human beings, must achieve a certain level of moral excellence, and learn certain kinds of facts. Ordinary human beings, or "selves", are a combination of a metaphysical core—a cognitive agent that exists outside of time and space—and a physical agent, something in space and time. The two stand in a complicated relationship—the atemporal cognitive agent is dependent upon the physical one, and the physical one somehow "imitates" the mental one. The mind influences the body—e.g., the body moves in accordance with the timeless agent's choices—but the agent does not control the body by means of an exercise of "efficient causation"; rather, the atemporal agent exerts a kind of teleological pull upon the spatiotemporal body.

Cognitive agents that achieve a certain level of moral goodness—being, "on balance", good—become Persons, with a capital "P"; only things that *they* know contribute to God's consciousness. And, as best I can tell, only *some* things they know become part of God's consciousness: namely, truths about metaphysical reality. Ammonius identifies metaphysical reality with a realm of entities he calls "*eide*"; so the facts they know which contribute to God's consciousness are facts about the nature of the *eide*. The *eide* are actually "attributes of God"; so, what God is able to learn, through the awareness of good agents, is truths about God's own nature (pp.128-9). God's chief end is self-understanding, and, since that can only be achieved by good persons coming to understand metaphysical truths, promoting such knowledge on the part of good persons should be the chief end of human beings, as well.

Points of Contact, Points of Difference

Many echoes of other theological and metaphysical systems can be heard here, though often transposed into a much more ontological key. Ammonius's conception of God and of the destiny of the human "soul" includes themes one can find in quite a few mid-20th Century theologians. In Tillich and other Christian theologians of his generation, God becomes a timeless "ground of being" to whom thoughts and intentions may be attributed only tenuously. Tillich, Bultmann, and many other theologians completely repudiated supernaturalist elements of Christianity, including the idea of God intervening miraculously in history. Bultmann taught that the only kind of "afterlife" to be hoped for is some kind of timeless union with God—not "after time" but "above time", and not a union in which one's personality really survives as such.

Whitehead, and the process theologians he inspired, had more to say about God's agency in the world than merely rejecting miracles and intervention. They posited a kind of divine teleological causation at work in everything—God providing the initial "aim" in every process of coming to be. The God of process theology does not unilaterally cause things to happen; God's creatures must serve him if the divine will is to be accomplished, and they may well frustrate his will.

There are family resemblances between Ammonius's views and these theological precursors. But the pieces are put together in different ways, and given different rationales. Ammonius's God belongs to the timeless realm because God's nature consists of something like Neo-Platonic Forms—God is timelessly eternal for metaphysical reasons. The conditions under which individual humans are united with God have to do with the extent to which we serve God's purposes; and a mechanism for this union is given a more precise description than one finds in any of the theologians. Every act of knowing a metaphysical truth on the part of a pious person becomes a part of God's Consciousness; these events in the lives of persons are simultaneously (or, rather, timelessly) also parts of God's act of knowing. (Ammonius calls the sum of such acts, in the life of a pious person, the person's "Soul".) One finds nothing like this, to my knowledge, in the tradition of liberal Protestant thought. Furthermore, unlike most, if not all, of these 20th Century theologians, Ammonius's God only knows things that human beings know. Our coming to know more, for the Deity's sake, is our chief end.

The idea that human beings are, fundamentally, outside of space and time, also calls to mind Kant's noumenal realm; but Ammonius does not attempt to use the timelessness of choosers as a way to reconcile free choice with determinism in the "phenomenal" or spatiotemporal realm. A choice, made manifest in bodily actions at a certain time and place, may be timeless; nevertheless, if the action taken is deterministically caused by prior states of the universe and inexorable laws of nature, it would not be an action freely chosen.

Perhaps the most noteworthy consilience between Ammonius and another thinker is to be found in the similarity between Ammonius's and Mark Johnston's conception of God's purpose. The definition of "the Highest One" in Johnston's *Saving God* (Princeton U. P., 2009) is "the outpouring of Being by way of its exemplification in ordinary existents for the sake of the self-disclosure of Being" (p.189). For Ammonius, too, God's Will is self-disclosure—that God could come to comprehend God's own nature. In both of their theologico-metaphysical systems, God in some ways resembles the Deity of liberal theology, but the divine purpose is a kind of "self-disclosure" or "self-understanding" that has a more metaphysical ring to it than anything found in recent Christian theology. Johnston attempts to draw *relatively* traditional, Christian moral implications out of his God's purpose; we are called, he says, to a kind of selfless Agape. I must confess that the route Johnston traces from God's nature to this conclusion is not at all clear to me. The ethical implications Ammonius draws from his doctrine of God, on the other hand, do seem to me to follow quite straightforwardly. But I shall argue that they lead further than Ammonius should want to go.

A Fruitful Idea for Non-Supernaturalist Theists

Although I am not, myself, attracted to Ammonius's conception of the Deity, it is a picture which, in rough outline, obviously has great appeal in some quarters—primarily, among those philosophers and theologians who admire certain aspects of traditional religion, but find they cannot take its supernatural elements seriously. Ammonius's reasons for disbelief in the traditional Deity are far from trivial. His depiction of the dubious origins and subsequent histories of the Abrahamic faiths highlights real intellectual problems for anyone who would continue to adhere to one of them. As he points out, the problem of evil presents a huge challenge to such people (a group to which I belong); and it is a challenge he thinks cannot be met by anyone holding on to the God of the Western monotheisms. The only viable theism, he concludes, is one that gives up most of the traditional divine attributes. Now, I believe there is a great deal that can be said—indeed, that *has* been said—in defense of a theism in which God retains these attributes (with, perhaps, a caveat concerning foreknowledge of free actions). But I have to admit that most philosophers will be on Ammonius's side of these arguments, not mine.

Among those who come this far with Ammonius in rejecting traditional religion, some—like Mark Johnston, Bultmann, Tillich, Spinoza, and many others—find that they cannot believe we live in a universe without any meaning or purpose, other than what we can impose upon it. Some still have a sense that there is a "Most High One" (as Johnston calls it) upon which everything else depends and to which we owe a kind of worship or devotion. For the considerable number of thinkers who find themselves on this path, Ammonius's work contains much of value. I strongly commend it to them—they will find numerous ingenious solutions to problems that arise within this perspective.

Since this perspective is not mine, I will not attempt to lift Ammonius's best ideas and put them to use within the framework of Tillich's theology, or Johnston's panentheism. I will, however, briefly point out one element of his system that seems to me to be particularly promising.

Thinkers in this tradition face some serious questions, none more puzzling (to me, at least) than this: What in the world is it supposed to be like to enjoy "union" with a "ground-of-being" style God? How can persons whose lives do not extend into some heavenly realm nevertheless be joined to God in a deep and significant way? Although I am no expert on the matter, my impression is that Bultmann, Tillich, and the rest do not really have much to say about this—that it is left an impenetrable mystery. Ammonius, on the other hand, has a truly original, fully developed theory that casts a new light on the possible nature of this union. Good persons can generate "souls"; in doing so, they thereby think thoughts that are at once *their own* and *also* portions of *God's very own knowledge*. Our highest thoughts are God's thoughts, as well. And this is not an idle wheel in Ammonius system; it is truly important that we are united to God in this way, for these are thoughts God needs us to think—in having them, we will have contributed to the divine self-understanding.

A philosopher or theologian might have reservations about the criterion for soul-generation (Ammonius makes use of the notion of being “on balance, good”, which some will find problematic; a couple of alternative criteria are mentioned below), or have doubts about whether God mainly values our thoughts about *metaphysics*; while still finding the model highly suggestive, and potentially fruitful. I find much of the writing by scholars in this tradition impenetrable (I am thinking particularly of the mid-20th Century theologians). I usually have no clue what their Deity is really like, what “union” with this being could consist in, or why it would be a good thing. Ammonius’s doctrine of “Soul-making” (not to be confused with Hick’s) makes his spin on these ideas much more understandable and attractive than what is usually on offer.

But I have said enough about the contours of Ammonius’s complex and impressive system, and done enough gesturing in the direction of its more provocative, original, and potentially fruitful parts. In time-honored philosophical fashion, I shall show my respect for Ammonius’s positive accomplishments by attending to the finer details of the parts I find most problematic.

II. Criticism of the Metaphysics

“Eduction”: A Generalization of Scientific Method

Ammonius calls the kind of reasoning that will be used to justify his metaphysical views, “eduction”. The justificatory methods that eduction comprises are advocated as nothing more than a generalized version of the methods used in science—or, as he puts it, “the general methods of rational thought” (p.47). In fact, he might as well have simply called the method “rational inquiry”. It makes use of deduction, induction, and what Pierce called “abduction”—nowadays, more often called “inference to the best explanation”.

The method is illustrated by Sherlock Holmes’s so-called “deductions”. One takes a body of data, and looks for theories that explain the data—where a “theory” is a general description of the subject matter, one that imposes some kind of taxonomy and unity upon the phenomena. Somehow, one tries to determine which of the theories available at that point is “best”; then one derives predictions from it using deduction; and the predictions are tested inductively. If the tests are negative, one revises it so as to be in better conformity with the data, in the “best” way possible; and the process begins again.

As Ammonius points out, in metaphysics, deduction and induction do not do nearly so much heavy lifting as abduction. In the simple sketch of Sherlockian method just given, abduction comes into play when determining which among several otherwise seemingly adequate theories is “best”. Abduction includes a multitude of explanatory strategies. In particular, Ammonius agrees with those advocates of inference to the best explanation who say that an explanation can be better than another in virtue of “internal aesthetic virtues” (p.42). Symmetries within a theory, simplicity, internal coherence, and other factors—“often difficult for a scientist to verbally articulate” (p.41)—are allowed to favor one theory over another, if other things are equal.

In metaphysics, unlike the empirical sciences, the “observations” predicted by a theory “massively underdetermine which observationally adequate theory should be adopted” (p.41), and so the metaphysician must fall back upon these theoretical virtues—which often fail to yield undisputed verdicts when used to judge competing theories. Different metaphysicians will assign different weights to various kinds of simplicity, symmetry, and other quasi-aesthetic features; and they will also frequently disagree about how much of any one virtue a given theory displays, compared to some competing theory.

Ammonius presses into service the rather obscure word, “eduction”, to describe the combined use of the methods just described. Since we already have more familiar names—e.g., rational inquiry, reasoning, generalized scientific method—for roughly the same thing, it will strike some readers as odd, perhaps as an attempt to appear innovative. But Ammonius does not intend to be innovative in methodology; he means to be treading the well-worn paths that all respectable metaphysicians have tried to follow. It would be unfortunate if the peculiar choice of terminology led readers to think otherwise.

There should be little controversy about the viability of the method in any legitimate field of knowledge. Essentially, a person is engaged in eduction if she is pursuing reflective equilibrium and accepts inference to the best explanation as a valid form of reasoning, in addition to deduction and induction. Critics of metaphysics may claim that it does not constitute a field of knowledge or even a field of reasonable belief—they may, like the positivists, think there are no real questions being addressed by metaphysics; or that, in the absence of methods of inquiry that lead to convergence, there is no point in attempting to do metaphysics. But practitioners of metaphysics should find little, if anything, to disagree with in Ammonius's advocacy of eduction. His insistence upon "fallibilism" in metaphysics is laudable; a metaphysical theory "can only have the status of a body of internally virtuous explanatory proposals that remain open to continual refinement and improvement" (p.42). Ammonius's ontological system has undergone several major revisions, in the light of criticisms and counterproposals he has solicited from a wide range of professional metaphysicians; so he obviously takes seriously the fallibility of eduction, when applied to ontological matters.

The Value of Explicit Definitions

Ammonius suggests a connection between the admission of fallibility in our metaphysical theories, and willingness to get by without "precise definitions of concepts—necessary and sufficient conditions—that are to govern a field of study" (p.43).

> [S]ince metaphysics cannot aspire to the certainty of logic or mathematics, it is useless to lay down strict, unchanging definitions of the philosophical concepts in play. For just as in the empirical sciences, where concepts get modified along with empirical theories, so also, as philosophy develops by way of better and better eductions, central philosophical concepts must be

> modified. Concepts are themselves tightly wound-up little theories, which must evolve as the larger theoretical framework, which includes them, evolves. (p.44)

As the ontological system of Part 2 unfolds, the significance of these remarks becomes clear. Ammonius will make use of Plato's term, "*eide*" (and "*eidos*"), as a name for a kind of entity that plays a crucial role in his ontological scheme; and he will not give us anything like "necessary and sufficient conditions" for something's being an *eidos*. Shortly, I shall try to tease out what it is, exactly, that the *eide* have in common; what role they play in Ammonius's metaphysics. Their nature is, I will argue, rather mysterious; initially, they seem similar to Plato's *eide* or Forms, with respect to their theoretical role and intrinsic nature; but, once the full theory is on the table, they no longer have this role in common, and the meaning of "*eide*" is, I shall argue, difficult to determine.

Does request for an explanation of the meaning of "*eide*" constitute an illegitimate demand for "precise definition" in a field where such precision is not to be expected? I do not think so. When a philosopher introduces a technical term, we have every right to ask for an explanation of what it means. Not every explanation need take the form of giving necessary and sufficient conditions; though sometimes our explanations will do so (and I do not see why the fact that our theories are inevitably provisional should discourage the attempt to make *today's* version of the theory precise by spelling out its details). Philosophers can meet the demand for an explanation of new technical terms by several means. They can explain what their new terms mean by way of examples. D. C. Williams managed to teach us to use his word "tropes" in that way; we could just see, after a few examples, that they all had something in common; and it was easy to go on from there, and to predict what Williams would or would not call a "trope". If his examples did not typically produce this result in readers making a good-faith effort to understand him, the meaningfulness of his word, "trope", would rightly be called into question.

Often, the giving of examples is accompanied by a detailed description of the theoretical role the new term is to play within a metaphysical theory. So, Frege taught us his special, technical use of the word "thought" by explicitly defining it in terms of "truth" and another one of his technical notions, the "sense" of a sentence; but he also gave us plenty of examples to help us get the hang of it. Peter van Inwagen, defending the existence of fictional entities such as Sherlock Holmes, introduced the relation of "holding" that is supposed to pertain to a character like Holmes and the properties attributed to him by a fiction, such as intellectual prowess and a competitive nature. "Holding" is clearly a technical term, peculiar to van Inwagen's metaphysics. Again, we are supposed to get the hang of this new notion by being told its theoretical role, and seeing numerous examples of it in use.

The case of Frege, and the "thought" (i.e., the notion of a mind-independent, non-linguistic proposition) is an illustration of a technical term explained, at least partially, in terms of another one of that philosopher's specially invented technical terms ("sense"). There is nothing, in principle, wrong with explaining new terminology in this way. But one mustn't go too far. Whitehead's Process Philosophy, in its full-blown form, arguably did just that: "actual entities", "actual occasions", "concrescence", "prehension"… after awhile, only a few true believers claim to be able to make sense of the whole system. For the rest of us, the new taxonomy Whitehead introduces is too alien, too poorly understood in its own right, for it to cast light upon the metaphysical problems it is supposed to solve; the capacity of Whitehead's system to really *explain* anything has, for us, evaporated.

Ammonius's theory of the *eide* is in danger of falling into a similar trap, as shall appear. Very many of the expressions he uses to help us understand the meaning of "*eidos*" are being used with a special sense, peculiar to his metaphysical system. The theoretical roles of several of his central notions prove difficult to pin down.

What is it to be an Eidos?

The nature of the *eide* is perhaps the greatest interpretive problem facing the reader of *Coming to Understanding.* Examining the "wheel" or spiral reveals what at least initially appears to be a heterogeneous list. Some entries seem to be the names of what would traditionally be thought of as properties or kinds (*Being*, *The Goodness of Personhood*, *Choosing*, *Awareness*, *Piety*), others seem to be individuals (*God*, *The Block Universe*), still others seem to be collections of properties, or collections of individuals (*The Attributes of God* a.k.a. *The Eide*, *Cognitive Agents*, *Souls*). What do they all have in common? In virtue of what do they all deserve the same name, "*eide*"? And does it have anything to do with the reason Plato gave the name *eide* to his Forms?

The problem is made acute by the appropriation of this technical term from Plato's notoriously difficult philosophical theory, the interpretation of which is, itself, contested. When the term is then applied to a list of things, many of which do not appear to play a role in Ammonius's theory that in any way resembles the role played by the *eide* in Plato's theory, the meaning of Ammonius's term becomes even less clear.

Appropriating another philosopher's technical term, and putting it to radically different use, is not unprecedented. I am reminded, again, of D. C. Williams's borrowing the term "trope" from Santayana, who had used it to mean a kind of repeatable essence, whereas Williams gave it the now standard meaning: a "particularized", nonrepeatable property instance. Of course Williams helped us get the hang of his new usage by giving us pages and pages of "homey" examples (e.g., the flavor, color, and shape tropes of his several lollipops in the first part of "The Elements of Being"). Ammonius's usage is not so tidily pinned down by means of unproblematic, familiar cases. The *eide* are contrasted with: God (who is nevertheless included among the *eide* for some purposes) and non-*eidetic* particulars, such as individual cognitive agents, physical agents, souls, and constructed entities like selves. Whatever the difference is between the non-*eidetic* particulars and the *eide*, it must be deep and important. The *eide* are the only things that show up on the wheel, and it will turn out that God's goal, which we are all to serve, is coming to understand the nature and interrelations among the *eide*. Belonging to this category *matters*; they are much more important than mundane individuals and their mundane states and relations. But what do the *eide* have in common, what makes them of greater interest to God than, say, all the cognitive and physical agents and *their* interrelations?

In What Sense Are the Eide "The Attributes of God"?

One avenue to understanding the nature of the *eide* is immediately blocked. The *eide* are all said to be "attributes of God". But, unless the word "attribute" itself is given a highly unusual, technical meaning within the theory (and Ammonius does not, so far as I can see, explicitly offer one), many of the *eide* are *not* attributes of God.

Here is a truism if ever there was one: The *attributes* of a thing can be truly *attributed* to it. Another truism: The attributes that may truly be attributed to a thing are not to be distinguished from its *features* or *characteristics*; the latter terms are virtually synonymous with "attributes". So, assuming anything like the usual meaning of "attribute", if F is an attribute of X, it must at least be possible for there to be a name, "N", that picks out the attribute, and by means of which it can be attributed to X. In other words, there must, for each such F, be a name "N" that could be used in the following sort of sentence to say something true: "X has the attribute N", or, equivalently, "X is characterized by N".

Names are available for many of Ammonius's *eide* that can, with some plausibility, figure in truths of this form, with Ammonius's God as the subject. "God has the attribute *Being*"; "God has the attribute *Godhead*"; "God has the attribute *Intelligibility*"; and so on. For other *eide*, however, it is not at all obvious how to regard them as in any sense attributes of God.

Take, for instance, The Block Universe: the four—(or however-many-) dimensional world of space-time that contains everything concrete (p.74). "God has the attribute *The Block Universe*" does not sound right; "God has the attribute *being the Block Universe*" can't be right, either, since it is only God's body, not God Himself. "God has the attribute of *having The Block Universe as a part*" cannot be right, since God has no parts (p.64). It is simply not clear how The Block Universe could be construed as an attribute that characterizes God in any ordinary sense of the word "attribute".

Other *eide* are at least as difficult to regard as attributes of God; and some of them are explicitly barred, by Ammonius himself, from being attributes of God—again, in the ordinary sense of this term. *Choosing*, for example, is an *eidos*; but, on Ammonius's conception of

God, it is not an attribute of God. If "God has the attribute of *Choosing*" were true, then God would choose; God would be the kind of Person who makes choices—but God "neither makes nor acts upon choices" (p.115).

I see no way of construing *Information*, *States of Affairs*, *Ontological Dependence*, *Cognitive Agents*, *Part and Whole*, along with several other *eide*, as attributes of God. Now, on some versions of monism (e.g., Jonathan Schaffer's monism), the One, although it is in some sense ontologically prior to everything else, nevertheless has more mundane things as parts. Sometimes it is perfectly sensible to call something "an attribute of X" when, strictly speaking, it is only one of X's parts that has the attribute in the primary sense. The U.S. government can address the United Nations by having its ambassador address the U.N. This avenue, too, is blocked; since Ammonius's God has no parts.

Although God may be simple, He is nevertheless responsible for the existence of everything else; all other things are, ultimately, ontologically dependent upon God. In virtue of this fact, Ammonius's view does surely qualify as a kind of monism. One might suggest that, just as a thing can be said to have an attribute in virtue of the fact that one of its parts does; similarly, a thing might be said to have an attribute in virtue of the fact that something that is ontologically dependent upon it has that attribute. However, since *everything* is dependent upon God, *every attribute* of *everything* would then be a candidate for being an *eidos*; by itself, this suggestion does nothing to help pin down Ammonius's meaning. Furthermore, there is the problem that some of the *eide* seem hard to construe as attributes of any sort, whether of God or of something else (e.g., The Block Universe, Cognitive Agents, States of Affairs).

So the characterization "Attributes of God" provides no guidance in the attempt to figure out what the *eide* are like, what they all have in common. Perhaps they can all, somehow, be construed as attributes; but they are certainly not all attributes of God, and some of them do not seem to be attributes of anything else, either. The failure of the *eide* to be, in a straightforward sense, "The Attributes of God" blocks one route to explaining why the goal of grasping the nature of the *eide* should be so important to God. One could understand how a grasp of God's nature—

what God is like, intrinsically—might be of great value, to God and others. If the *eide* were, indeed, in the ordinary sense, God's attributes, understanding them would be to understand God's nature. After all, the nature of a thing can be identified with its attributes, or at least with an important subset of them—perhaps its intrinsic ones, or its essential ones. Since the *eide* are not all, in any straightforward sense, attributes of God, coming to understand them cannot be identified with coming to understand God's nature. So we are left with the question: Why is it just *these* things that are so important to God?

The Historical Predecessors of the Eide

In section 1.2, Ammonius provides a historical backdrop for his project, and one ought to be able to gain insight into the nature of Ammonius's *eide* by comparing them with their counterparts in Plato, Aristotle, Spinoza, Kant, Husserl, Chisholm, and others. Ammonius traces the history of "Category Theory", describing its ups and downs (from his point of view) since its origins in Plato and Aristotle. The ways in which he says his *eide* are similar to, and different from, the Categories posited by philosophers throughout history, does direct the reader toward a quite definite conception of the *eide*. If one were to read only Part One of *Coming to Understanding*, the meaning of *eide* in Ammonius's metaphysics would seem perfectly clear. I shall elucidate this Part One conception of the *eide*, and then show why it cannot, after all, be what Ammonius has in mind.

The historical precedents for his theory of the *eide* are all varieties of "Category Theory". The categories in question are the ontologically most basic *kinds*, the "relatively basic categories or divisions of reality" (p.14). Ammonius's first and, in the end, most favored example of the subject matter of Category Theory is Plato's theory of the Forms—Plato's "ideas" or *eide*, such as *Goodness*, *Justice*, *Beauty*, etc. According to Plato, all good, just, and beautiful things "participate in" or "imitate" the relevant *eide*, and it is in virtue of that relationship that the things are good, just, and beautiful. In Aristotle, the categories are "tamed", becoming a list of "predicables". Spinoza's categories are just two: thought and extension. Kant's categories are supposed to be applicable to every possible object of thought. As Ammonius points out, Kant takes Category Theory in a subjective direction; but Kant's categories are nevertheless clearly intended to be in the same "line of work" as Aristotle's. Hegel's version of category theory is faulted, by Ammonius, for lacking anything like the structure of Porphyry's Tree, in which sub-categories falling under a higher category are species of the same genus, distinguished by *differentia*. So, whatever the difficulties of interpreting Hegel, Ammonius certainly sees his scheme of thesis, antithesis, and synthesis as providing categories *under which things fall*, having something like the traditional structure of genus and species found in Aristotle. Category Theory in Husserl and Chisholm again clearly takes the form of a search for fundamental kinds.

After this brief trip through the history of Category Theory, Ammonius identifies the intended subject of all these theories, i.e. "the Categories", with the *eide* of the theory to be propounded in the pages to come (pp.24-5). Since the term is taken from Plato's theory of the Forms, its use suggests the theory will be more similar to Plato's than to other versions of Category Theory; as, in some respects, it certainly is.

What do all these theories have in common? What is the conceptual role of "Category" in each of these historical precedents for the theory of *eide* (and, indeed, the conceptual role of Ammonius's *eide* themselves, insofar as they are described in Part One)? The Categories are, in each case, the "relatively basic categories or divisions of reality", as Ammonius puts it. For a category to divide reality, there must be two kinds of things: the things that belong to that category, and the things that do not. For the divisions to be deep and natural ones, the things that belong to one category must be similar in some metaphysically significant respect, and in this respect different from all the things not belonging to the category. In every historical precedent Ammonius gives for the *eide*, then, they are responsible for dividing reality into fundamental kinds; in every case, it is built into the very idea of a category that things can "fall under" it, or "be instances" of it, or "exemplify" it; and in every case, falling under the category accounts for an important respect in which things resemble one another. Although, as shall appear, there are difficulties in interpreting Ammonius's *eide* as all playing this role, his initial characterization of the *eide*, in section 1.3, seems to place them firmly within this tradition: They are simply Plato's *eide*, properly understood, and as such, play the role of grounding sameness and difference among particulars—at least with respect to sameness and difference in the metaphysically interesting or ontologically fundamental aspects of things. A great deal of what Ammonius says about the *eide* makes perfect sense, if we read him in this way.

Two Theories of the Eide

At the beginning of section 1.3, "Plato's *Eide* Revisited", Ammonius contrasts two approaches to finding metaphysical grounds for "the facts of sameness and difference" (p.26); and locates his theory of the *eide* on one side of this divide. On the "property-first theory", "common properties ground the mutual similarities and differences among things, similarities and differences in virtue of which things are classified together in various natural kinds" (p.26). He will go on to describe this as the theory that the *eide* are "universals" that are "instantiated" by particulars (p.27). On the contrasting theory, "it is the preeminent particulars or eide that an individual resembles or imitates that determines what properties the individual has" (p.26). According to this view, which might be called the "particulars-first theory" of similarity and difference,

> [t]he eide are not universals but particulars; they are not instantiated but imitated. To be sure, the eide are ontologically *preeminent* particulars; they are not in space and time, and they are ontologically prior to the ordinary spatiotemporal particulars that fall under and imitate them. (p.29)

Ammonius embraces the particulars-first theory and argues against the properties-first theory. Throughout Part One, it would appear that Ammonius's theory of the *eide* just *is* the particulars-first theory of sameness and difference; that it is not only emerges later on.

What exactly is it about the properties-first view that Ammonius dislikes, and how does his preferred theory contrast with it? In particular, what does it mean to say that the *eide* are particulars, and not universals; and that the *eide* are not "instantiated" by the particulars that nevertheless "fall under" them, and resemble one another in virtue of doing so?

Contrasts between "particulars" and "universals", like the closely related contrasts between "concrete objects" and "abstract objects", are multifarious; the terms are used in radically different ways by eminent philosophers, so when they appear in a philosophical work, there is often no telling—at least at first—what they might mean. Russell teased apart several different alternative lines one might be drawing by means of such terms in "On the Relation of Universals and Particulars", (*Proceedings of the Aristotelian Society*, Vol. XII, 1912, pp.1-24). But his careful distinctions and advice have had little effect; these pairs of contrasting terms continue to be used to mean many different things in contemporary philosophical writings (or to vaguely point in the direction of many different meanings).

(A case in point: Philosophers often blithely say "sets are abstract objects, and therefore outside of space and time", without bothering to explain what "abstract" means. It cannot mean "the result of abstracting away from some aspects of a thing". If anything, a *set* of some objects, or the *unit set* of a single object, is something extra: it is those objects or that object *plus* something…though it is difficult to say what, exactly, the extra thing is. And these philosophers do not usually tell us why exactly "outside space and time" should be thought to follow from "abstract". I notice a thing's color by "abstracting away from" its shape and other qualities; but why should the end result of this process of abstraction be thought to suddenly yield a completely non-spatial and non-temporal item when it was, all along, the process of attending to something in space and time? Perhaps, in this context, the word "abstract" has nothing to do with the process of abstraction; but then we need some further story about what it *does* mean.)

So, when any metaphysician describes some of the creatures in his or her ontological menagerie as "particulars" or "universals", "concrete" or "abstract", we do well to inquire exactly what he or she has in mind. I shall run through a few distinctions among types of entities and among theories of resemblance, distinctions that seem to me to be relatively unproblematic, and that will be useful in interpreting Ammonius's denial that his *eide* are universals, and his insistence that they are particulars.

(i) There are theories of similarity and difference according to which the metaphysics behind resemblances among individuals need posit nothing more than a set of individuals, perhaps allowing that it must be a set with some special property of "naturalness" or a set of things standing in a certain pattern of resemblance relations to members and non-members. (I shall ignore truly thoroughgoing nominalisms—ones that reject even sets.) This sort of theory is sometimes called "set-theoretic nominalism". By contrast, there are theories that insist that, at least in some cases of individuals with "something in common", the "something" is an additional entity to which all the individuals are somehow related —it is their common relation to *this* thing that makes the set of individuals special, and not a primitive feature of the set or a fact about their relations *to one another*. This contrast provides one meaning for the word "universal". Many metaphysicians will think that, whatever this special, additional individual may be like in other ways (in space-time or out of space-time; contingent or necessary; and, crucially, for present purposes, ontologically dependent or independent), it plays a distinctive role: the "universal role". Since Ammonius's *eide*—at least, all the *eide* described in Part One—do play this role, but are said not to be universals, this is clearly not the meaning of "universals" that Ammonius has in mind when he says that *none* of the *eide* are universals. So as to avoid quibbling about words, I shall use the expression "resemblance-maker role" instead of "universal role". A theory about similarity and difference that posits something in this role has a good claim to the title "realism", so that is what I shall call it: Realism about resemblance-makers.

Ammonius's particulars-first theory about the nature of similarity and difference, as described above, is clearly *not* a version of set-theoretic nominalism; and it clearly *is* a version of realism about resemblance-makers. Realism comes in many different flavors; realists say many different things about their resemblance-makers, and the relations holding between them and the particulars that resemble one another. Ammonius endorses Plato's "imitation" theory about the relation between a group of similar things and the common *eidos* in virtue of which they resemble one another: "In Plato's final development of the theory of the eide, ordinary particulars are said to imitate the eide"; and this is an idea he takes "very seriously" (p.36). He reports Plato's view as being that "ordinary particulars have certain characteristics in virtue of imitating their respective eide" (p.37). Since this latter description exactly mirrors Ammonius's statement of the particulars-first theory of similarity and difference, which is made *in propria persona*, (pp.26-9), I read him as endorsing Plato's account, at least in broad outline.

Ammonius's claim that Plato "comes to reject the conception of the eide as universals instantiated by particulars", and his own insistence that "[t]he eide are not universals but particulars; they are not instantiated but imitated", will sound odd to the ears of many metaphysicians. After all, the properties-first theory and the particulars-first theory have a lot in common. Each is a theory of what it is for things to be similar and different. In each case, similarities among individuals are explained in terms of their all standing in the same relation to a further thing, very different in nature from them. It would be natural for a metaphysician to say: "let us use the term 'instantiation' or 'participation' or 'exemplification' for that relation, *whatever it is*, that holds between individuals and a further thing, just in case standing in that relation to that further thing is what grounds their similarity in some respect; and let us call that further thing, a 'universal'." Such a metaphysician would say: "In Part 1, Ammonius, like Plato, has offered us a theory about the nature of the instantiation relation, namely, that it consists in *imitation*; and he has also, thereby, offered us a theory about the nature of universals, namely, that they constitute a sort of *paradigm*."

This metaphysician would, I believe, have the weight of tradition on her side: Plato's theory of the Forms, in all the versions one can read off of (or into) his dialogues, is traditionally called "realism about universals", and the theory of participation-as-imitation is traditionally described as a particular account of "instantiation". All of these terms—universal, *eide*, Form, participation, instantiation, exemplification—are terms of art. In such matters, my advice would be to let tradition carry the day, if there is a consistent traditional usage to fall back upon; and here, I believe, there clearly is. But so far as I can see, nothing substantive would be at issue between this metaphysician, who insists that Ammonius's property-first theory includes *universals* and a relation of *instantiation*; and Ammonius, who wishes to distance himself from theories that embrace this terminology.

One must look elsewhere, then, to find the point of Ammonius's insistence that the *eide* are particulars, not universals.

(ii) There is a distinction to be made between things that are the primary occupants of spatiotemporal locations (or the fundamental relata of spatiotemporal relations, in a relationist theory of space-time), and things that are at best indirect occupiers of space and time. This has sometimes been thought to mark the great divide between the abstract and the concrete; and, sometimes, the abstract has been identified with the realm of universals, the concrete with the realm of particulars. As an interpretation of Ammonius's use of these terms, this, too, is a dead end. Obviously, in calling his *eide* "particulars" and denying that they are "universals", he is not denying that they are abstract in this sense; for his *eide* (many, and I suspect all) are firmly lodged in a timeless eternity.

(iii) There is a distinction to be made between entities that admit of exact duplication; and entities that cannot be duplicated. Sometimes this distinction is thought to line up with the distinction between the particular and the universal. But, again, this cannot be Ammonius's rationale for calling the *eide* "particulars". Ammonius allows that "eide are like universals or properties in at least this respect: an eidos cannot be perfectly duplicated…. This feature of the eide, namely that they cannot be duplicated, marks off the eide from ordinary particulars, which can at least in principle be duplicated or perfectly resembled" (p.37). For many metaphysicians, I suspect that the *eide*'s being outside of time, playing the resemblance-maker role, and failing to admit of perfect duplication would be enough to clinch the deal: If Ammonius's *eide* are not universals, they will wonder, what would it take to be one? Again, though, if Ammonius wishes to reserve the contrast "particular-universal" for some other purpose, there is nothing but terminological disagreement here.

(iv) There are theories about similarity and difference that posit an entity to ground every meaningful, nonparadoxical predication—sometimes called “plenitudinous theories of universals”, though we had better call them “plenitudinous theories of resemblance-makers”. By contrast, there are theories according to which only predications ascribing the most fundamental features need to be regarded as grounded in relations to some entity beyond the item to which the feature is ascribed—“sparse theories of resemblance-makers”.

Plato, in at least some of his moods, would hold a sparse theory, positing forms only to explain certain cases of resemblance. What is it in virtue of which all just actions are just, all beautiful things beautiful, all good things good? The answer: imitation of the *eide* of Justice, Beauty, and Goodness. What is it in virtue of which one parcel of mud or dirt resembles another? It is not clear how Plato would answer this question; but, from the *Parmenides*, one gets the feeling there could be no *eide* to explain such similarities. So Plato’s theory of the Forms (i.e., what Plato means by “*eide*”) is a sparse theory of resemblance-makers.

Some contemporary defenders of sparse theories of universals look to science for the fundamental respects of resemblance, and denigrate normative properties like Plato’s paradigmatic forms—they are merely projections of our attitudes, and, as such, could hardly be *fundamental* ways for things to resemble one another. But this is an “in-house” disagreement among defenders of sparse theories of resemblance-makers; they disagree over which respects of resemblance are objective and fundamental—which ones are “out there in the world” and (as Plato put it) “cutting nature at the joints”. It is not a disagreement about the general role of resemblance-makers (i.e., what are usually called “universals”). They are still in the same game: namely, providing a metaphysical account of the most fundamental respects of resemblance among things (where “things” should be taken in the widest possible sense).

Ammonius’s particulars-first theory falls squarely on the side of the sparse theorists of resemblance-makers; and his refusal to call the *eide* “universals” is closely associated with his rejection of a plenitudinous theory. He says “the property-first theory appears to be bolstered by the seemingly fundamental role that properties play in making certain predications true or false" (p.26). He goes on to tie the property-first theory even more closely to a plenitude of universals, one for every meaningful predicate:

> [The property-first theory] treats having a property as the explanation of satisfying a predicate. Here is the fundamental idea of properties as universals: they are "predicables," that is, the things the having of which grounds the truth of this or that predication. One can then go on to ask whether these universals are in rebus, as Aristotle held, or transcendent, as Plato insists in his early dialogues. But the common doctrine is that universals ground predication; it is by having or instantiating this or that universal that you come to satisfy this or that predicate. (p.27)

So, at least *part* of what Ammonius means by denying that his *eide* (and those of Plato) are universals is this: they are sparse, only accounting for deep aspects of resemblance, and not needed for everything truly predicable of something else.

There is a certain irony in the fact that David Armstrong is mentioned in the paragraph introducing the distinction between property-first theories and particulars-first theories. The former are said to be committed to plenitudes of resemblance-makers; while the particulars-first theory is sparse. Armstrong, famously, defends a sparse theory of resemblance-makers; in this respect, Ammonius and Armstrong are in agreement. But of course Armstrong's resemblance-makers are universally agreed to deserve the name "universal"; Armstrong is the paradigmatic "Aristotelian realist about universals". So, rejecting plenitudinous theories of resemblance-makers would not *normally* be thought sufficient to render resemblance-makers worthy of the name "particulars".

There is, however, a further distinction that plays a role in Ammonius's rationale for denying that his *eide* are universals; and it seems to be at least as relevant to this denial as the point that they are sparse.

(v) What I have in mind is the distinction between, on the one hand, things that exist both independently of God and independently of more mundane concrete individuals like human beings; and, on the other hand, things that are ontologically dependent upon God or upon some of these more mundane individuals.

Ammonius has the most to say about this distinction at the beginning of Part 2. He reminds us that Part 1 contrasted various theories of "the categories, understood as at least giving the basic ontological divisions among things", and notes the distinctive features of his particulars-first theory, and the aspects of the properties-first theory he rejects:

> In Part 1, it was argued that the categories are eide, i.e., preeminent particulars that are ontologically more fundamental than the ordinary particulars around us….
>
> This is already a significant innovation in metaphysics and theology. For one thing, it decisively rejects the old doctrine of attributes as universals. It is important to note that this doctrine was always at odds with the idea of God as the Being on which everything else is ontologically dependent, and which is itself not dependent on anything else. For universals are understood to be the metaphysical underwriters of predication, and so are common to all those who satisfy the corresponding predicates. According to this doctrine, universals exist as the meanings of predicates anyway, and the other things that exist, including God, subsequently instantiate one or another group of the preexisting universals, and as a result have this or that nature. This is already a "two-realms" doctrine. There is the abstract realm of instantiatible universals, standing complete in itself, and then there is the concrete world of particulars, perhaps arranged according to God's creative plan. However, since universals are independently existing abstract entities, which give concrete things their natures when they are instantiated, universals

> cannot themselves be ontologically dependent on anything in the realm of particularity, including God. But this breaks with the fundamental characterization of God as the source of all being. God must already have a nature in order to create, i.e. manifest His Will in the generation of other beings. But in order to have a nature, according to the view that God's Attributes are universals, He must instantiate a certain range of universals, namely those constitutive of that nature. And this requires the prior existence of the universals themselves. Hence on the attributes as universals view, universals are themselves conceived as not ontologically dependent on God Himself. In a certain sense this amounts to the denial of the existence of God, at least if we take seriously the characterization of God as the source of all being.
>
> If God is the source of all being then He must in some way be the source of His own Attributes; they must emanate from Him, but this is possible only if those Attributes are particulars, not universals. (pp.50-1)

It is clear, then, where the *eide* fall with respect to distinction (v): They are ontologically dependent entities, ultimately all dependent upon God. The passage seems almost to treat dependence upon God as sufficient for particularity. Certainly, resemblance-makers that are both dependent upon God and also sparse in number are, by Ammonius's accounting, particulars. A theory of similarity and difference can fall on the "universals side" of distinctions (i), (ii), and (iii); but its resemblance-makers will be particulars, by Ammonius's lights, so long as they fall on the right sides of both (iv) and (v).

So far as I can see, Ammonius never considers the possibility that distinctions (iv) and (v) might be independent issues. But in fact the distinctions do seem to cut across one another. David Armstrong, as noted earlier, believes in a sparse theory of universals. Although his universals are dependent upon the existence of instances of those universals, they are certainly not dependent upon God (there being no

Deity in Armstrong's ontology); and John Bigelow is, I believe, a sparse theorist who accepts universals that do *not* depend upon their instances, and that do not depend upon God either. Some contemporary theists who believe in universals, like Peter van Inwagen, accept a plenitudinous theory and also confess that they cannot see how such things could depend upon God for their existence. But many theists (today and throughout the history of Western philosophy) will try to construe universals as something like paradigms in God's mind: although, like God, they are necessarily existing, they are nevertheless dependent upon God in the way that a thought is dependent upon its thinker. I suspect that many theists of this stripe would follow van Inwagen (and Plantinga and many other contemporary Christian philosophers) in embracing a plenitudinous theory. (After all, why not? God has plenty of thoughts to go around!) If there is a deep link between the two criteria Ammonius uses to determine whether a theory contains universals, it is not at all obvious.

Although the displayed passage, above, falls short of an explicit definition of what Ammonius means by "universal" and "particular", his view has, I submit, become relatively clear. At the very least, it is clear that the following sufficient conditions hold:

(U) An entity is a *universal* if: (a) common relations to it are supposed to account for similarities among other things (i.e., it plays the resemblance-maker role), (b) it belongs to a plenitude of similar things that serve as the grounds for all (non-paradoxical) predications, and (c) it exists independently of God and of things in the "concrete world".

(P) An entity is a *particular* if: (a) it does not belong to a plenitude of resemblance-makers that, together, serve as the grounds for all (non-paradoxical) predications, and (b) it depends upon God or things in the "concrete world" for its existence.

All the *eide* mentioned in Part 1 are elements in Ammonius's particulars-first theory of similarity and difference. All are, therefore, resemblance-makers. But, since the theory is a sparse one, and since they emanate from and are dependent upon God, they satisfy (P) and fall under Ammonius's concept of a particular.

The Apparent Shift in the Meaning of "Eide" in Part 2

Ammonius's use of the words "particular" and "universal" is obviously somewhat idiosyncratic. But the reader who goes no further than Part 1 can come away with a quite definite idea of what his *eide* are, and why he calls them all "particulars". The *eide* are dependent entities that, like Plato's *eide*, play the resemblance-making role; they are sparse, accounting only for fundamental aspects of resemblance; and the relation in virtue of which particulars "fall under" them is one of imitation.

The project of understanding the nature of Ammonius's *eide* would be over if one could rest here. The problem is that, unlike Plato's *eide*, Ammonius's do not all seem to play a resemblance-making role. Plato's *eide* were posited to explain what made all just acts just, all beautiful things beautiful, and so on. Very many of the things Ammonius calls "*eide*" do not seem to be posited for any such reason.

If a thing, X, plays the resemblance-making role in a metaphysical theory of similarity and difference, one should be able to say that the so-and-sos all resemble one another in virtue of some special relation in which they stand to X. I cannot think of any way to fill in a sentence such as: "The so-and-so's all resemble one another in virtue of imitating The Block Universe (or States of Affairs, or God's Attributes, or Cognitive Agents)".

One hypothesis is that Ammonius has simply decided, in Part 2 and the remainder of *Coming to Understanding*, to use "*eide*" in a new way, so that it has nothing to do with resemblance-making. In the end, I believe one must read him in this way. But I was thrown off the scent by the fact that he continues to call them *attributes*. If many things have an attribute, there will be some so-and-sos that resemble one another in virtue of standing in a special relation to that attribute; so attributes belonging to many things clearly play a resemblance-making role. If there are attributes that only one thing has (whether contingently or of necessity), they are still in the same line of work as the attributes had by many things: there is still something that is a certain way because it stands in this same sort of relation to such an attribute. So anything worthy of the name “attribute” simply *must* play the resemblance-making role, even if it is the attribute of but one entity, such as God.

As noted earlier, as the theory unfolds, the continued use of “attribute” in describing the *eide* turns out to be highly misleading. The fact that they are all called “attributes” provides no guidance in our attempt to understand what *eide* have in common; for they are said to be attributes *of God*, and many *eide* could only be attributes of God in some Pickwickian sense of the term “attribute”.

A More Abstract Approach to the Meaning of “Eide”

Once the eductions of the *eide* are underway in Part 2, *eide* are frequently introduced with no attempt to explain what things might resemble one another in virtue of imitating them, or how they could count as attributes of anything, including God (though they are still called “attributes of God”). So what is it that makes them all special, and makes their interrelations of such intense interest to God?

The only thing certain about the common nature of Ammonius’s *eide* is that they constitute a complex structure, standing in the various relations of ontological dependence exhibited by the wheel or spiral. My hypothesis is that, when Ammonius calls a thing an *eidos* or an Attribute of God he simply means: It is the kind of thing that shows up on this wheel. It need play no role in explaining similarity; and it might be impossible to *attribute* it to anything, even God.

The idea that “*eide*” simply means “things that stand in such-and-such relations encoded by the wheel” is supported by Ammonius’s insistence that a diagram can be “a taxonomy waiting for content” (p.45). He notes that diagrams can be used to introduce “abstract taxonomies that allow the groupings of things, and the positing of things, in ways different from the groupings allowable in natural languages” (p.46). Of course a diagram like the wheel could represent many things. It could, for example, be a map of the beginning of the yellow brick road, in which case the sharing of boundaries by regions would simply represent the sharing of boundaries by tiles in the road. In order for Ammonius to identify *one* of the (infinitely many, potentially radically different) taxonomies describable by means of his diagram as *the* content, he must tell us which relations among the regions "encode various generalizations we are building into our new taxonomy" (p.46). And this he certainly does, summing them up in Diagrams (2A) and (2B).

To understand what the *eide* are, then, one must understand the wheel; and to understand the wheel, one must understand the various relations that generate its pattern. Chief among them is the matter-form division of each member; the spiral can be seen as the result of a (timeless) "hylomorphically determined 'process'" (p.57), in which every item is divided into matter and form, and the sequence continues *ad infinitum* (since every particular has matter and form, and everything is a particular). My worry about the success of the wheel as an explanation of the meaning of "*eide*" is essentially the same as my worry about Whitehead's system. The relations posited as holding between things that represent *eide* in the diagram are, themselves, very difficult to understand; they are like Whitehead's "concresence", "prehension", "actual occasion", etc. The names for some of them are familiar; but, all too often, examination reveals that Ammonius is using them with a peculiar meaning, wresting them from their normal context. As a result, the real nature of the *eide*—what they all have in common, and why they are thought to be especially important to God—will continue, in the end, to elude me.

The details of Ammonius's metaphysical system are offered as the results of eduction—a process of inquiry, in which reasons can be given; not the result of a blinding flash of intuitive insight into the structure of reality. How, exactly, is the hylomorphic structure of the *eide* supported? What reasons are given for supposing the branching matter-form pattern holds everywhere, of everything?

Ammonius takes it as axiomatic that everything is a "particular". And from this it is said to follow that everything has form and matter, including God (see, e.g., pp. 52-3 and p. 58). If "particular", "matter", and "form" meant, in Ammonius's system, what they have meant to many in the tradition of Aristotle, this inference would be relatively straightforward. But, as we have seen, "particular" has turned out to have a special meaning for Ammonius; and "matter" and "form" will undergo considerable stretching too. As a consequence, the basic eduction that generates the wheel must be called into question.

Initially, form and matter are described in traditional terms: matter is (relatively) passive, form is active, differentiating and structuring that matter; “a particular just is that matter, formed in a certain way”, and the form in question is to be distinguished from “its efficient cause” (i.e., the cause of the matter’s being so in-formed), and also from the “telos or end” for which the matter is formed. Now, why think that this pattern of division into matter and form (and also of efficient causes and teleological causes) applies to God and things in a timeless realm that are remotely like Plato’s *eide*? How is its application “educed”?

In some theological traditions, God is said to be absolutely simple, not admitting division into matter and form. Ammonius insists that, although God is simple in the sense of not having parts, He is nevertheless a complex of matter and form. I see no particular argument, in Ammonius, for God’s hylomorphic complexity. But, in some contexts, Ammonius would not need much of an argument. Suppose, for example, that *everything else* seems to have a hylomorphic structure. In that case, one could defend divine hylomorphism on grounds of simplicity or uniformity. Theories are better the simpler they are; and inference to the best explanation could support extending the matter-form distinction to the Deity.

The actual material component proposed for the Deity is “Being”, understood *not* in the sense of a highest genus under which all things fall, but rather as “the most fundamental object or subject of which anything can be predicated” (p.73). What this sounds like is not an undifferentiated, passive “material”, but a fundamental property-bearer—what, in some metaphysical schemes, would be called a “substratum” or “bare particular”. In this case, it is the substratum of the property denominated “The Godhead”. Still, it would be fair to say that, between underlying property bearer and property borne, the former seems more “matter-like”, the latter being obviously more “form-like”. So far, then, so good; Ammonius’s use of matter and form stands a fair chance of being an analogical extension of their traditional meanings.

But after these first two eductions of matter-form structure—neither of which was patently obvious, since the first has been frequently denied, and the second is not a *clear* case of matter and form—the eductions become either terribly strained or non-existent. Why think that every other item on the list of the *eide*, including formal ones such as The Godhead, should display hylomorphic structure? This idea is certainly foreign to the Aristotelian conception of matter and form; when these notions are playing on their "home turf", the form of a thing would not be thought to be divisible into form and matter. The basis of Ammonius's eduction of universal hylomorphic structure is his axiomatic claim that everything is particular. But recall the sense in which an *eidos* that plays the resemblance-making role is a particular: it is caused to exist, and it is not part of a plentitudinous theory of resemblance-makers. Beyond that fact, the *eide*, as they figured in Part 1, appeared much like the universals of other metaphysical systems; they (or some of them, at any rate) satisfy the universal-like sides of the distinctions (i), (ii), and (iii). So Ammonius's eduction only goes through if matter-form structure is somehow required by a thing's (a) *depending upon God*, and (b) *not being part of a plenitude of resemblance-makers*.

I do not, however, see any connection between Ammonius's two criteria for particularity, on the one hand, and matter-form structure, on the other. What is it about simply *being caused to exist* (in one or another sense of "cause") that *demands* divisibility into matter and form? The history of philosophy is replete with metaphysical theories that would reject the implied connection. Many would do so because they reject hylomorphism altogether. But even Aristotle, and metaphysicians who borrow a matter-form distinction from Aristotle, will typically allow for created things that are not further divisible into matter and form. Examples would include Thomistic souls (which are created forms, and not further divisible into form and matter), and universals-conceived-of-as-Divine-Ideas (which, though dependent upon God, also do not divide naturally into form and matter; they are not modifications of a passive, divine, mental stuff). If ubiquitous hylomorphic structure is to be supported by the particularity of everything, *in Ammonius's very special sense of "particularity"*, he must say a good deal more about the connection between dependency and sparseness, on the one hand, and matter-form construction, on the other.

A further problem with the eduction of universal hylomorphism is the extent to which the meaning of "matter" and "form" are stretched by his theory. In an Aristotelian metaphysics, the examples of particulars are things like *this statue*, *that man* or *that woman*, etc. The notions of form and matter are introduced by distinguishing the shape of the statue from the clay out of which it is made; distinguishing the common humanity of the man or woman from the flesh, bone, and blood in his or her body; and then calling the former members of these contrasting pairs "forms" and the latter members "matter". But when the particulars in question are radically different from the paradigmatic Aristotelian particulars, some serious direction is required if the reader is to get the hang of applying the categories of matter and form in such a foreign context. Tearing the Aristotelian distinction from its traditional applications, and applying it so broadly as he does, requires more justification and explanation than Ammonius provides.

And, as the wheel unfolds, it becomes hard to see the appropriateness of matter-form pairs for every item. In many of Ammonius's examples of formal and material *eide*, I feel there may well be something matter-like and form-like to the two sides of his division. I find especially appealing the cases in which the material side seems like a plurality of things (States of Affairs, Cognitive Agents, Souls) or an undifferentiated blob (The Block Universe, Information, Awareness); it is not so hard to regard the formal side as imposing structure upon the more amorphous or plural side. (The case of Awareness, however, could easily be misleading. "Awareness" seems to me to be a use of a mass term to refer to a collection of discrete entities—particular persons who are aware—in something like the way "cutlery" or "furniture" refers to collections of individuals. After all, how could there be awareness other than by particular persons being, individually, aware? The idea that awareness comes in a cloudy, undifferentiated form sounds wrong to me; there is no such thing as "mind-stuff" that congeals into loci of consciousness; there are only individual minds that are conscious. This casts into doubt Ammonius's reason for putting Awareness on the side of material form; see p.98).

Although these proposed divisions into matter and form seem natural, many others seem quite strained. The *eidos* The Godhead, for example, needs matter and form; and it initially sounds rather fitting that the matter of this formal *eidos* should be "God's Attributes", and that the form of those attributes should be the complex ontological dependence relations among them. Upon a little reflection, however, the choice is puzzling. Since "God's Attributes" include The Godhead itself, one wonders: Can a thing figure in its own matter? On anything like the Aristotelian conception of matter and form, the answer would be: Of course not! So, from one of the very earliest *eide* on the wheel, doubt is thrown upon the appropriateness of the labels "matter" and "form" for the dichotomy Ammonius posits within every *eidos*.

A further obstacle arises for this particular eduction. Many items on the wheel are, as noted earlier, not actually *attributes of God* in any ordinary sense. So, although it may *sound* plausible to suppose that the formal *eidos* in virtue of which God is God should be something like "God's attributes organized in a certain way"; it is hard to know just how appropriate this scheme is when many of the things called "God's attributes" are not literally God's attributes. The items on the wheel cannot all be *attributed to* God; and, according to Ammonius, none of them are *parts* of God; so the only relation in which *all* of them stand to God is ontological dependence. Once this is clear, the appropriateness of regarding all the *eide* as something akin to "matter" for The Godhead is no longer obvious. Why should relations among things that merely *depend upon* God be taken to constitute aspects of God's very own form?

Many of the other "eductions" of matter-form pairs are equally problematic; and few seem inevitable. The *eidos* called "Being" is the basic subject or substance that has the divine form, The Godhead; but why suppose that this Being is constituted, hylomorphically, by a process of Coming-to-Understanding that in-forms the space-time Block Universe? I suppose that it follows from Ammonius's Monism that the Block Universe must be in some way included in God; but why not say, instead, that the sum total of *all* particulars, save God, serves as the matter for God's Mind, not just The Block Universe? Or The Block Universe plus all non-*eidetic* particulars, apart from God?

More radically, one may ask: Why start with Being and The Godhead, rather than skipping directly to The Block Universe and Coming-to-Understanding as candidates for the matter and form of God? Does not God's Mind have a fair claim to be the formal aspect of God? On a Thomistic Aristotelian scheme, a person's rational soul or mind, and the substantial form of the person, would not be distinguished; if hylomorphism is really to apply to God, why not follow the Thomistic pattern? (Of course the true Thomist will reject the idea that, in God, matter and form can be distinguished.) And, if The Block Universe can serve as the matter for God's Mind on Ammonius's preferred eduction of God's matter and form; then, once God's Mind has become the initial formal *eidos,* The Block Universe should be able to serve as the initial material *eidos* of God Himself, taking the place of Being on the wheel. The virtue of simplicity would seem to be well served by cutting out a few middlemen here.

I find similar "Why nots?" arising at many matter-form eductions, indicating that I have only a tenuous grasp of some of the relations indicated by spatial relations on the wheel. Why is Sameness and Difference the matter, and Differentiation the form, of Formal Cause? Why not the reverse, for instance? Ammonius's justification is that "Differentiating Form crucially makes for the distinction between the same and the different"; but why not say that it is Sameness and Difference that makes for Differentiation? And how is Formal Cause more closely tied to these two *eide* than to others? "Of course, Formal Cause is an essential *sine qua non* of this distinction between the same and the different", says Ammonius; but everything (except for God and Being) has a Formal Cause (i.e., is the telos of something else), so Formal Cause is *sine qua non* of a good deal more than sameness and difference. Furthermore, Material Cause is also essential to things that are the same and different; and it is *matter* that, by being differentiated, yields things that are the same and different. Is this connection enough to make plausible the alternative eduction that Differentiation and Sameness and Difference are the form and matter of Material Cause?

Why does Final Cause serve as the form of Ontological Dependence? The connection between the two seems quite mysterious; and I find nothing in *Coming to Understanding* that would link the two—

unless one already thought that the Final Cause or Telos of God's Mind were the Coming-to-Understanding of this Ontological Dependence structure. But how is it determined that God's Mind really has this as its telos?

Like the connections between *eide* and matter-form pairs, the "telic" connections within the wheel are not obvious, either, in many cases. Why should one think that Final Cause exists for the sake of States of Affairs? or that Differentiating Form exists for the sake of Efficient Cause? or that Formal Cause exists for the sake of Ontological Dependence? and so on. The brief remarks justifying these claims in section 2.3 are often cryptic, leaving me with more questions than answers. It is just not obvious that the red arrows, which point from each *eidos* to the *eidos* one row up and one step clockwise, represent a genuinely teleological pattern throughout the wheel. The failure of this relationship to be, in any obvious sense, universally "telic", has serious consequences for the theory as a whole. If the one sort of region is not clearly the telos of the other, then nothing can be inferred from the fact that Coming-to-Understanding stands in this "red arrow" relation on the wheel to The Godhead; with the meaning of the "red arrow" relation up for grabs, it is no longer clear whether their place in the pattern suggests that the whole point of God's "becoming aware" is for God to understand God's own nature or inner structure. And this, of course, calls into question one of the central—and, by my lights, most problematic—doctrines of *Coming to Understanding*. I address my worries about the ethical implications of this particular eduction in Part III of my commentary.

Eduction or Revelation?

The eduction of grand metaphysical systems is a shaky enterprise, as Ammonius frankly admits. How would one choose between the radically different metaphysics of Aristotle, Descartes, Leibniz, Spinoza, or Hegel? Or even between the more modest attempts to defend comprehensive theories of the categories in our day, such as the ontological schemes of D. C. Williams, Chisholm, Armstrong, or Lewis?

The great systematizing philosophers of the past often pretended to prove their systems from self-evident principles. Contemporary ontologists are more modest—they offer sets of ontological categories that seem to hang together in a systematic way, and to enable us to express (what they take to be) the fundamental facts about the world in the simplest possible way. These virtues in a metaphysical system could be summed up as "coherence", "simplicity", and "scope". After the failure of the most ambitious rationalists to *truly* prove that their systems were the only inevitable ones, choosing to be a latter-day Spinozist or Hegelian could only proceed along the same lines—and should have done so even in their day. (Perhaps one could argue that, *de facto*, that was how the older rationalists defended their systems, too.)

A metaphysics which could show itself to do better than the other available theories with respect to these valuable commodities—coherence, simplicity, and comprehensiveness—could fairly claim to have been "educed". Like most interesting philosophical theories, no matter the domain, such a metaphysical theory could hardly pretend to have been proven "beyond doubt" or anything nearly so grand; still it could lay claim to having been reached by a (no doubt fallible) process of rational inquiry. Because there are bound to be disagreements about the relative coherence, simplicity, and scope of competing theories, an eduction should be judged a success if a metaphysician can show merely that a reasonable person might well assess his or her theory as the best available maximizer of these values.

Disagreements about the theoretical virtues of coherence and simplicity will obviously be hard to assess objectively, since they will turn upon hard-to-formulate, borderline-aesthetic judgments. Disagreements about which of two theories has greater scope might seem easier to adjudicate. But here, too, reasonable metaphysicians will differ in the portions of common belief that they take to constitute stable knowledge. If, as Quine thought, only the most well-established sciences, like physics, need be taken seriously in our metaphysical theories, the fact that a metaphysics makes room for objective ethical values, propositional attitudes, etc. will not count in its favor; ethics and folk psychology are too undisciplined to produce known facts that must be preserved in our final, comprehensive metaphysical theory. With drastic restrictions on the domain within which a metaphysics must prove itself adequate, the metaphysician can get by with a more austere set of fundamental categories and relations among them. The less scientistic among us will (rightly, by my lights) demand a theory of much greater scope. But where, precisely, should we draw the line between *known facts* that must be expressible in terms of the metaphysical system on offer, and mere hunches that have no serious claim upon the metaphysician?

Here, there will be reasonable differences; which could lead to reasonable differences about whether one metaphysics is more comprehensive than another. An example: Broad and Sidgwick were no fools; and they thought they had reason to take psychical research seriously—though I think that, even at the time, the majority of philosophers were not unreasonable to have serious doubts about the value of the experiments and case studies that Broad and Sidgwick found compelling. Still, at some point in time, one could be a reasonable person and yet take the phenomena of séances, etc. as impressive evidence for life after death; and one could also be a reasonable skeptic about the deliverances of psychical research. At such a time, there would be reasonable differences about the question whether one metaphysical theory beats another with respect to scope. Obviously, a metaphysical account must have implications about the nature of persons—even if it tells us we don't exist, or that we are second-rate entities, it ought to answer the question, "What am I?" And a metaphysics of persons that allows for disembodied, conscious life after death will no doubt look very different from one that need not make room for even the possibility of my surviving the death of this body.

Ammonius is perfectly aware that the eduction of a metaphysics is a shaky game, depending, as it does, upon judgments about theoretical virtues that are difficult to assess. But he believes that his system—his large-scale picture of the fundamental nature of reality—should score well, relative to competing schemes, when judged by these standards. Some of his apparently axiomatic principles (e.g., his Monism, and the doctrine that eternal truths require a timeless realm populated with entities in virtue of which these truths hold) have appealed to thinkers of many stripes; they obviously have an abiding attraction for the speculative metaphysician. I shall mainly focus on the finer details of his eduction of the *eide*, which is one of the most original aspects of his treatise.

In order to lay fair claim to being “educed”, the elements and inner structure of the wheel must exhibit a high measure of the theoretical virtues I have been describing. And here, there is a cost to his theory for each of the difficulties encountered in the previous section: e.g., the absence of an intuitive similarity among the *eide*, the failure of the matter-form pattern to plausibly extend to many of its supposed cases, and the general non-inevitability of many choices of category and relations to other categories. Insofar as any of these eductions leave the critic thinking, “Why would one say that, rather than something else?”, there will be a failure to display internal coherence. If too many of these relationships must be brutely posited or taken on faith (posited because they *must* be there, in order for the pattern of the wheel to be maintained), the network of relations will not display the kind of coherence that one wants in a metaphysical theory.

I find Ammonius’s eduction of the *eide* unconvincing; I am unable to see many of the connections posited among the *eide*, or to understand several of the technical terms he introduces. The words “*eide*”, “Attribute”, “matter”, and “form” are used, by other philosophers, to stand for things that play certain roles in their theories; and I have a pretty good idea what they mean by these words. They are able to describe these roles using less abstruse notions, or to convey the meanings of their terms by repeating examples until I begin to get the idea. Pretty quickly, I can go on to apply the term to new cases, reliably agreeing with their application, even though I might not completely buy into their theory. I find the same terms in Ammonius’s metaphysics, and they start out *seeming* to mean roughly what they have meant in the mouths of other metaphysicians; but soon, their use is extended to so many surprising cases, that I no longer am able reliably to apply it in new instances, or to judge the plausibility of Ammonius’s use of it.

If a sufficient number of the relations borrowed from Aristotle’s “four causes” (expanded, by Ammonius, to six) were consistently applied to cases that seemed, intuitively, to be in keeping with Aristotle’s usage, I could use *them* (together with ontological dependence, which is explicitly defined in familiar terms) to formulate an abstract description of the wheel that would give me some purchase on its contents, the *eide*. "The *eide*" would come to mean: whatever it is that satisfies that abstract structure of causal (and ontological) dependencies. Then I could judge whether the particular "fillers" Ammonius assigns to the boxes seemed appropriate, and so whether they lend credibility to the idea that a whole satisfying this description actually exists. Unfortunately, my understanding of what Ammonius means by material cause and formal cause is undermined by the extension (described above) of the matter-form distinction into realms where it can bear no resemblance to what Aristotle meant; and so I am at sea, unable to simply take the roles of matter and form and use them to define an abstract structure, the fillers of which are the *eide*.

The two examples given to explain Ammonius's two additional causes—differentiating form and structuring form—are not enough to convince me that differentiation and structuring need to be distinguished from instances of efficient causation. Some things are efficiently-caused to exist by differentiating something from its environment, as in the carving of the statue; other things are efficiently-caused to exist by a reconfiguration of matter, so that it takes on a distinctive structure, as in the construction of the temple. Judging from the examples, some things have differentiating causes, but no structuring causes; and, perhaps, vice versa—the blocks of the temple are already differentiated from the surrounding air; no further act of differentiating is needed, only a structuring-cause. So two more of the crucial relations that might give me a handle on the nature of the whole wheel have become problematic. The examples within the wheel bear little resemblance to the statue and temple examples. And the relations are said to hold throughout the wheel (every sector gets a blue arrow directed toward it, and, after the early stages, every sector gets a green arrow pointing toward it); but, from the examples used to introduce differentiating-cause and structuring-cause, one would have thought they would *not* be relations that should hold throughout the realm of particulars; instead, they seem like relations that easily come apart: some things have a differentiating cause but no structuring cause, and vice versa.

Suppose Ammonius's eduction of the *eide* is, ultimately unsuccessful—that is, suppose he is not able to convince others that the theory encapsulated by the wheel displays an impressive measure of the theoretical virtues by which such theories are to be judged. Suppose also that, nevertheless, Ammonius is *right*; reality displays a structure roughly like the one he posits; and he, himself, has seen its internal coherence, its ability to make sense of everything. (This could be the case if Ammonius, but not the rest of us, understands the meanings of the terms I find elusive; and his understanding of them turns the theory encapsulated by the wheel into a virtuous web of mutually sustaining theses.) A curious result follows from these two suppositions. According to Ammonius's system, God's chief end is to understand the *eide*; and those who do so are fulfilling God's will, with God's will as at least the telic cause of their coming-to-understanding (pp.165-7). (God would not be the sufficient cause of Ammonius's insights—Ammonius's Deity does not intervene in the course of history, in the way the traditional God of monotheism is wont to do.) Since, *ex hypothesi*, Ammonius is the only one to whom this knowledge has been vouchsafed, Ammonius would be in something very close to the position in which the founders of the Abrahamic faiths believed themselves to be: the one person to whom especially detailed information about God has been revealed—sole recipients of a revelation of God's nature, the final cause of which is God.

The similarity does not go very deep. Ammonius does not take his theory of the *eide* to be the final word; he welcomes criticism on grounds of failures of coherence, simplicity, and so on. One doesn't suppose that Moses or Paul would be open to discussing the theoretical virtues of belief in a single Deity (rather than a plurality of them), or belief in salvation by means of faith in Christ (rather than by faithfully keeping the Law). Ammonius does not take God to have directly "given" him insight into these matters in anything like the way God is supposed to have revealed himself to prophets; it is meant to be ordinary trial-and-error methods of rational inquiry that have led to this system. Still, there is an ironic twist here: The closer to truth his system is, the more like a prophet Ammonius becomes. For the fine details of the wheel are extremely difficult to understand, let alone believe; the more of these he has right, the more likely it will become that *only* Ammonius will ever believe anything like the truth about God.

Ammonius's real expectation is that his scheme will prove correct in broad outline, and that successive generations of philosophers and scientists, working together, will come to a better and better understanding of the true, metaphysical structure of reality—an understanding possible only for institutional Persons, constituted by vast numbers of cognitive agents. In the next sections I consider Ammonius's conviction that the goal of coming-to-understand that would be served by such Persons can provide an adequate foundation for ethics.

III. Criticism of the Ethics

"On Balance, Good"

When a self dies, there is a sort of reckoning: Now that the life is complete, one can ask whether it was, "on balance", good or bad; and, if the former, the self is a Person whose knowledge—at least knowledge of metaphysical truths—becomes a part of God's consciousness. ("Soul" is given an unusual technical meaning, but one that has a clearly defined place in his system. As noted above, Ammonius calls God's coming to know what one such Person knows, a "soul". A timeless state of consciousness, on the part of God, is quite unlike Descartes's notion of an immaterial thinking substance; but one can see a justification for Ammonius's usage.) I shall ask a couple of quick questions about this arrangement, and then move on to deeper questions about his ethics.

What if there are incommensurable goods and evils? In that case, "on balance" would not be applicable. Supposing the amount of goodness and badness in a person's life can be measured, why suppose it is "one iota" above 50% good that makes a soul? There are alternatives. Consider a person who starts out well-meaning and innocent and industrious, and who gradually becomes a cynical, nasty, vicious character. So long as the early part of his life outweighs the later part of it, be it ever so slightly, he gets to be a soul. But does it not seem that there is a kind of intrinsic goodness to moral *growth*? The life of a person who is growing in virtuous characteristics, and shedding vices, should—one might think—get a kind of "value-boost" over a person with the self-same virtues and vices, possessed to the same degree over a period of the same length but "in reverse". (The first person exemplifies what Brentano called the "*bonum progressionis*", the latter the "*malum regressus*".) This thought suggests a different criterion than overall balance: It might have something to do with the trajectory of a person's life; was it, on balance, moving in the right direction?

Another question: Why does God get to know *everything* (at least every metaphysically important thing) that a person knew, so long as they were, on balance, good? Why not say that, when a person is displaying vices, anything the person knows *only at that time* is "blocked" from becoming part of God's consciousness; God only knows what the person knows when he or she is being virtuous. This would seem to be in keeping with the notion that God's mind, though it is a sort of function of our minds, is, unlike ours, without moral blemish.

Morality as a Kind of Piety

Ammonius offers a theory of morality that subsumes right action under the category of "piety", i.e., doing God's will. In a slogan, "*morality is a part of piety*" (p.191). In response to Alister McGrath's posing the question of the *Euthyphro*, Ammonius makes a move that is similar to Robert Adams's identification of the right with what God commands, and the good with what God loves. 'It is a metaphysical discovery, therefore, that "goodness" is coextensive with "piety"' (p.191).

Ammonius wants to ground *all* morality, and indeed all *goodness*, in doing God's will, as the following characteristic passages illustrate:

> How much a person's behavior is in accord with its divinely ordained purpose determines the rightness or wrongness, and thus the degree of goodness, of its behavior. A good person is one whose pattern of choices

> is pious—that is, sufficiently guided by its service to God. (pp.187-8)
>
> The behavior of humans towards one another is moral behavior *only when* it is pious behavior. Pious behavior, however, is behavior that is appropriately oriented towards God. (p.194).
>
> [I]t is more metaphysically adequate to characterize right behavior of any sort as behavior that is in accord with God's Will. The natural word for *this* is "piety," and the result is that piety is the most general characterization of the good. (p.191)

I note that, here, *all* moral norms seem to be grounded in God's Will—not just the rightness and wrongness of behavior, but *goodness itself* is to be defined in terms of serving God's will.

The distinctively *moral* part of piety is just the part of doing God's Will that concerns our interactions with one another; we can, in our dealings with others, behave in ways that do or do not satisfy God's Will. But what are these ways? What does God will us to do, in our everyday lives?

An ordinary divine command theorist can easily "recover" whatever conventional moral principles he or she wants, on the basis of the identification of right and wrong with God's will. The technique is simple: just suppose that God has issued commands that back up the part of conventional morality one wants to keep. But Ammonius's God is not the sort of Person who issues complicated commands aimed at the particular details of our lives. Ammonius's God has one purpose and one purpose only: to Come to Understand God's Attributes (the *eide*), which Ammonius identifies with God's own nature. (Earlier, I argued that the *eide* do not in any straightforward way qualify as God's attributes, so knowledge of them is not obviously knowledge of God's nature; but I am setting those worries aside for present purposes.)

In Some Circumstances, Moral Enormities Would be Justified

I shall raise a couple of objections to the idea that all our obligations must be derived from our duty to help God to grasp metaphysical truths. For one thing, it would seem that Ammonius's principles justify (what seems to me to be *clearly*) deeply immoral behavior, so long as it promotes progress in metaphysics. Furthermore, it becomes difficult to see how Ammonius's moral theory could wind up agreeing with conventional wisdom about right and wrong very much of the time *at all*. Ammonius attempts to show that his account of right and wrong will not be so radically out step with our usual convictions. But I shall argue that he cannot do so, without giving up his claim to ground all ethical norms in God's Will.

On the face of it, what God's Will requires of us, according to Ammonius, is simple: Maximizing knowledge of metaphysical truths, since only by *our* knowing them does *God* get to know them. If this were the end of the story, the result would be a strange moral theory indeed, according to which only metaphysicians (and others who learn deep truths about the nature of things, like scientists studying The Block Universe) can serve God directly; while those unable or unwilling to do metaphysics should serve *us*, giving us as much free time as possible in which to … do metaphysics! However (superficially) appealing this might seem to the student of metaphysics, it is drastically out of step with what most people believe about goodness, badness; right, and wrong. I am grateful, every day, to the good people of New Jersey for providing me with ample opportunity to think about metaphysics; but I do not believe they have a greater obligation to support my research than that of scholars in other fields.

Grounding all ethical norms in the satisfaction of a purely intellectual goal could be expected to lead to radically counterintuitive judgments about right and wrong; and, in some places, Ammonius does not shrink away from some rather shocking conclusions. "How much a person's behavior is in accord with its divinely ordained purpose determines the rightness or wrongness, and thus the degree of goodness, of its behavior." The content of God's purpose for us seems, on the face of it, to have nothing to do with kinds of paradigmatically moral behavior most systems of ethics would advise. The “service” God requires of us “is a matter of being truly aware (as much as possible) of metaphysical realities and verities, and of bringing about other Persons who are truly aware (as much as possible) of metaphysical realities and verities” (p.27, new version of Part 4).

It would be natural to conclude that, because God does not primarily care about the inculcation of virtues like compassion and fairness, when the goal of coming-to-understanding metaphysics would be better served by a (conventionally) “unkind”, “unfair”, “unloving” action on someone’s part; well, that is what one should do. Ammonius attempts (by two means described below) to recover much conventional wisdom about moral and immoral behavior; but, even were he successful in that project (as I shall argue he is not), the result I have just described would likely follow from Ammonius’s system.

The following quotation, if one put it into the mouth of a metaphysically-gifted Stalin, say, would be chilling:

> One mistake of conventional morality, however, is the presumption that “normal” morality—e.g. Aristotle’s doctrine of the mean (moderation in all behavior) and the conventional list of other appropriate behaviors towards others—implies ethical rules that are binding upon *all* human persons in all circumstances and at all times. Recognizing that morality is a subspecies of piety, that the primary obligation of all human persons is to facilitate God’s aim of Self-Understanding, implies however that there may always be exceptional circumstances, circumstances that conventional morality will not be able to recognize or predict. Pious behavior is not a set of rules, apprehended by reason, which applies at all times and in all places and to all persons. Consequently, at different times and places different kinds of behavior—even kinds of behavior that may violate conventional morality—may be exactly what is required by God’s Will. (p.194)

A powerful politician who justifiably believed that he was good at metaphysics, and could identify others who are good at metaphysics, would find in these principles a rationale for wholesale disregard of normal ethical standards in his efforts to found an institution capable of "serving God's Will". Democracy is never going to fund the kind of institution that could achieve what Ammonius calls "institutional awareness of God" (p.219); so, once opportunity presents itself, the politician is obliged to become a tyrant; and, whenever flaunting conventional morality would better serve the establishment of such an institution, the tyrant is obligated to do so.

One need not have the power of a tyrant to be led into behavior that would, by normal standards, be judged deeply immoral. Even ordinary academics would be susceptible. Suppose the falsification of a letter of recommendation could insure the denial of tenure to my anti-metaphysical colleague, while increasing my chances of gaining tenure. What should I do? Conventional morality says: Don't cheat! Don't lie! It wouldn't be fair! But, given my colleague's opposition to metaphysics, I have a powerful *obligation* to prevent him from gaining tenure, and to insure that I keep my job; and Ammonius has no independent norm that prohibits cheating and lying. In such circumstances, it would seem that Ammonius's ethics delivers a clear verdict: I *must* falsify the letter.

The example of Newton does nothing to allay my worries on this score. Newton is depicted as a (conventionally) immoral character, causing unhappiness all around; but, because he contributed so much to our understanding (of, I take it, metaphysical truths about mathematics and The Block Universe), "on the divine scale of goodness, Newton's behavior is probably quite pious, even though it is simultaneously also immoral (at least according to the dictates of conventional morality)" (p.197). Ammonius says that "[t]his kind of case, however, is rare." But I am troubled by an ethical system that implies it is *ever* the case. Accepting this result would show just how far from its ordinary meaning "Love" has been wrested in Ammonius's definition of "Love" as: using one's referential and appetitive capacities in accord with God's Will (p.123). Newton was, in Ammonius's peculiar sense, a "loving" person, despite the fact that he was not, by all accounts, a loving person.

Another character who, rightly, can do whatever he or she likes is the person who knows that (a) he or she is not capable of knowing any metaphysical facts not already discovered by others, and (b) he or she is never going to do anything that affects a person or institution capable of such knowledge. Someone who, upon some occasion, knows (a), and also knows that committing some crime or offense will not decrease the odds of anyone's coming to understand more metaphysics than is currently known, may also do whatever he or she likes.

From my perspective on virtues and vices (which I hope is at least partly informed by Christ's teaching and example, and so arises out of a moral tradition criticized in Part 4), Ammonius's ethical principles generate norms that are completely topsy-turvy, wildly over-valuing abstract speculation and those who engage in it, while under-valuing the virtues and vices the inculcation of which should be the true goal of a system of ethics. Moreover, the principles would, from my point of view, pose a serious moral danger to anyone actually tempted to follow them. Granted, Ammonius says things to distance himself from a reading of his ethics that would lead to monstrous results. Given one interpretation of his doctrine of "Soul-making", to be discussed below, I had better *not* falsify the letter of recommendation, or I might not engender a Soul—and all my knowledge of metaphysics would be for naught! But if he *were* to invoke this doctrine to avoid justifying patently immoral behavior in such circumstances, Ammonius's moral instincts would be rebelling against the conclusions to which his principles ought to drive him—or so I shall try to show, in the sequel.

Ammonius Cannot Recover "Conventional Morality" for Most Situations

Besides permission of moral enormities whenever metaphysics would benefit sufficiently thereby, there is a serious question whether an ethics based on Ammonius's principles could agree with conventional morality in the everyday cases, even when special conflicts with the pursuit of coming-to-understanding are not in question. Ammonius appeals to two main considerations in attempting to generate the result that, for most people, most of the time, ordinary moral principles apply. The first is to emphasize the importance of cooperative activity for human beings, and the role of institutional Persons in achieving God's goal of self-revelation.

Ammonius points out that we seem "built" to function in groups, and ultimately to constitute institutions and, eventually, institutional persons:

> A key part of being functional human persons, therefore, is that one is able to perform in the context of such groups. Many of the virtues and vices [of conventional morality] can be justified by the mere fact that if human persons are to function successfully within groups, they need to behave towards one another in ways that allow the group to operate as a unit—as a self—as well as allow everyone to function successfully within the group. Virtues such as "justice," "humility," "patience," and vices such as "arrogance," "hatred," and "laziness," often express solutions and problems (respectively) either in the successful functioning of a group as a self or in the successful functioning of individuals within that group. (p.195)

In other words, there are certain aspects of human flourishing that can only be realized in groups, and cooperating groups require the display of at least some of the traditional virtues (or at least the appearance of them). But should we expend resources promoting these aspects of human flourishing, and not others? Indeed, whence the moral obligation to pursue flourishing? One might say, "We would not be happy unless we promote kinds of flourishing that require cooperation among many people". But who is the "we" here? Some hermits are perfectly happy, flourishing in solitary ways. In any case, why should we care about happiness and flourishing? By Ammonius's lights, we have an obligation to flourish or pursue happiness only if it is part of what God Wills—but his God does not care about our happiness or flourishing, at least not *directly*. Ammonius writes as if the conventional virtues acquire some kind of moral force merely from their usefulness to the end of successful group activity, which most of us prefer. He has been ‘characterizing much of morality as arising from the “is” part of the “ought presupposes is” equation’ (p.195). I submit that no genuinely *moral* principles can, by his lights, be derived from these considerations without showing how participation in cooperative groups *serves God*.

That is Ammonius’s next move. Let us grant that peaceable, productive cooperation is required to build institutions. Playing a useful role in an institution requires getting along with others, treating them with respect, etc.; so, if forming institutions were part of God’s purpose for us, then the grounds for a moral requirement of baseline of civility, at least, might be justified. But how to link institution-building to the imperative to maximize metaphysical knowledge?

Ammonius connects institution-building with God’s Will in an interesting way. Many metaphysical facts are too complex and numerous for individual minds to know; but, in principle, a large enough institutional Person could go further than its individuals would get, working independently—in terms of the complexity of what is known, and in sheer volume. But this generates moral norms that directly apply only *while at work*, and only when working in institutions that *promote metaphysics*.

Very few institutions have metaphysics as their goal, and most people will never have the opportunity to participate in one of them. Furthermore, given how difficult it is, by Ammonius’s standards, to be an institutional Person, probably none of these metaphysical institutions is a Person, so none contributes independently to God’s Consciousness; furthermore, for reasons adduced below, even if one of them *does*, it arguably knows very little, contributing much less than what its members individually know, because of the disagreement endemic to the discipline.

It is true that we naturally tend to form societies and institutions; but if none of them is metaphysically-oriented, this natural tendency of ours is no sure sign that God wants us to do so, or wants us to inculcate the virtues they require. In fact, it seems much more likely that God’s ends would best be served if those capable of doing metaphysics, but with no opportunity to join specifically metaphysically-oriented institutions, were ruthlessly to drive people away, cultivating social vices, so that they will have more time to study metaphysics on their own. Since this is the vast majority of educated people, the social virtues are hardly entailed by Ammonius's claim that God needs a metaphysics-oriented institution. I conclude that appeal to the value of institutions will not underwrite very many ordinary moral principles for the vast majority of people—perhaps, since arguably none of our metaphysics-oriented institutions is a Person who adds anything to God's Consciousness, this avenue yields nothing.

As an aside, I shall register my skepticism about the plausibility of institutional knowledge of metaphysical truths. Any reasonably precise statement of a metaphysical theory will be believed by approximately one person—the person who formulated it. Even a group of metaphysicians working in the same tradition—Thomists, say—will disagree about many details, with little prospect of complete convergence. I find it even less likely that a large number of philosophers, using refinements of the kinds of rational powers we now have, could come to agreement upon a broadly Aristotelian, or neo-Platonic, or Spinozistic, or Quinean, or Lewisean, or… metaphysical system. But, on Ammonius's scheme, dire consequences follow from continued disagreement among philosophers in an institutional setting. The reason for positing institutional selves is the fact that institutions seem to "know" things, and to "want" things, and to "act" in ways that are not simple functions of the knowledge, desires, and actions of the human beings involved. Ammonius emphasizes the ability of institutions to know things no member knows; but he also recognizes that they can fail to know things that many members know (p.125). The knowledge attributable to an institution cannot simply be the sum of things known by its members. Suppose an investment firm functions so well that it becomes a Person. There are ten companies in which the firm has an interest; for each one, there is one person in the firm who knows how that company's stock will fare over the next quarter, but there are also many in the firm who (wrongly) disagree with this person's prognosis. If the one person who happens to know in each case is not able, independently, to decide whether the firm should invest in that company, then we should not say that the *firm* knows what all ten stocks will do in the next quarter. The individual knowledge is "washed out" by disagreement. Similarly, for any significant number of metaphysicians working today who could conceivably constitute an institution aimed at metaphysical knowledge, their differences of opinion will "wash out" most of what they, individually, might happen to *know* about the true metaphysical structure of the world—unless one or two could form a cabal, and take over, somehow determining the "official position" of the institution. If the institution is at all democratic, or membership voluntary, that situation would not last long.

In short, unless the future produces humans with vastly enhanced powers of ratiocination—including, in particular, much more finely calibrated sensitivity to *a priori* theoretical virtues than we have ever possessed—there is little prospect of institutions that know *any* metaphysical truths. And this would remain so even if the greatest metaphysicians in the world were allowed to work together in the context of an ideal institutional Person; some of them might know a great many metaphysical truths, but the institution would remain ignorant, so long as there was substantial disagreement.

There is a second, potentially more powerful mechanism by which Ammonius might try to soften his reduction of morality to piety, so that it implies ordinary moral standards most of the time, and does not imply that *any* act can be justified, so long as it is the best way, in the circumstances, to promote metaphysics: the doctrine of "Soul-making", according to which God only learns metaphysical truths garnered by selves that are, overall, better than they are bad. The imperative to maximize God's self-revelation is not obeyed if one only works to maximize the number of selves that know metaphysical truths; if all the metaphysical truths are known by, "on balance", bad people, God gains nothing.

Good people are, Ammonius agrees, loving people; so one might think that, here, God's purpose has been shown to require that we (at least, those of us capable of knowing metaphysical truths) must treat one another in loving, kind ways—on pain of God's not getting our knowledge, because we are, on balance, bad. This strategy would not generate the requirements of conventional morality under normal circumstances for normal people, if those people are *not* capable of knowing metaphysical truths that are not already known by God. It might well be that most people are in this situation; we are smart enough to understand metaphysics, if we study diligently, but few contribute anything new that extends God's knowledge. (And anyone who takes a wrong turn, directing those capable of advancing metaphysics to believe metaphysical falsehoods, has badly undermined God's goal. Given the shakiness of all metaphysical conclusions, and the radically different views that equally intelligent metaphysicians hold, I would argue that we can never know that we are not taking fellow metaphysicians in the wrong direction. So we can never know, while doing metaphysics, that we are doing the right thing—by Ammonius's lights.)

But, even if most people are capable of knowing such truths, and so fall under God's imperative to love, Ammonius is not entitled to use this as an *independent* means of deriving norms governing ordinary behavior. As noted earlier, "a good person" is, for Ammonius, identified with "a person who does God's Will", and that Will concerns, directly, only the maximization of metaphysical knowledge. The connection between "being good" and "love" is retained, but only because, as emerged earlier, "loving", too, is identified with doing God's Will. In the end, the restriction that only metaphysical truths known by good persons can be known by God amounts to nothing more than this: Only metaphysical truths known by persons who *do their best to maximize the overall amount of knowledge of metaphysical truths* can be known by God. There is no conceptual link between conventional understandings of goodness and love upon which Ammonius can rely in his derivation of moral principles from God's Will.

I do not, then, think that Ammonius's has the means to render his ethics consistent with (what should be) uncontroversial judgments about clear cases of immoral behavior; nor to derive ordinary moral precepts for ordinary occasions.

Grounding Ethics in Metaphysics?

In general, I am suspicious of attempts to "ground morality in metaphysics", as Ammonius says must be done:

> The only sufficiently rigorous procedure is to first ground morality in metaphysics. Only then can one see

> clearly enough the status of our various moral intuitions about vices and virtues, where these intuitions are merely conventional, and where they are of enduring value. Only then can one discern which should be kept and which should be discarded. (p.194)

The desire to "ground morality in metaphysics" *might* just mean: try to reach reflective equilibrium within the body of one's metaphysical and ethical beliefs. That is a desire of which I certainly approve; but it is consistent with allowing one's deepest ethical convictions to trump metaphysical intuitions. And that is something Ammonius will not allow. For Ammonius, grounding morality in metaphysics means discarding "conventional morality" and recovering whatever one can of conventional moral principles by justifying them on metaphysical grounds. But why must ethics always take the hindmost?

Ammonius's answer is twofold: (1) The "hodge-podge" of "vices and virtues" hallowed by our conventional ethical judgments have not been stitched together into a sufficiently tidy theory that displays theoretical virtues like simplicity, symmetry, etc. If we cannot construe *all* vices and virtues as having a symmetrical structure, or find some other "principled way of organizing these lists" (of virtues and vices), we have no reason to trust our intuitions about right and wrong (p.193). (2) The fact that a few "cardinal virtues", like chastity and courage, are not universal undermines our confidence; in other words, all of ethics is cast into doubt because of instances of significant moral disagreement.

Ammonius's argument here admits of a simple—and, by my lights, devastating—*tu quo que*. Granted, no tidy moral theory has completely won the day, revealing a deep unity to our intuitions about right and wrong; but several moral theories have offered theories that *do* purport to reveal a theoretical deep structure to morality, and diverge only in extreme cases from the judgments about morality most of us tend, instinctively, to make. Consequentialist theories, such as varieties of utilitarianism, are certainly still going concerns; virtue-theories are being developed; and Kantians have made a real comeback.

Why does Ammonius reject all these attempts to display ethical norms as more than a "hodge-podge"? Utilitarianism does not, I believe, get a mention; but the main objection usually lodged against it is that it cannot be made to agree with *all* of our strongest intuitions about right and wrong in particular cases. Of course this should not worry Ammonius, since he is prepared to let some of our moral intuitions go by the board, if it will help with the theoretical virtue of unity with metaphysics.

I was not moved by Ammonius's brief remarks dismissing Aristotelian *eudaimonism*. Serious attempts to unify the virtues have been made, and not all will be "deeply undercut by recent discoveries in empirical psychology"(p.186), because not all are intended to ground morality in a purely naturalistically definable notion of "flourishing". (One recent example is Linda Zagzebski's virtue ethics, articulated in *Divine Motivation Theory*; she intends one version of her theory to be consistent with a non-theistic perspective; and many other virtue ethicists offer non-theistic, non-naturalistic theories as well.)

Kant's deontological approach is hardly criticized at all. Kant, like Ammonius, puts persons "outside of time", and claims that our noumenal nature makes us special. "But then it seems natural to claim that the morality-determining value of persons actually derives from their capacity to take up a divinely ordained purpose" (p.187). Perhaps it seems so to Ammonius, but I confess that I should have to be told a great deal more before I should count this a decisive objection to deontological approaches—either Kant's peculiar version, or contemporary ones that attempt to unify ethics along Kantian lines without putting persons outside of time and space.

So the reasons given under (1) do not seem at all compelling. How about (2)? Here, Ammonius is even more vulnerable. In *The Abolition of Man*, C. S. Lewis argued, with some plausibility, that the amount of ethical disagreement across the globe and across the millennia, is much less than one might have supposed. A persistent theme in philosophical responses to arguments for relativism is to point out just how much disagreement about what is right and wrong can be attributed to differences of opinion about *non-moral facts*. Often, the source of the ethical disagreement is not due to *moral* disagreement at all, but rather to *metaphysical* disagreements. To take an obvious example: two people may agree that, to deprive a thing of a future full of value is, *prima facie*, to do something terribly wrong; but they may disagree about the conditions under which persons come into and go out of existence, thus differing about whether abortion at such-and-such stage deprives anything of a future that *it* would have had. A fair number of "moral" disagreements can plausibly be construed as metaphysical, and irresoluble not because of failure to agree about morality, but failure to agree about metaphysics.

The real nail in the coffin of reason (2) is, then, simply this: It seems obvious that, on any sensible way of measuring the amount of agreement about substantive matters between two bodies of beliefs, there is vastly more agreement among ordinary people about right and wrong than there is agreement among metaphysicians about metaphysical matters. So, if (2) provides a rationale for supposing that ethics needs grounding in something more sure, similar considerations ought to show that metaphysics needs grounding in something more sure. Absent such grounding, metaphysics is not the place to look for firmer foundations for ethics.

Ammonius repeatedly emphasizes the fallibility of all metaphysical conclusions, and the provisional nature of any metaphysical system, including his own. Truly taking this fallibility to heart ought to give one pause when contemplating any radical revision of ethics on metaphysical grounds. As I argued earlier, the theoretical virtues alleged to be exemplified by the theory of the *eide* are, in many instances, far from clear; e.g., it is not at all clear that the pleasing symmetry of division into form and matter truly holds among the items posited on the wheel; nor that the regular pattern of telic connections we are supposed to be able to see is really there. By my lights, if one puts forth a theory as comprehensive and controversial as this one, recognizing that some of these crucial eductions are not self-evident—or even inevitable-given-the-general-scheme,—then one should be prepared to see it require revision in fairly radical ways. For example, since the purported telic relations are not obvious, it might well turn out that a more elegant successor version of the theory will say that something *other than coming-to-understanding* is God's one goal; or it might say that the goal of coming-to-understanding has something *other than understanding the Godhead itself* (and therefore God's Attributes) as its object. Openness to the likelihood of revisions as radical as this should prevent one from taking drastic steps based upon radical ethical conclusions implied by the theory.

I would urge that we have better reason to trust our untutored sense of what is right and wrong, or the deliverances of a plausible ethical theory—be it consequentialist, virtue-based, or deontological—than the normative consequences of any comprehensive metaphysical scheme. In moral matters, we have some reason to believe we are really "onto something". In metaphysics, there is much less that should be accounted genuine, substantive knowledge of positive truths.

IV. Conclusion

I conclude with a litany of points of agreement and disagreement, picking out what I take to be the most serious problems.

I basically agree with Ammonius's description of good method in metaphysics. In territory so far from the empirical, we are driven to play a shaky game of formulating and comparing theories, trying to determine which ones better satisfy quasi-aesthetic virtues of coherence and simplicity; and also trying to figure out which ones can include, in their subject matter, most of what we take ourselves to know. The former virtues are notoriously hard to measure; and the latter criterion—comparing the *breadth* or *scope* of theories—will be a source of further hard-to-resolve disagreement. Some of us will take certain subject matters to be legitimate fields of knowledge that *must* be describable in terms of the categories of our metaphysics, while others will dismiss them as mere "loose talk". When explicitly discussing method, and the epistemological basis of his own theory, Ammonius consistently admits the shakiness of this game—the fallibility of the process of eduction, and the certainty that further reflection would lead to significant changes in his system. But someone who currently accepts a metaphysical theory on these grounds—as the best available option, subject to changes of unknown proportions that will almost certainly come—ought not to advocate radical revisions of other subfields of philosophy, such as ethics, in order to make them fit with this temporary stopping point on the ontological road. Yes, it is interesting to see what sort of ethics could fit with such a system. But, to the extent that a metaphysics is out of step with the best theories in those other subfields, and with the "common knowledge" upon which they rely, the metaphysical theory is undermined by the other theory, not the reverse.

I am intrigued by Ammonius's idea that every *eidos* has matter and form. The idea that a pattern something like Aristotle's matter-form distinction might run through a theory of the categories strikes me as an interesting one, well worth exploration. (Indeed, in a review of an earlier expression of Ammonius's ideas, I pursued this idea at considerable length; it still seems to me to have potential, and to be worth working out in a serious way.) Ammonius is right to say that an ontological theory ought to exhibit pleasing structure, displaying interesting and plausible connections among the creatures in its menagerie; and he is right to think that a theory's doing so carries an epistemic benefit. A metaphysics of the categories that discovered a ubiquitous form-matter branching-principle at work throughout its tree (or table or wheel or what-have-you) would earn extra points in the competition for "best ontology". I agree with Ammonius that a "flaccid" or "list-like" catalogue of fundamental metaphysical kinds is much worse than a collection of kinds generated by a theory that finds lots of symmetries and interesting connections among them. I also agree that, when a theory has enough virtues of this kind, we should be prepared to accept some of its more surprising conclusions—things we might not, antecedently, have thought were true. So there is much in Ammonius's general strategy to be admired. However, when it "came down to the short hairs", I had trouble understanding the systematic connections that were meant to render his theory more plausible than rival metaphysical systems.

The matter-form structure of the *eide* is the principle connective tissue—or, to switch metaphors, the principle engine generating the infinite wheel. To make plausible the supposition that the matter-form branching relations hold, Ammonius must show that his *eide* are the kinds of things that admit of decomposition into matter and form. It will be okay if a few cases do not seem to fit the pattern; so long as ubiquitous hylomorphic branching is required by a preponderance of truly compelling examples, one could be justified in treating the recalcitrant cases as discoveries. Unfortunately, application of the branching principle to the *eide*, insofar as I understood their nature, did not seem obvious in very many cases.

Matter-form structure was supposed to be a natural result of the fact that each is a particular. But I no longer saw this as a natural result, once Ammonius's somewhat idiosyncratic meaning of "particular" came into focus. Ammonius's discussion of the *eide* in Part 1 suggested that they would satisfy many metaphysicians' definitions of universals (all the *eide* discussed there seemed to be much like Plato's *eide* or Forms: they play the resemblance-making role, do not admit duplication, and are outside of time). Their particularity came down to two features: there is not an *eidos* to serve as the ground of every true predication (although the *eide* are, many of them, the sort of things that explain resemblance among some particulars, and so ground *fundamental* true predications—just like Armstrong's sparse universals); and they are not independently existing, but rather emanations depending, ultimately, upon God. These two features did not, in themselves, strongly suggest to me that anything that has them must break down into matter and form. As the hylomorphic distinction is used by other philosophers, having matter and form would not necessarily be linked to the two features Ammonius associates with particularity; and Ammonius did not provide an independent explication of a special use of "matter" and "form" peculiar to his theory, but rather relied upon the usual examples. So the supposition of ubiquitous hylomorphism among the *eide* seemed, initially, unmotivated.

Still, if enough of them had exhibited something resembling a division into matter and form, one might have begun to see the appropriateness of the supposition, even if it did not follow from Ammonius's notion of particularity. Unfortunately, the grip I had on the idea of "form-like" and "matter-like" pairs of *eide* faded quickly when examples were enumerated. The individual eductions of material and formal constituents of an *eide* were sometimes strained; few seemed inevitable; and so the supposition that the matter-form pattern held throughout the wheel began to seem to be an unfruitful hypothesis.

I only discussed, briefly, a couple of further examples of relations that were supposed to knit the wheel together, generating theoretical virtues that could lend credence to the entire structure. But I will say that I have thought hard about a good number of the “eductions” of the various relations, and, in general, only a few seemed to me to be intuitively “right”. In my judgment, there are just not enough plausible examples of the posited causal relations holding in exactly the right pattern to justify supposing that the pattern is repeated to infinity, including the many unobvious cases. Given my skepticism about the eductions on the wheel, it is not surprising that I found myself unwilling to radically revise ethics in light of its early eductions.

Author's Response to Gordon Graham and Dean Zimmerman

Overview

Coming to Understanding is a radically God-centered work, as much in its philosophy as in its theology, yet it begins by setting aside the claimed revelations common to Judaism, Christianity and Islam as (at best) confused and inconsistent glimpses of God. In the place of revelation, it ambitiously relies on reason alone to advance our understanding of the nature and attributes of God. In the pursuit of that ambitious task, the philosophy and theology of *Coming to Understanding* are inspired by the following very general core convictions, which happen to be shared to in large part by my two critics Gordon Graham and Dean Zimmerman.

Realism: *There is an objective reality.* Reality exists, and has the properties it does, independently of human beliefs and assertions; beliefs and assertions are true or false depending upon how reality is. (A consequence: it is false that everything is a social or mental construct.)

Intelligibility: *Reality is intelligible.* To every part and every aspect of reality there corresponds a truth; truths are in principle objects of cognitive grasp, and are in practice candidates for explanation. (A consequence: it is false that some of reality is incoherent, or that some of it transcends all possible thought.)

Epistemic Progress: *There is progress in human understanding.* The extent of human knowledge is not static or regressive, but increases as a result of scientific and philosophical inquiry. (A consequence: dogmatic skepticism of the sort found in various "post-modernist" views is false.)

Fallibilism: *Human knowledge is fallible.* Human beings very often cannot rule out the possibility that their best-justified beliefs about reality are false; but the fallibility of belief is consistent with knowledge. (A consequence: it is false that we can claim to know things only if we are certain about them.)

Teleology: *There is objective teleology in the world.* The nature of dependent particulars is such that some have purposes or “proper ends”, which are not reducible to any efficient-causal facts. (A consequence: it is false that all explanation is efficient causal explanation.)

Monism: *There is one and only one ontologically independent particular.* Of the many particulars that make up reality, there is just one that depends upon absolutely nothing for its existence, and since nothing else would exist unless this unique particular did, it is not unreasonably called ‘God.’ (A consequence: it is false that any “Godless” account of reality can be complete.)

Personhood: *There is both will and intellect in the unique ontologically independent particular.* Since personhood is the highest status we find exemplified in the dependent particulars around us, it is not unreasonable to take its defining features to be present in the highest degree in God. (A consequence: it is false that God is identical with nature or any such impersonal array of forces.)

Perhaps because of their Christian commitments, both Graham and Zimmerman *may* end up denying Monism. For Monism fails on at least one construal of the triune God of Christianity, a construal that does not understand the “procession” of the Son and the Holy Spirit from the Father as a manifestation of their ontological dependence on him. Otherwise, if the Father is understood as the source of all being, then Monism should be no obstacle for Graham and Zimmerman. And while some things Graham says seem to be at odds with Epistemic Progress, at least as it applies to metaphysics, Zimmerman seems to share all the other core commitments. It is highly fruitful to operate on so much common ground when it comes to discussing the more particular details over which we disagree. I thank them both for their attention to the text, and for the forceful and direct ways in which they put their objections and concerns. Before I turn to the details of their questions and criticisms, it may be worthwhile to review and summarize the central themes of *Coming to Understanding* that invite these very questions and criticisms.

The Central Themes of *Coming to Understanding*

In its more particular details, *Coming to Understanding* examines the specific ways in which everything else ontologically depends on God, and the ways in which the achievement of God's purposes practically depends on our orientation and action. (The two forms of dependence, ontological and practical, are distinct forms of dependence and must be clearly distinguished in our thought about God.)

Although God is a person with consciousness and a will, God does not intervene in the world in response to our prayers and pleadings, but radically depends on us, not only for the achievement of good in the world, but also for furnishing the contents of God's consciousness. We are agents of God's self-understanding; our contributions to the process of coming to understanding serve to populate God's mind with knowledge of what is metaphysically real, and hence with knowledge of God's own nature as the source and ground of reality. Carrying out God's will of coming to self-understanding sets the true standard of both individual morality and collective political life. Indeed a good deal of *Coming to Understanding* is devoted to explaining how institutions are to be governed, organized and directed in accord with God's will. The upshot is the call for a new "Ultimate Institutional Person", that is, a new way of organizing our collective contribution to God's self-understanding.

Unlike almost all contemporary philosophical discussion of metaphysics and ethics, *Coming to Understanding* is a thoroughly God-centered work. God is introduced as the source of being, as the one being on which all other beings are ontologically dependent. It transpires not only that that all other beings owe their existence to God, but they also have the natures that they have thanks to the imitating of God's attributes by certain "metaphysical" particulars. These attributes, it is argued, are the true eide. That is, they are the pre-eminent particulars outside of time which confer natures on the genuine metaphysical particulars in time, and hence on the composites constructed out of these genuine metaphysical particulars. Just as in Plato, the eide are unchangeable, eternal and fundamental explanatory factors, available not to sense experience but only to the developed intellect, as it turns its attention to the nature and reality of Divine things. As in Plato, the eide are perfectly and truly what they are, while the particulars that fall under the eide only imperfectly approximate them by way of patterns of imitation. Thus, what Plato called "sensible things" and what *Coming to Understanding* calls "non-eidetic particulars" are what they are because of a pattern of imitation of the eide, while the eide are what they are completely, and independently from anything else, excepting God, whose attributes they are. Herein lies the "God-centeredness" of the metaphysics of *Coming to Understanding*: God is the source, not only of the existence of things, but also of their natures.

One surprising claim defended in Part I of *Coming to Understanding* is that these eide or attributes of God are particular not universal; indeed it is argued that *nothing* is a universal as traditionally conceived. Another surprising claim, which if true would be foundational for metaphysics, is that the articulation of the attributes of God and the relations among the attributes is precisely what would be delivered by the correct *theory of the categories*, which has been a sort of philosophical Holy Grail from Aristotle on to Edmund Husserl and Gilbert Ryle. It is God's attributes which are the basic metaphysical joints of reality, not our most general concepts. Metaphysics is not the exploration of the ontological commitments of our conceptual scheme; it is the investigation of God's nature and our relation to it. So metaphysics and theology are at root one.

One key insight that drives the derivation of the sequence of attributes of God is what might be called "Generalized Hylomorphism". The matter/form distinction is best understood as an account of the unity of any given particular, what makes the particular the very particular that it is and sets it off from the other particulars around it. Thus construed the matter/form distinction applies to all particulars. Since the eide are themselves particular and not universal, they are governed by matter and form, indeed by form in its three distinguishable varieties, namely structuring form, differentiating form and individuating form. (The reader is here referred to the discussion of Aristotle's four causes or explanatory factors in Part 1 of *Coming to Understanding*).

As well as form considered in its three aspects, analogs of matter, telos and efficient causation structure the categories into a spiral-shaped logical space. (That which Zimmerman refers to as “the wheel”.) For, properly conceived, these six causes are types of fundamental explanatory factors, and the analysis of the eide or (the categories) shows that they are the fundamental explanatory factors. So the eide must be typed and related by the six causes. This discovery in the theory of the eide or categories helps depict the nature of God, and the relations among God’s attributes. It also implies the central features of the God-centered metaphysics of *Coming to Understanding*.

As already noted, God’s attributes, the eide themselves, are in turn dependent on God, and they emanate from God in a certain specific sequence of steps, with each later attribute being ontologically dependent on its predecessor. The determinate details of these patterns of ontological dependence are fixed by the patterns of ontological dependence among the six causes. So since form is ontologically dependent on matter, the primary emanation of the eide from God alternates between material and formal eide. Thus the first eidos, Being, is a material eidos and the next, The Godhead, is a formal eidos, with the next material and the next formal, and so on, *ad infinitum*.

The relation of ontological dependence, the relation which holds between two particulars when the second owes its existence to the first, imposes a strict ordering on the eide, so that no eidos can appear in two places either in the primary emanation of the eide or in the overall pattern of ontological dependence that unifies the eide. This immediately rules out all those theories of categories which rely on cross-classification, such as the commonly accepted philosophical system in which there are particulars and universals subdividing both mental and physical items, so that we have as a basic categorical division of Being mental particulars and mental universals, along with physical particulars and physical universals. Any system of classification which in this way allows for Mentality, Physicality, Universality and Particularity as cross-classifications is *thereby* exposed as not an adequate system of categories. For the same categories, namely Universality and Particularity, occur as subdivisions of both Mentality and Physicality. By reflecting on the constraints governing the emanation of the categories from God we can see that any such classification, however faithful it might be to our conceptual scheme, or to the theoretical framework of some particular philosophy, is not truly in line with the categorical structure of reality. For each category/attribute/eidos has its own unique position in the sequential structure of ontological dependence.

By a similar consideration, we can see that contrary to Hegel the categories are not organized as opposing pairs of contraries, where a category and its contrary are ontologically on a par. Indeed, once we understand the categories as attributes of God, we can see that there are no negative categories; that is, no categories that can be adequately specified simply by negating another category. For God's attributes are positive features of God's nature.

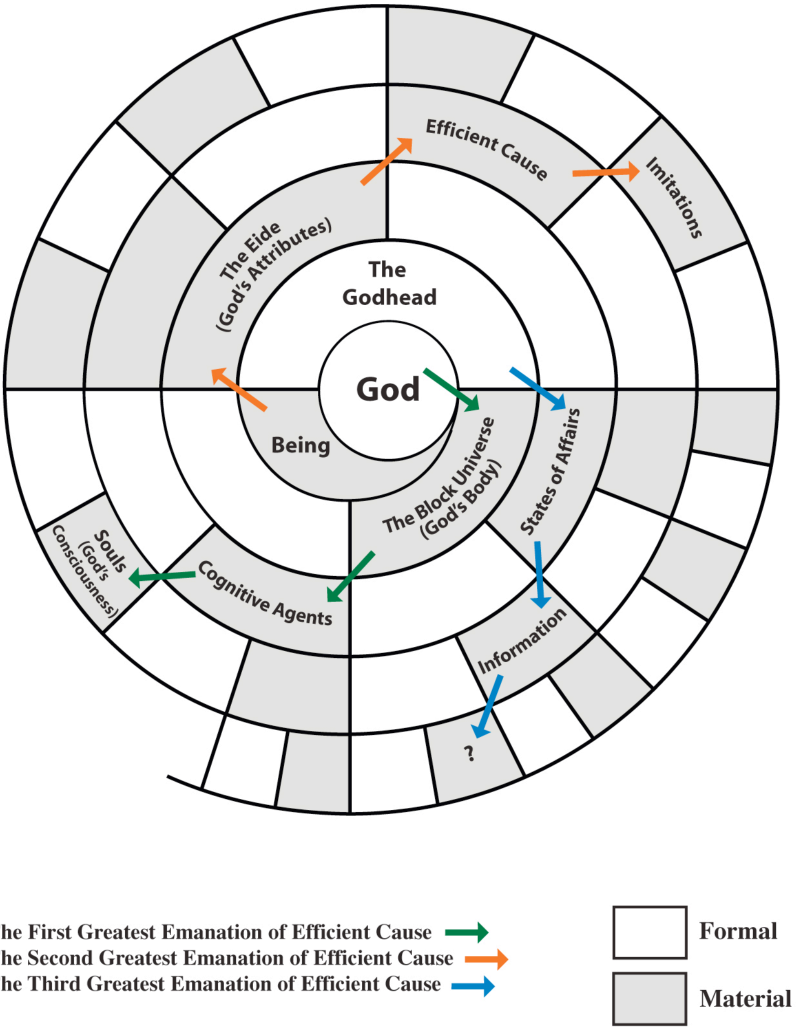
These are just two of the many ways in which category theory looks very different when we:

(i) understand the categories as eide,
(ii) understand the eide as particular not universal,
(iii) understand the eide as attributes of God,
(iv) understand the eide as ontologically dependent on God,
(v) understand the eide as emanating from God
(vi) understand this emanation in terms of the six types of fundamental explanatory factors or "causes".

It is precisely the understanding of the eide as emanating from God in accord with the six types of explanatory factors or "causes" that provides the grounding for the theology of *Coming to Understanding* and generates its details.

So, for example, the familiar idea of God as creator is captured in a distinctive way in the theology of *Coming to Understanding*. One explanatory factor that needs to be grasped in order to understand any particular thing is the pattern of efficient causation that surrounds it. The same is true for the eide, or attributes of God, for they too are particulars. They too stand in efficient causal relationships, and these are exhibited various patterns of the emanation of the eide from God (in the "the wheel" as Zimmerman calls it). Recall, for example, Diagram 3 from the text:

Diagram 3: The Three Greatest Emanations of Efficient Cause


God
The Godhead
Being
The Eide (God's Attributes)
Efficient Cause
Imitations
The Block Universe (God's Body)
States of Affairs
Information
?
Cognitive Agents
Souls (God's Consciousness)
The First Greatest Emanation of Efficient Cause
The Second Greatest Emanation of Efficient Cause
The Third Greatest Emanation of Efficient Cause
Formal
Material

As what is labeled in the diagram as "The First Greatest Emanation of Efficient Cause" reveals, God is the efficient cause of The Block Universe (or God's Body), which is the efficient cause of Cognitive Agents, which in turn is the efficient cause of Souls (or God's Consciousness). This pattern of ontological dependence confirms that God is, as it were, the "creator" of the physical universe, that is, The Block Universe or four-dimensional manifold that encompasses everything that physics might study. Out of that four-dimensional manifold Cognitive Agents causally arise, and these are capable of generating Souls that make up the consciousness of God. God's consciousness is thus dependent on the soul-making activity of Cognitive Agents. In this fashion, basic aspects of the efficient causal structure of reality are derived from the theory of the categories, otherwise known as the theory of the eide, otherwise known as the theory of God's attributes.

As well as efficient cause, another explanatory factor that needs to be grasped in order to understand a particular thing is its end or telos. Once again, the same is true for the eide, or attributes of God, since they too are particulars. They too stand in telic relationships and these are exhibited in the pattern of the emanation of the eide from God. When it comes to connecting the theory of the eide or God's attributes with a theology that explains our proper relationship with God, there are two patterns that are profoundly relevant. Each is a telic trajectory in the sense of a sequence of eide such that the immediately succeeding eidos of a given eidos in the sequence is the *telos* of that eidos. By dwelling on these two sequences or trajectories we are able to discover an objective teleology built into God's attributes, and hence into the metaphysical particulars that imitate them. From this objective teleology it is possible to derive the ethical principles that govern constructed particulars such as human selves, for these constructed particulars are ultimately made up of metaphysical particulars. These two supremely important trajectories are the Telic Trajectory of Being and the Telic Trajectory of The Eide (God's Attributes), depicted in the following diagrams, taken from the main text. They are repeated here as reminders of the way in which the theory of the categories/eide/divine attributes can disclose an objective teleology built into the nature of things.

Diagram (5A): The Telic Trajectory of Being

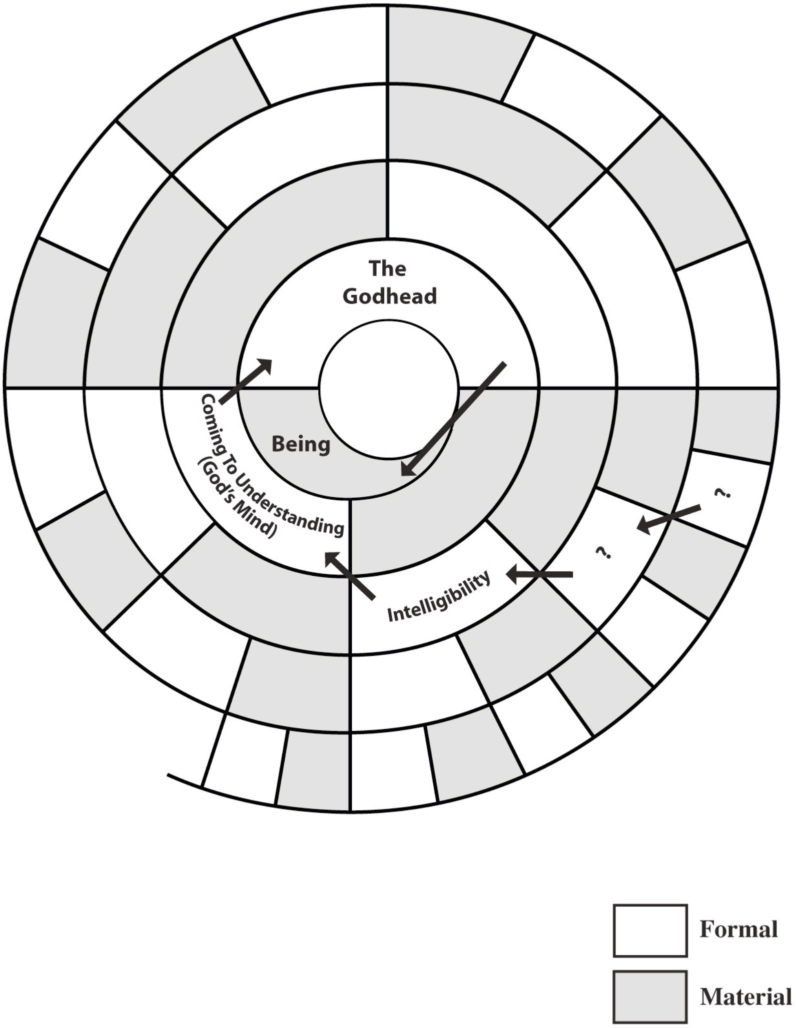
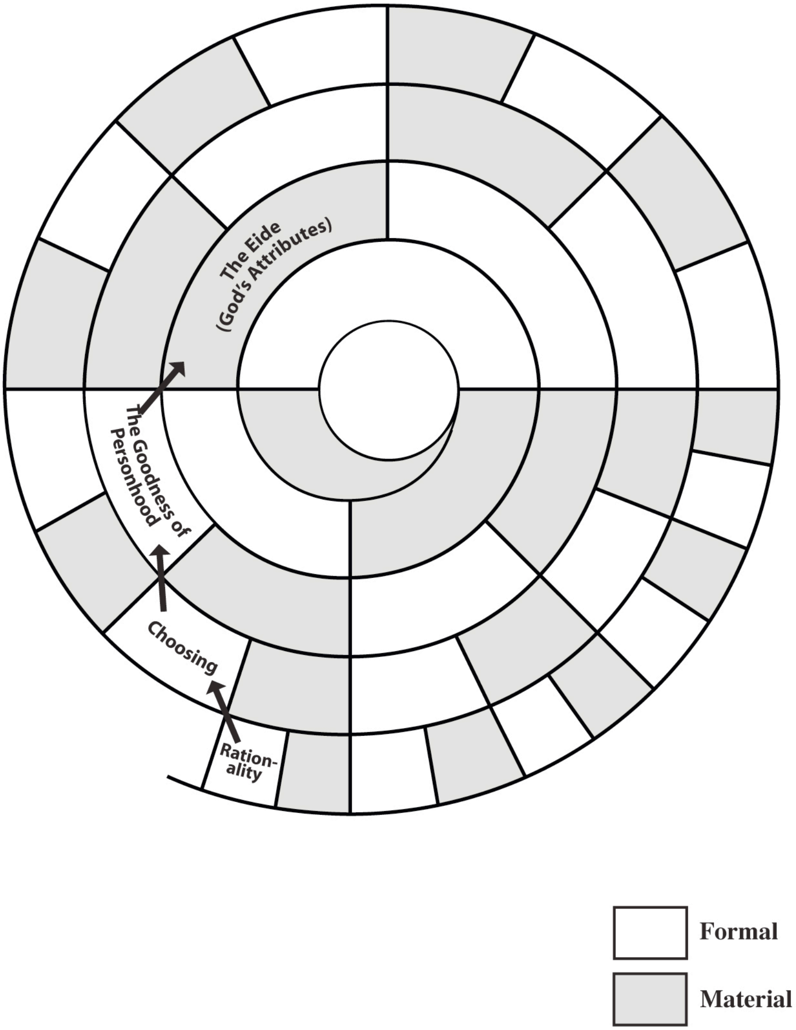

The Godhead
Being
Coming To Understanding (God's Mind)
Intelligibility
?
?
Formal
Material

Diagram (5B): The Telic Trajectory of The Eide (God's Attributes)


The Eide
(God's Attributes)
The Goodness of
Personhood
Choosing
Ration-
ality
Formal
Material

The Intelligibility of things exists for the sake of Coming to Understanding, which in its turn is directed at The Godhead or the form of God. This explains in part why things are intelligible, and hence why understanding is possible at all. Furthermore, Rationality itself, and hence its stirring in us, exists for the sake of Choosing, which is directed at The Goodness of Personhood, which in its turn is directed at The Eide (God's Attributes). This entails that Choosing, and hence our choices as cognitive agents, are properly directed at realizing The Goodness of Personhood, which in its turn is directed at the basic metaphysical joints of reality, namely the categories/eide/divine attributes. In this way, the telic trajectories presented above offer a metaphysical basis for the orientation of thought and action, and hence provide a fundamental basis for ethics. We discover by reflection on the structure of God's attributes that our fundamental task is to increase our understanding of the eide, the true paradigms of the natures of things, and to ascertain what constitutes right action. To know these things is to understand what serving God means, namely promoting God's own self-understanding, which is disclosed as our ultimate end and reason for being.

By paying close attention to the structure of the eide, which are the true paradigms of the natures of things, we come to understand non-eidetic particulars as well. Within the totality of all particulars or "reality as a whole" we can usefully distinguish metaphysical particulars from constructed particulars. Metaphysical particulars correspond to the real joints of reality, rather than merely reflecting our conceptual scheme and its style of demarcating entities. So the metaphysical particulars include God, the eide or God's attributes, and the genuine metaphysical parts of those eide. *Coming to Understanding* further argues that only certain material eide have parts. So the genuine metaphysical particulars include and are exhausted by God, the eide, and the parts of the material eide that have parts. Constructed particulars are none of these, but rather accidental unities whose parts are bundled together by our tendencies to see certain collections as if they were genuine wholes. For example, each one of us seems to be aware of a self—something that is the seat of our awareness, has emotions, and occupies a body. But there is no genuine metaphysical particular to which this entity corresponds. No eide or attribute of God corresponds to the Self, and so no eidos has individual selves as its parts. Rather, whenever someone is aware of a self he or she is actually aware of *two* non-eidetic metaphysical particulars, a cognitive agent and a physical agent, that together misleadingly strike that person as a single entity. (Note that the eide Cognitive Agent and Physical Agent are both the material eide of formal eide, or Orders as described in 2.4; this is why their parts are genuine metaphysical particulars.) A self is salient to a person only because of that person's self-image, and apart from a self-image a self would not stand out as an ingredient of reality.

Accordingly, the loss involved in death cannot consist simply in the destruction of the self, or of any other mere constructed whole made up of metaphysical particulars. It consists instead in the coming to an end of the distinctive activity associated with a cognitive agent and its corresponding physical agent. However, there is one other genuine metaphysical particular that may come into play on the completion of a person's life, depending on whether that person has been "on balance good"; that is, on balance a pious servant of God's will. When a good person's life is completed, that life may correlate with a soul—which can then be seen as the person's sacrificial gift to God. That soul, and it alone among the aspects of a person, will reside eternally as part of God's Consciousness. The knowledge of metaphysical reality contained in that soul will thereby contribute to God's own understanding.

Since that knowledge concerns the metaphysical structure of reality, it will in its turn be knowledge of God's own nature, so that the knowledge of metaphysical reality contained in that soul will thereby contribute to God's self-understanding. This is the way in which God comes to understanding and self-understanding, through the "soul-making" activity of finite cognitive agents.

It follows that even though after death there is no resurrection of the physical agent or human body and no mysterious regeneration of the cognitive agent, there is nonetheless some part of the good person that is eternal, and that transcends the person's death. This is not only true for those good persons that are human beings; it holds equally for those good persons that are institutions. In order to be a person, an institution has to have a sufficiently integrated physical and cognitive agency so that it satisfies the definition of a person; i.e., so that it is aware, has a will, and can deploy these capacities to be able to serve God's will. If the institution actually serves God’s will so that it comes to be on balance good, it will generate a soul which becomes part of God’s consciousness, conferring on God all the metaphysical knowledge that the institution acquired during its lifetime. This accounts for the great importance of institutional persons in the process of coming to understanding. Because of the complexity of their structure, and their extended lifetimes, they can contribute so much more to God’s self-understanding than can individual human beings. Hence the importance of a true replacement for the church, the temple and the mosque; that is, an institution genuinely built around the process of God’s coming to self-understanding.

The obverse side of God’s coming to self-understanding, through the pious activities of human persons and the institutions they make up, is God’s self-revelation to those human and institutional persons. As persons, and in our various institutional roles, we are obliged by the objective telos built into reality—the directedness of the eidos Coming to Understanding toward the eidos that is The Godhead—to be the agents of God’s self-revelation. On the other hand, when things are viewed from the perspective of God’s Consciousness, the objective telos built into reality obliges us to be the agents of God’s self-understanding. We behave rightly—or, equivalently, *piously*—when and only when we (directly or indirectly) promote God’s self-revelation, and therefore God’s self-understanding.

Given this, we are now in a position to appreciate the earlier crucial contrast between our *ontological* dependence on God and God’s *practical* dependence on us. Although we are entirely ontologically dependent on God, God is practically dependent on us when it comes to bringing about God’s self-revelation and self-understanding. God’s self-revelation occurs only by way of *our* individually and collectively becoming knowledgeable about God. This, of course, is deeply at odds with the fundamental outlook of the Abrahamic religions, which each describe themselves as *beginning with* God’s private and particular revelations, where the initiative comes wholly from a God “in search of man”. In these purported revelations, God is supposed to have intervened as a particular efficient cause among other efficient causes, and spoken to Abraham, incarnated himself in Jesus, or communicated with Mohammed through an angel. On such a conception, God’s self-knowledge is already complete, before the pious actions of individual human beings and the institutions they constitute. Human life is thus pictured as a mere testing ground to see which individuals can live up to this God's rather arbitrary stipulations, stipulations which bear a striking similarity to the mores of the ancient Near-East.

Other problematic features of the Abrahamic religions have congealed around these ontological confusions over the status of God and the nature of God's self-revelation. Each of the three major Abrahamic religions has naturally claimed a special privilege for its own revelation, the revelation which supports the details of its own dogmatically propagated creed. This has the consequence that these creeds cannot be recognized by their followers as fallible *attempts* at understanding God's Will, attempts that are flawed, like all human efforts, and are therefore open to improvement as our collective understanding deepens. Instead, each of the Abrahamic religions represents its own scriptures and creeds as the fixed expression of revealed eternal truth, even when it is obvious that the creed is intrinsically woven in with, and distorted by, elements of ancient Near-Eastern magic and cosmology. By valorizing these embedded elements as fixed parts of God's revelation, or worse, by making them the objects of irrational faith, the Abrahamic faiths are in effect s*chools for irrationality*. Moreover, within the Abrahamic faiths, historically contingent institutional roles have been invested with near-to-absolute authority, and the occupants of these roles are given the kind of unquestionable authority that is deeply corrupting. The resultant pseudo-infallibilist creedal dogmatism of the Abrahamic religions naturally attracts certain kinds of authoritarian personalities to the prized institutional roles in these religions, thereby invariably ossifying both the institutional structures of the religion and its forms of worship.

It is precisely this defensive pseudo-infallibilism, with its bias toward authoritarian and inflexible personalities, that makes these religious institutions liable to be overtaken by bigotry and defensive violence. Hence the characteristic association of the Abrahamic religions with sectarian violence—crusades, inquisitions, pogroms, jihad, and the like. For these reasons, *Coming to Understanding* goes so far as to claim that the Abrahamic religions have, as institutions, lost their capacity to truly love, that is, serve God's own coming to self-understanding. As a result they have ceased to be institutional persons. The Abrahamic religions are no longer God-centered; rather they now are centered on defending their own historically outmoded understandings of God.

What then of the meta-institution of Science, guided as it is by Fallibilism and a corresponding sense of its continual need to refine and deepen its understanding of its subject matter? Is Science as such an institutional person? Does it have the capacity to serve God's will to self-understanding? *Coming to Understanding* argues that the Institution of Science never actually became a person. The reason is that almost from the very beginning of the scientific revolution of the 17th Century, Science defined itself in part by spurning a certain notion that is crucial to the understanding of God—namely the notion of final ends or teleological causes. The Institution of Science made it a centerpiece of its methodology that only explanations in terms of efficient causation are to be admitted. The problem is not with the exclusive focus on this perfectly legitimate style of explanation; the problem lies with the prideful ideology that there is in fact *nothing more to knowledge than knowledge of efficient causation*. In embracing this ideology, the Institution of Science has been collectively taken in by an illegitimate inference from Methodological Naturalism, the perfectly valid methodological outlook, which can be summarized this way,

> **Methodological Naturalism:** Scientists should always and everywhere seek to find efficient causal explanations of phenomena in terms of natural entities and their properties to the *ideology* of Scientism, which can be characterized thus:
>
> **Scientism:** All that there is in the world are the items and properties that would be described in a complete fundamental science, plus those items and properties that can be reduced to the items and properties that would be described in such a science. All that can pass as knowledge are explanations given in terms of the most fundamental natural entities (presumably those of

> microphysics), together with the natural laws that determine their behavior.

In claiming that the network of natural causes and effects—along with the natural laws that describe them—constitute all of existence, Scientism denies much of reality, most notably God and his purposes. This is why the Institution of Science, dominated as it is by Scientism, fails to be a person. It systematically influences other persons not to pursue whole classes of metaphysical truths; it thereby occludes God's true will from those persons, and is to that extent vicious in its effects.

A similar cause of the failure of personhood is found in the institutions of secular humanism such as The Ethical Culture Society, which place a humanistic ethic in the central place in human life. However well meaning these approaches may be, they actually deny the defining role of God's will in determining what is right and wrong. They look to conventional human understandings of good and evil to replace a God-centered conception of the ethical life as service to God. As will emerge in the response to Dean Zimmerman, the proper foundation for ethics is essentially teleological, that is, it must recognize the truth in

> **Practical Teleology**: An action is right to the extent that it promotes the greatest good.

Contrary to Utilitarianism however, the greatest good is neither human happiness nor human flourishing, but God's coming to self-understanding. To the extent that a humanist ethical society or indeed a "church" like Unitarianism neglects God's central place in determining what is right and wrong, it opens the door to an excessive focus on human happiness or human flourishing as the determiners of the ethical life. It will also inevitably be led to another formative ethical principle, namely

> **Universalism**: The greatest good is to be measured by the good conferred on all persons, with each counting equally.

Despite its obvious centrality in many systems of contemporary ethics this is actually a principle which in effect idolatrously raises the interests of individual human beings to the level of God's coming to self-understanding. Such are the often unnoticed consequences of abandoning a God-centered conception of ethics. In this way, even well meaning "ethically based" institutions fail to help their members to serve God. The institutions fail to be persons, and as a result their devoted members are likely to fail to be Persons, that is, they will fail to actively promote God's will to self-understanding.

These remarks about the unnoticed danger in Universalism have a certain affinity with the distinctive role of love in the ethical system of Coming to Understanding. A person is defined, in part, by his, her or its capacity to love. Love, in its turn, is defined as being able to exercise one's referential and volitional capacities in accord with God's will. At first sight, this may strike the reader as an odd definition of "love". For it corresponds neither to eros nor to philia nor to agape. Love, as it is defined in *Coming to Understanding*, is not an emotion but a committed orientation towards the service of God's will. As such, it is distinct from both philia (friendship) and eros (sexual desire); for these essentially involve particular emotions.

Not only are philia and eros set aside as forms of love, but agape or radical altruism is also examined and found to be a defective ideal of love. Agape is supposed to be completely selfless and utterly giving in nature. It is the love "that asks no questions" and that "turns the other cheek"; when one is filled with this love, one gives everything without any thought of return. However, from the Divinely oriented consequentialist or teleological point of view that is central to *Coming to Understanding,* such behavior will often count as vicious; for this kind of radical altruism does not enhance the capacities of members of institutions to cooperate maximally well with one another in the task of promoting God's coming to self-understanding. Instead, it simply tempts others to exploit the radical altruist; indeed if a community contains too many altruists that community will inevitably invite and unwittingly promote exploitation. A community that is instead composed of individuals who are only "reciprocal altruists"—who are willing to cooperate with others *only when* those others are willing to cooperate in return— is likely to be far more successful precisely because it resists exploitation by selfish predators. Christian charity or agape is thus truly “otherworldly”; it ignores the realities of human agency, and so cannot be endorsed under conditions of increasing understanding. The same is true with many of the more sentimental aspects of conventional morality, in particular the emphasis on advancing the flourishing of all human beings equally and independently of their particular capacity to love in return.

Moreover, something else is missing from such attempts to place conventional morality and the flourishing of individual human beings at the heart of ethical life. Conventional morality has no developed ethical standards for institutions; for there is no good conception of institutional weal and woe available to conventional ways of thinking. This is because institutions are not thought of—or judged in terms of—their contribution to their proper telos or final end, namely God’s coming to self-understanding.

Given that the final end of all persons is God’s coming to self-understanding, the neglect of the final end of institutions by conventional morality is a dire failing on its part. As already noted, no single individual human being can come to be aware of the large number of metaphysical realities and the complex explanatory relations among them. Hence no single individual, on their own and in isolation from an appropriate institution of co-operative persons, can make a very significant contribution to God’s self-understanding. This has to be a collective achievement, and if it takes place it will be in the context of an overarching institution that not only exhibits physical agency and cognitive agency, that not only is *capable* of promoting God’s will to self-understanding, but that *actually* promotes that self-understanding.

The ideal version of such an institution, truly dedicated to carrying out God’s will, would be an *Ultimat*e *Institutional Person*. It would be aware of the maximum possible number of metaphysical verities, and their deepest interconnections, so that the perfection of its collective knowledge will be the perfection of God’s self-understanding. There is therefore an ultimate practical imperative, wholly neglected by conventional morality, namely that we should attempt to bring about such an *Ultimate Institutional Person*—an institutional person that is flexible in its ideology, that encompasses all knowledge (scientific and metaphysical), and that remains always open to developing and deepening its collective understanding.

At the present stage of human development, the only non-institutional persons we know of are human beings. We may or may not be alone in The Block Universe, but in our state of ignorance about this, the *ultimate imperative for humankind* is the attempt to bring about and contribute to an Ultimate Institutional Person made up of humankind. Whether or not we are alone in The Block Universe, this goal is still supremely important to God. It is only those human beings who are serving God's Will—both as individuals and in the institutions to which they belong—who genuinely contribute to progress towards an Ultimate Institutional Person. This is the end that gives our short-lived and local strivings a significance that extends beyond our small time and place in The Block Universe.

Indeed, even those human beings that are mere selves and not persons (let alone Persons, or *active* realizers of God's will) can make positive contributions through such an Ultimate Institutional Person. They can thereby be genuinely useful, like mercenaries on the right side in a just war.

A human being will fail to be a person if it fails to develop the *capacity* to conform its referential and volitional/purposeful capacities to God's Will. However depending on the internal structure of a given institution it is possible for human beings that are not persons to contribute positively to the overall functioning of that institution. Even so, a human being may fail to be on balance good, because he or she remains totally self-involved outside of the functioning of that institution. However, especially in the case of *transparent* institutions it is unlikely that an institution can succeed in being a person, let alone a Person, without at least some, indeed many, of its members being Persons as well. So in order for the ultimate imperative for humankind to be achieved, in order for the Ultimate Institutional Person of Humanity to develop, individual human persons must deepen their commitment to serving God.

When it comes to evaluating an institution's suitability to serving God's will there are two different types of institutional transparency that are relevant. An institution is *internally transparent* to the degree to which the awareness of selves and persons within the institution and the awareness of the institution itself are both available to be mutually shared. An institution may be said to be *externally transparent* to the degree to which the awareness of that institution is available to be shared with selves or persons who do not belong to that institution. When an institution reaches the level of a self and also has a high degree of internal transparency then the knowledge of the individual members—be they selves or persons—is also shared by the institution as well. If the institution itself has reached the level of a Person; that is, if it on balance promotes God's will, then God too will thereby come to know what the selves and persons who belong to that institution know. For this reason it is natural to suppose that the Ultimate Institutional Person will and should be an internally transparent institution.

The degree of external transparency of an institution also has important effects on the range and scope of God's consciousness. Consider, for example what is presently the major knowledge-gathering institution, what we have called the Institution of Science, and the sub-institutions, such as research institutes, independent labs and universities, which make it up. By and large these institutions exhibit a high degree of external transparency. Despite misplaced entrepreneurial forces within modern universities working to the contrary, much of their knowledge is not proprietary knowledge; it is there for anyone who is willing to put in the work to master it. Thanks to this important—though threatened—ideal of external transparency, it is possible through the consciousness of individual Persons within the Institution of Science and without, for God to be conscious of the relevant fundamental knowledge possessed by the Institution of Science. This remains so, despite the distortion of the Institution of Science by its commitment to Scientism. In this way, the important work of the Institution of Science is "saved" by the external transparency of that institution. So the significance of the Institution of Science goes beyond that of being the mother of the technological revolution; its genuine fundamental knowledge of reality can become part of God's consciousness.

Coming to Understanding defines piety as serving God's will, and hence as contributing to God's coming to self-understanding. In aiming to be pious, we naturally fall into the error of individualism, that is, we think that making ourselves good persons is a private matter, something we can achieve by affecting others personally, mostly in one-on-one relationships, and in very small groups such as families. We suppose that as long as we treat others and their projects with respect, and avoid harming anyone else in the course of pursuing our own projects, we ourselves will be essentially blameless or good. This, however, represents a profound underestimation of the demands of piety. A pious life can only be fully pursued in the context of appropriate institutions, institutions that contribute directly or indirectly to the process of coming to understanding. For no individual human person can become aware of enough by him or herself, to be of real service to God. The process of coming to understanding is intrinsically a collective activity, and piety must be measured in terms of collective activity as well as individual deeds. Thus in order to be pious we must directly or indirectly contribute to the awareness of appropriate institutions; for only institutions are capable of the systematic understanding of the metaphysical realities of which we are gradually becoming aware.

Indeed, it is a given individual's contribution to appropriate institutions that will typically matter most in the determination of that individual's degree of piety. Moreover, given the interconnectedness of institutions, it will often be the case that an institution's contribution to *other* institutions will typically matter most in the determination of its degree of piety

Thus a natural (if idealized) hierarchical picture emerges; a picture of individuals at the bottom, and ever more inclusive institutional entities above them, culminating in whatever institution has the most complete and comprehensive understanding of God and God's Attributes. This highest-order institution is what *Coming to Understanding* characterizes as the Ultimate Institutional Person. (On the assumption that we are alone in The Block Universe, this institution will be the Ultimate Institutional Person of Humankind.)

Despite its understanding of God and of what it is to serve God, and its anticipated replacement of churches with the hoped for Ultimate Institutional Person, *Coming to Understanding* maintains three central lines of connection with the old theology: God is a person, the standard of right or "pious" action is action in accordance with God's will, and God alone is the proper object of worship. However, these propositions are derived from fundamental metaphysics by the method of eduction, and not from the revelations peculiar to the Abrahamic faiths.

The principle of Fallibilism articulated earlier, tells us that the viability of this whole approach is open to challenge; and whereas Zimmerman endorses the systematic exploration of fundamental metaphysics, Graham is more skeptical of the whole approach. While Graham raises questions about the status of the metaphysical project as a whole, Zimmerman's points are more internal to that project. Zimmerman is especially worried about the rejection of universals, and his discussion invites a more detailed treatment of universals than was given in the text of *Coming to Understanding*. First, however, I will address Gordon Graham's more global concerns about the text.

Gordon Graham's Concerns

In his probing discussion of *Coming to Understanding*, Gordon Graham aims "not so much to examine detailed aspects of individual arguments, but to offer some broader comments on the central concepts and topics with which it is concerned." Graham's overarching sense is that many of the central concepts of *Coming to Understanding* have been ripped out of their everyday contexts and are being made to bear intolerable weight in the overall system that the work presents. In defending the idea that our concepts are rooted in our everyday practices, and so become lifeless or empty when applied beyond those practices, Graham takes Wittgenstein, Kant and Hume—as he interprets them—to be his close allies.

Not only are Graham's interpretations of these thinkers less than fully compulsory, but his whole emphasis on our everyday concepts and their homely origins can promote a quite bad methodology when it comes to fundamental metaphysics and theology. It is one thing to explicate the conceptual structure inherent in the anthropocentric point of view, but it is simply idolatrous to suppose that these concepts will be adequate to the task of characterizing God, God's will, and the structure of fundamental reality. As emphasized in *Coming to Understanding*, we need conceptual innovation to do this; we need to stretch and expand the meanings of our terms and then embed them in a new and highly constrained interpretive framework in order to begin to say something adequate about the nature of God.

Agency

Graham draws on the authority of Wittgenstein to emphasize that

> we are first and foremost doers not seers or hearers. . . it is essential to grasp that from our infancy we act *within* the world and not merely *on* the world. Speech, which is so fundamental a feature of human life, is a manifestation of this activity, not simply a verbal record of the world as apprehended in mental awareness. Furthermore, for human (and other animal) agents the world has teleological content, i.e. it presents itself as *relevant to our needs*, already filled with resources—food and shelter—dangers and opportunities.

Although it is unclear why an agent-centered rather than a spectator-centered outlook is at odds with the views set out in *Coming to Understanding*, Graham goes on to draw the following conclusion:

> If against this background, human beings are indeed properly described as "physical agents", then the inclusion of hurricanes in the same category raises a question about the meaningfulness of the classification.

Obviously, Graham cannot really and clearheadedly be doubting the *meaningfulness* of the classification "physical agent" for he has just relied on its intended meaning in order to forge the loose connection he makes with the thought of Wittgenstein. Presumably, his *real* objection is that the classification lets too much in, including things that are very different, such as human beings and hurricanes. But the fact that a conceptual system classifies different things together is only an objection if that conceptual system also lacks the means to distinguish them, and here it seems surprising that Graham does not note that human beings unlike hurricanes are also—many of them—sites of selves, persons and souls, as *Coming to Understanding* emphasizes. Once those further important distinctions are taken into account there is no conflict between the views of *Coming to Understanding*, and the action-centered perspective that Graham finds in Wittgenstein.

Recall the various distinctions in this domain introduced in the text, distinctions which Graham simply elides in his complaints about the concept of a physical agent. First, a *person was defined* as a particular with three structured sets of capacities:

(i) referential capacities (being aware, or being conscious),
(ii) volitional/purposeful capacities (having a will, and/or making choices in accord with goals or purposes),
(iii) the capacity to love (being able to exercise the first two sets of capacities in accord with God's Will).

Next, it was observed that associated with persons are selves. Human selves are constructed entities composed of a particular kind of physical agent, namely the human body and a cognitive agent who is the bearer of awareness and freedom. Finally, regarding *persons and Persons*, it was noted that a self can succeed in being a person, because it possesses the third structured set of capacities, it becomes a *Person* only if it adequately exercises its capacity to love. It thereby brings about a soul, where this involves making a contribution to God's consciousness, which in turn means contributing to God's coming to understanding, in effect to God's self-understanding, thereby actualizing God's will.

Whatever one makes of this theory, one cannot reasonably say that it neglects what is special about human agency just in virtue of treating the human physical agent as ontologically the same sort of thing as a hurricane. This is a worry that could arise only on a very cursory reading of the text of *Coming to Understanding*.

Is There Theoretical Knowledge of God?

In trying to clip the feathers of theoretical speculation about God, freedom and the soul, Graham invokes Kant, writing that neither physics nor metaphysics can ground knowledge of God, but only pure practical reason—that is, a priori reflection on our ethical situation, and its presuppositions. Graham continues

> If this is true, then knowledge of God obtained in this way is not properly described as 'such as it is'. It is complete, and to think otherwise is to continue to believe possible that which Kant thinks he has shown to be impossible—theoretical knowledge of God.

There is, of course, room to doubt that even from Kant's point of view our practical knowledge of God provides *complete* knowledge of God. Throughout Kant's *Religion Within the Limits of Reason Alone*, and his anthropological writings more generally, Kant emphasizes the limited—and hence *incomplete*— character of our knowledge of God. That said, the real issue is the possibility of theoretical knowledge of God, and in particular the status of the intellect when it is directed at Divine things. One thing we do know is that Kant's attempt to foreclose this issue by an appeal to his theoretical philosophy, namely his own empirically uninformed efforts at what we would now call the theory of perception and cognitive science, are not to be taken as definitive. Kant's "a priorism"—his attempt to use pure reason alone to set the limits of pure reason—is deeply misguided. The question of the status of the intellect when it is directed at Divine things is an a posteriori matter. The method in fundamental theology and metaphysics is not pure reason's deductions, but rather eduction, the same method employed in the natural sciences, albeit directed at a different, more abstract, subject matter.

Recall that eduction involves four aspects: First, inference to the best explanation of the data at hand; second, the attempt to derive further consequences by deduction from our explanatory hypothesis; third, additional inductive testing or verification against the data; and fourth conceptual innovation in order to elaborate and unify our explanatory hypotheses. (Zimmerman focuses on the first aspect of eduction, and wonders in passing why we need a new name for inference to the best explanation; but the whole point of the term “eduction” was to emphasize how these four aspects are related.) So conceived, eduction is therefore an open-ended process of hypothesizing and testing that is as much the proper method of metaphysics as it is the proper method of empirical science. As against the ambitions of Hegel, it is not a process that will produce the finality and certainty of logic or mathematics. There will always be room for further improvement and refinement.

What reasons are there for thinking that eduction will be utterly impotent in the realm of metaphysics while being deeply fruitful in science? There is the undeniable fact that what is called “metaphysics” is at a greater theoretical distance from actual empirical observation than what is called “science”. This, however, does not alter the *method* of metaphysics, but only complicates the chain of eductions that lead to the proposed metaphysical explanations, so that for long periods of time there will be more room for disagreement and less convergence of informed opinion than we happen to find in contemporary geology or chemistry. The method remains the same in metaphysics as in science; it is just the distance from observed data that creates the illusion that metaphysics proceeds by deduction alone.

Here, I am obviously inclined to agree with Dean Zimmerman when he writes that

> a person is engaged in eduction if she is pursuing reflective equilibrium and accepts inference to the best explanation as a valid form of reasoning, in addition to deduction and induction. Critics of metaphysics may claim that it does not constitute a field of knowledge or even a field of reasonable belief—they may, like the positivists, think there are no real questions being addressed by metaphysics; or that, in the absence of methods of inquiry that lead to convergence, there is no point in attempting to do metaphysics. But practitioners of metaphysics should find little, if anything, to disagree with in Ammonius’s advocacy of eduction.

It is an odd idea that eduction should work well in science but not in metaphysics. In making the connection between experiment and theory, science depends on a variety of metaphysical assumptions, such as the regularity of nature and the universality of natural law. From a certain point of view, our deepest scientific theories and their metaphysical presuppositions face the tribunal of experience and experiment together. This at least is the clear consequence of the holism of theory and observation argued for by Willard van Orman Quine—and before him by Pierre Duhem.

Does Philosophy Actually Make Progress?

Later it emerges that Graham will be satisfied with none of this, for he turns out to be a thoroughgoing skeptic about progress in philosophy. He rejects the "common conception of philosophical inquiry" that "thinks in terms of advancing the subject, and solving problems that have hitherto evaded solution." Philosophy makes no progress; it produces no results.

The decisive argument against this kind of Wittgensteinian defeatism will be recognized by anyone with the faintest familiarity with 20th century philosophy, for the argument essentially takes the form of *solvitur ambulando*, in effect a walkthrough of some of the striking results of the era.

Just to begin on the stroll: Is "On Denoting" (Bertrand Russell) devoid of any results? Does *Principia Mathematica* (Bertrand Russell and Alfred North Whitehead) contain no philosophical results? Are we to suppose that the refutation of David Hilbert's program in the philosophy of mathematics by way of Kurt Godel's incompleteness theorem is *not a result*? (Recall that Wittgenstein embarrassed himself in front of Turing by making confused claims precisely about this.) Pierre Duhem's account of the holism of epistemic justification—oh yes, another non-result! Quine's demonstration that the analytic/synthetic distinction is a useless one is, of course, *not a result*? The clarification of the distinction between the metaphysical and the epistemological modalities (Jakko Hintikka, Ruth Barcan Marcus, Saul Kripke) is *not a result*? Alonso Church's thesis (as opposed to the purely logical content of Church's theorem), though foundational to computer science, is a non-result? Karl Popper's clarification of the nature of scientific method, Noam Chomsky's demolition of the empiricist theory of language learning, H. P. Grice's clarification of the distinction between semantic entailment and conversational implicature, Hilary Putnam's proof that meaning does not supervene on states of the brain, Saul Kripke's discovery of necessary truths known only a posteriori and of how to treat names as rigid designators; no doubt we are to be told that these are all *non-results*. The demonstration by Edmund Gettier to the effect that knowledge is not true, justified belief was *not progress, even though that view was widely held since Plato's Thaetetus*? One could continue in this vein for quite some time, but let's leave it at that.

Notice that when it comes to the question of progress in philosophy it is not an objection to observe that some of these results are negative, such as Gettier's. Science also progresses by ruling theories out; as Karl Popper famously put it, in science we do not approach the truth directly, so much as stumble away from falsehood by means of the method of hypothesis and refutation (two moments in the overarching method of eduction). The same pattern is to be found in philosophy.

Graham, who is fully aware of 20th century philosophy, is wrongly moved by certain familiar arguments for skepticism about philosophical progress. Yet he seems unaware of the equally familiar rejoinders to the effect that the starting points of these arguments are actually illusions produced by the artificially contrastive ways in which "philosophy" and "science" are now used. "Science" is an honorific for what has proved intellectually tractable and so now appears to admit of stable convergence in the light of increasing experience; "philosophy" denotes the residuum, what has not yet been established by the confluence of eductions from various sources. Much of what was once counted the province of philosophy is now science, and where philosophy and philosophers have made progress—logic, mathematics, linguistics, psychology, decision theory, the theory of computation, economics, and the more abstract reaches of cosmology—the result is designated with the honorific "science". In this way philosophy's achievements are quietly plagiarized by science, so that we are then told that obviously philosophy has made no progress.

There is, of course, a further temptation to think that there is something inherently defective about the status of the philosophical residuum, at least as it stands now, and so lament the possibility of any further progress on the "big questions" of God, freedom and the afterlife. This attitude survives only as long as we do not take the trouble to look at what is happening in contemporary metaphysics. Over the last thirty years there has been a profound intellectual deepening of the sense of *what it would take* to make a further advance on these "big" questions. It is perverse to deny this the name of knowledge, even though it is not first-order knowledge of the breakthroughs themselves.

As Willard van Orman Quine pointed out, our theories come to the tribunal of experience embedded in whole worldviews, the "philosophical" elements of these world views are inextricably bound up with the "scientific" elements. There is simply intellectual inquiry, and it advances as a whole without a principled and fixed line between what is a priori and obscure and a posteriori and tractable.

Nevertheless, Graham is quite right that what is called "philosophy" has a different relation to its history than what is called science. He notes:

> It is not just intellectual historians, but contemporary metaphysicians who read Plato, Hume and Kant. Contemporary moral philosophers continue to read Aristotle and Mill, and contemporary political philosophers read Hobbes, Locke and Rousseau. How can this be? If there are 'advances' and 'solutions' such authors, like Boyle [in the context of Chemistry], should be of antiquarian interest only.

Before we make too much of this contrast, it is worth checking just how contemporary philosophers think about the history of their subject. Three points are noteworthy. First, many are taken with something like David Lewis's metaphor of the history of philosophy as a big barn full of spare parts worth a perusal just in case you see something that might help in building your own philosophical system. Here it is the systematic ambitions of philosophy, and of particular philosophers, that makes its own history of more than antiquarian interest. Second, philosophy as a style of writing encourages its practitioners to locate their thought against a historical background for comparison and contrast, and the broader the system being developed, the wider the historical sweep. (This, for example, was the reason for the historical overview of the theory of categories in the opening part of *Coming to Understanding*.) Third, contemporary philosophers rightly insist that the history of philosophy be taught in philosophy departments by philosophers, and not by mere historians in history departments, historians whose absence of philosophical training would make them insensitive to the actual texture of the texts and the ideas. As a result philosophers themselves have to teach the history of their subject, and so they learn more about it than their colleagues in the sciences learn about the history of their subject.

Taken together, these three points almost completely explain the different attitudes of science and philosophy to their own histories. (And of course, one of the great sources of Scientism among scientists is ignorance of the history of science.) Graham's more radical thesis, that there is no progress in philosophy, goes far beyond what is necessary to account for the different attitudes among philosophers and scientists to the history of their respective.

In further attempting to deflate the use of the pure intellect in metaphysics and theology, Graham invokes the authority of Aristotle, writing

> [I]n the *Nicomachean Ethics* Aristotle gives an indication of how *phronesis* (practical wisdom) must undergird *sophia* and *theoria* (scientific and metaphysical theorizing). Viewed in *this* way, the deliverances of practical philosophy are further elevated within Reason. They are not a poor substitute for metaphysics—as *CTU* hints—but a necessary pre-condition of metaphysical thought.

Coming to Understanding does *not* in fact hint that practical wisdom, or more exactly intellectual virtue, is anything less than a necessary condition for knowledge of fundamental reality. As the text makes clear, eduction requires intellectual virtue—and so practical wisdom—in each of its various steps. More than this, it is emphasized that proper theory choice in the face of evidence is often partly an aesthetic matter, so that a certain emotional sensitivity—a susceptibility to aesthetic delight—is required to see things rightly. So although Graham objects that emotion is deliberately left out of the definition of a person, proper emotion may well be crucial to the project of coming to understanding. Just because one element is downplayed at one point does not mean that it will not enter in when it comes to the full explication of another central notion, such as eduction. Aesthetic emotion may lie in the essence of the proper functioning of the eductive method, without thereby lying in the essence of a person. Perhaps it is in part a failure to appreciate this that leads Graham to balk at the crucial extension of the notion of personhood to social institutions, which are devoid of emotions as such.

Are Institutions Persons?

Graham has a quite sophisticated argument against the idea that social institutions can literally be persons. He states it thus:

> A seminary that becomes a college, let us say, or more dramatically, a school that over time becomes a hospital, may retain possession of its property, its contractual obligations, even its personnel, and thereby at no point lose its legal status and identity. Its final cause has changed, though, and thereby it has changed into a different institution; it is no longer a school. This suggests an important difference with human persons. The final purpose of a human being (the activity of reason in accordance with excellence, if we follow Aristotle, or the ability to know God and enjoy him forever, if we follow the Shorter Catechism, or some other conception) does not change with even the most radical alteration in mode of life. The successful businessman who becomes a Trappist monk, or the hermit who becomes a socialite, remains the same person throughout. This is what entitles us to think of him/her as a metaphysical (or otherwise enduring) entity. The hospital that becomes a school (an actual example) retains its legal status, but is a different institution.

On the face of it this is no more than the observation that human persons and institutional persons are capable of surviving different kinds of changes. That should be taken as read, for it is part of what makes them *different kinds* of persons. However, Graham seems to be presupposing that when an institution is described as a person this can only be intended to capture the idea that an institution is a "legal person", that is, an entity invested with certain rights and responsibilities by written law. Given this presupposition, his remark about a hospital maintaining its legal status as the same legal person, even though as a school it is now another institution, makes good sense. Then he may be taken as arguing that in the case of a hospital becoming a school we have *two successive institutions but one enduring "legal person"; therefore such institutions are not essentially persons.* The argument is clearly interesting, but is the crucial premise true?

Clearly the presupposition that the personhood of institutions is a purely legal status simply begs the question against the view being argued against; namely that some institutions are "natural" persons, which the law may or may not recognize. Even so, even if we grant what appears to be Graham's assumption, the suggested argument misses one obvious option: there are in fact three institutions (and potentially three institutional persons) figuring in Graham's example, the hospital that came to an end, the school that started up in its place, and the institutional superstructure that persisted throughout. Each of these institutions would then be (potentially) natural persons, and of none of them would it be true that their final end (as opposed to their stated legal purpose) *changed*. Their final end or telos remains the same as the final end of persons quite generally, namely the promotion of God's self-understanding.

Graham later opines that anything as complex and multifarious as Science does not qualify as an institution. He thereby denies that there is such a thing as the Institution of Science, and so attempts to disarm *Coming to Understanding's* crucial claim that because it is dominated by the ideology of Scientism, which occludes teleology in general and God's purposes in particular, the Institution of Science is not a person. Perhaps here too Graham fails to appreciate the existence of meta-institutions, within whose superstructure other more definite institutions come and go.

God's Sovereignty

Graham describes the "most innovative move" of *Coming to Understanding* as the denial of "God's sovereignty". This is very puzzling, at least on its face. The central doctrine of the work is that God is the being on which all else depends for its existence. The lineaments of the forms of dependence of all particulars on God are set out in detail, some would say too much detail. Once we understand that creation cannot be an event in space or time, since part of what is created is The Block Universe and the whole spatio-temporal manifold which it exhausts, the best model for creation is the converse of ontological dependence. Once we understand that God does not intervene in the world like a nervous manager who doubts the effectiveness of his original directions, the best model for God's power is the power by which all things happen, and so there is no other power operating in the world that does not derive from God's power. So God is ontologically fundamental, God is the creator of all in the deepest sense, and God is all-powerful. In what sense then is God not sovereign?

There are two crucial points of dispute with the traditional theistic conception of God's sovereignty, and both of these clearly disturb Graham. The first is that God is not an occasional intervener in the course of nature; there are no such miracles, and indeed it is a kind of insult to the power and greatness of God to suppose that God is a local agent fiddling with the details of the stream of efficient causation. More than this, the radical doctrine of *Coming to Understanding* is that God depends on sentient beings like us for the contents of God's consciousness.

Graham objects that such a God cannot have knowledge of the world and so cannot really be said to be conscious.

> The nature of knowledge is of course one of the oldest and most intractable subjects in philosophy. It is hard, therefore, to say

> anything incontestable about it. But suppose we assume the traditional JTB account—that knowledge is true belief arrived at in some justifying way… I do not have knowledge if I am simply supplied with true beliefs by a third party. Accordingly, if it really is the case that God is cognitively wholly dependent on other agents, he cannot be said to be conscious any more than a computer can. A computer is programmed to respond to 'information' that is put into it. But the meaning of the word 'information' in 'information technology' is significantly different from its normal meaning. It refers simply to electrical impulses, both positive and negative.

Here Graham betrays a number of confusions drawn from the classical theistic tradition to which he is committed. First he takes God's knowledge to consist in something like true justified belief. However, God does not have beliefs, for he does not have representational states, states which could say or indicate that this or that proposition is true. A representation is a symbolic carrier of information, and there is no room to locate such passive items in God's mind. To be sure, the metaphysically adequate ideas of pious individuals and institutions are accurate portrayals of the nature of metaphysically significant things, and these ideas will populate the mind of God. God does come to be *conscious of* these metaphysically significant things, and to that extent *conscious of* aspects of his own nature. But we should not think of God's consciousness as consisting in a set of *beliefs* in propositions. (The possibility of a functional duplicate of a given person who has all that person's beliefs, but who is nonetheless not conscious shows that consciousness does not consist in having a set of beliefs.)

Instead God's consciousness consists of acquaintance with metaphysically significant things, it can be directed *at them* and not merely at propositions about them. God's knowledge is *savoir* not *connaitre,* and so it is *not* some form of justified belief. Accordingly, the fact that the contents of God's consciousness are derived from others does not threaten its status as knowledge. God's knowledge is knowledge *of*, not knowledge that, not true justified belief that such and such is the case. So even if Graham were right that the justification for a belief does not carry over when the belief is passed from one to another, this would be irrelevant to the case of God's knowledge.

Graham also betrays his conviction that God can only be active in the world if he from time to time miraculously sticks his oar in the stream of efficient causation. The following passage is quite telling:

> A similar point can be made about volitional capacity and purposefulness. Purposefulness implies activity. If God is utterly powerless, can he be active? Leaving aside the efficient causation of the universe, it seems that God's relation to the world is an entirely passive one.

But *why* should we leave aside God's efficient causing *and sustaining* of the universe? It is precisely because of this that God counts as a person; that is, one with the capacity to realize God's (own) will.

It is worth pointing out that Graham is concerned about the application of certain psychological notions to God. He makes the claim, for example, that a distinction cannot be made between the God of *Coming to Understanding* willing that something be and that God merely wishing it to be. Graham also argues that a failure to perceive metaphysical falsehoods deprives God of the capacity to recognize metaphysical truths. This is on the basis of a presupposition that Graham does not argue for that it is impossible to have certain concepts without corresponding contrast concepts. That both applying ordinary psychological concepts to God and attributing certain concepts to God requires perhaps deep modifications in those concepts is hardly a claim original to me. As Zimmerman points out in his discussion of *Coming to Understanding*, philosophers and theologians of the middle of the last century were keenly aware that such was required.

To repeat a theme that was raised in the first paragraph of this response to Graham, Graham does seem to exhibit a deeply conservative view of the concepts we are allowed to employ to understand God. *Coming to Understanding*, however, aligns itself with the practices of conceptual change that are routine in the sciences and, I must add, in metaphysics itself. There is no reason to hold any particular body of concepts or conceptual linkages sacrosanct in one's attempt to understand philosophical or theological issues.

Time and Eternity

It is perhaps this conservative attitude towards psychological concepts and the concepts of action that is behind Graham's discomfort with the distinction between the temporal and the atemporal urged in *Coming to Understanding*. Graham suggests that the analogy of the atemporal with the logical is less "illuminating" than other comparisons because "the problem with logic is that the relations it determines are static. … Nothing *happens* in logic itself. Acting in accordance with God's will, by contrast, has to be a practical *activity*."

Graham recommends instead that one considers what he describes as "contrasting temporal orders," cases like a piece of music or fictional narrative. He writes,

> A piece of music, like a story, has a start, middle and end. Temporal relations are essential to the intelligibility of introduction, repetition, variation, reprise, coda and so on, just as they are to understanding the narrative. These temporal relations are not the same as relationships in real time, however. A theme has to come before a variation in every single performance. But in real time, obviously, the theme in a later performance comes after the variation in an earlier performance. Similarly, Lady Macbeth has to die before Macbeth gives his famous speech, but in real time the speech has been given thousands of times before Lady Macbeth's next demise.

To characterize this in terms of "contrasting temporal orders" is to misconstrue what is going on. There is only one temporal order involved in these cases: the real one. There are *fictional* (make-believe) temporal orders—both in the music and in the narrative, but these aren't genuine temporal orders at all. Any *performance* of Macbeth occurs in real time; but the story itself only fictionally occurs in time. It does not occur in some other "order" of time.

Related to this mistake is Graham's conservative presupposition that the concept of action itself requires temporality to be made sense of, as opposed to the atemporal notions of precedent and consequent. It does not help Graham's case against *Coming to Understanding* to invoke fictional temporal orders.

Should Beauty Be Included Among the Attributes of God?

Graham rightly notes that despite its Neo-Platonic roots, *Coming to Understanding* does not preserve the fundamental metaphysical status of each of trio of the so-called "transcendentals", namely Truth, Goodness and Beauty. Beauty is not an eidos, things are not beautiful in virtue of imitating a form of Beauty. Instead, things count as beautiful because they standardly cause *human beings* to go into pleasurable emotional states involving what Kant called "the free play of the imagination". Other rational beings, other cognitive agents, and other persons who lack the distinctive human emotional sensibility that is the basis of the pleasurable response to the beautiful object or person would not find the same things beautiful as human beings do. The place then to look for a theory of beauty is not in metaphysics but in human psychology. One manifestation of this point may be the idiosyncratic way in which the term "beauty" is used; however good-looking they might be, *men in their thirties and later*, as opposed to boys, girls and women, cannot be beautiful, but only *handsome*. One wonders whether those who would promote beauty to the status of an eidos would do the same for *handsomeness*.

Graham has two objections to the metaphysical downgrading of beauty. First, he takes up the remarks to the effect that "Beauty is in the eye of the beholder" and "Beauty is bought by the judgment of the eye" and objects that this simply recapitulates the mistaken but dominant idea that the visual sense is the sole route to beauty. He quite rightly observes that music and poetry can be beautiful, as can certain mathematical proofs. However, this perfectly fair corrective does nothing to displace the broadly Kantian conception of beauty as the disposition of the object to put the human subject into a pleasurable emotional state associated with the free play of the imagination. The route to this pleasurable emotional state may be through vision, or through audition, or indeed, as in the mathematical case, through the operation of the intellect itself. However, this does not in any way advance the case that beauty should be counted among the eide. It simply amounts to the point that not all the beautiful objects are visible objects.

Graham offers a second and more systematic objection to the metaphysical downgrading of beauty, namely that it also involves the downgrading of style. He writes:

> Human actions have *style* as well as content, purpose and effect. When *CTU* says 'only Truth and Goodness really matter when it comes to serving God' this presupposes that the value of truthful statements and good actions can be assessed independently of the style in which they are uttered or performed. This is by no means evident. Scientists and mathematicians often take elegance and simplicity as marks of superiority in proofs and theories; some are even prepared to refer to such features as 'beautiful'. In practical life, too, value is often a function of style. It is not merely gifts in themselves that we value, but the manner in which they are given. Indeed arguably, some actions—those of politeness for instance—are *pure* style. Saying 'thank you' need have neither purpose (to gratify someone) or effect (their being gratified). It may of course have this purpose and this effect, but is intelligible and can be valued without them. Now if the stylistic dimension of an action—its gracefulness, simplicity, elegance, and so on—matters in relations between human beings, why should it not also matter in the service of God? ... Style is what turns lust into love, child care into parenting, feeding into dining, dress into fashion, fatalism into fortitude, and innumerably many other examples. In a religious or spiritual context, it is also what turns servility into worship.

Again, these are insightful remarks, and they do begin to make the case for the importance of style in human affairs, especially when the concept of style is stretched to the point where it simply denotes the manner in which things are done. Of course, the manner in which things are done can be of immense instrumental importance, since it can bear on whether we effectively serve God or not. Yet from the fact that style has immense instrumental importance, and the fact that appropriate style pleases those with the appropriate sensibility, it does not follow that Style should be included among the eide. Play is also of immense practical importance, and it produces intrinsic pleasure in those that are playing. Yet Play is not likely to be an eidos, it is not likely to be a joint in metaphysical reality. For what counts as play is a matter of our idiosyncratic human sensibilities. The same holds for style and beauty.

This said, I want to again stress the fallibilism that runs throughout *Coming to Understanding*. It is always possible that future eductions will reveal—contrary to the views being pressed here—that Beauty and even Play are among the eide.

Is the God of CTU a Suitable Object of Worship?

Graham asserts that, "traditional theology holds (as I do) that it is God's perfection that makes him worthy of worship." To the extent that this is not merely special pleading for a quite particular view of worship, one not shared for example by polytheistic traditions, he is raising an important and fundamental issue. What makes something worthy of worship? In *Coming to Understanding*, worship is characterized broadly as, "love expressed by human persons towards something they take to be greater than themselves."

For Graham, apparently, greatness is not enough. *Perfection* of a being is required to make it worship-worthy. Graham can stipulate this as a condition of worship if he so wishes, but such a condition, although presumably sufficient, is hardly necessary. Our counter-suggestion is that, in any case, it is usually not God who should be directly worshipped or praised. Instead what is surely praiseworthy is service to God. In this respect, it may be the Ultimate Person who is most praiseworthy. I am not asserting, in any case, that the worship of God is inappropriate. It may be quite appropriate in certain contexts. What is always called for, however, is pious behavior. Pious behavior is linked to serving God, and that in turn is linked to one's actions within the context of appropriate God-serving institutions.

Emotion is always an important component of pious behavior for human beings. I suggest that when a given individual understands the ontological fundamentality and nature of God, and when the nature of their service to God becomes clear to them, the appropriate emotional response will naturally follow because of the kind of creature they are.

Worthiness of worship, like worthiness of anything, cannot be *derived* from any description of qualities—this includes "perfection"—unless such worthiness is already tautologically built into that description. It is therefore an illegitimate move on Graham's part to offer the traditional "perfection of God" as a standard against which any description of worthiness must be measured.

Dean Zimmerman's Challenges

> Zimmerman provides an excellent summary of major themes of *Coming to Understanding* when he writes:
>
>> Ammonius is a Monist, in at least one sense of the word: He believes there is one thing (which he calls "God") upon which everything else depends. This being is a person who is conscious of some things, after a fashion; but Ammonius's Deity is outside of time, and not an agent intervening in nature in miraculous ways. In order for the Deity to be conscious of anything, less exalted persons, including human beings, must achieve a certain level of moral excellence, and learn certain kinds of facts. Ordinary human beings, or "selves", are a combination of a metaphysical core—a cognitive agent that exists outside of time and space—and a physical agent, something in space and time. The two stand in a complicated relationship—the atemporal cognitive agent is dependent upon the physical one, and the physical one somehow "imitates" the mental one. The mind influences the body—e.g., the body moves in accordance with the timeless agent's choices—but the agent does not control the

> body by means of an exercise of "efficient causation"; rather, the atemporal agent exerts a kind of teleological pull upon the spatiotemporal body. Cognitive agents that achieve a certain level of moral goodness—being, "on balance", good—become Persons, with a capital "P"; only things that *they* know contribute to God's consciousness. And, as best I can tell, only *some* things they know become part of God's consciousness: namely, truths about metaphysical reality. Ammonius identifies metaphysical reality with a realm of entities he calls "*eide*"; so the facts they know which contribute to God's consciousness are facts about the nature of the *eide*. The *eide* are actually "attributes of God"; so, what God is able to learn, through the awareness of good agents, is truths about God's own nature (pp. 107-8). God's chief end is self-understanding, and, since that can only be achieved by good persons coming to understand metaphysical truths, promoting such knowledge on the part of good persons should be the chief end of human beings, as well.

Although Zimmerman goes on to raise a number of subtle and interesting challenges to the central theses of *Coming to Understanding*, he rightly locates the intent of the work as an effort to suggest an alternative and fruitful way of thinking of God and his relation to human beings. He writes:

> A philosopher or theologian might have reservations about the criterion for soul-generation (Ammonius makes use of the notion of being "on balance, good", which some will find problematic; a couple of alternative criteria are mentioned below), or have doubts about whether God mainly values our thoughts about *metaphysics*; while still finding the model highly suggestive, and potentially fruitful.

By way of summarizing his points of agreement and disagreement Zimmerman notes that any metaphysics of the categories that discovered a ubiquitous form-matter branching-principle at work throughout its tree (or table or wheel or what-have-you) would earn "extra points in the competition for best ontology”. He also agrees with the crucial accusation made in Part 1 against category theories from Aristotle on, namely that a “flaccid” or “list-like” catalogue of fundamental metaphysical kinds is much worse than a collection of kinds generated by a theory that finds lots of symmetries and interesting explanatory connections among them. And he is *in principle* open to the kind of revisionary metaphysics *Coming to Understanding* attempts to argue for, noting that when a theory has enough explanatory virtues, we should be prepared to accept some of its more surprising and revisionary conclusions — “things we might not, antecedently, have thought were true”. Thus, in summarizing his areas of agreement he writes “[T]here is much in Ammonius’s general strategy to be admired”.

Even so, Zimmerman also finds much to disagree with in the formulations and arguments of *Coming to Understanding*. He understandably balks at several of the eductions of particular eide at particular points in the text, but his main criticisms of the metaphysical structure of *Coming to Understanding* cut more deeply than this understandable skepticism about this or that eduction. He claims that the eide should be treated as universals and not particulars, that they cannot be taken to be attributes of God, that the meaning of “eide” changes between Part 1 and Part 2, and that there is no good account of the relation of falling under an eidos which shows that this relation is clearly distinct from instantiating a universal. He challenges the generality of the matter/form distinction, and so rejects its application in the centrally important account of the emanation of the eide. To these objections he adds worries about the ethical upshot of *Coming to Understanding*. He points out that the convergence between conventional morality and the ethical system of *Coming to Understanding* holds only for the most part, so that under special circumstances we may be required to do things that conventional morality would find repugnant or horrendous. He suggests the ethical system defended in *Coming to Understanding* absurdly puts the activity of the metaphysician at the top of the hierarchy of human activities. Finally, he questions whether metaphysics can properly be taken to be the ground of ethics.

Each one of the issues Zimmerman raises is crucial and needs to be taken up in some detail.

The Eide as Attributes of God

The eide are the attributes of God and as such they are ontologically fundamental. Let us start with the idea that, as such, they are the fundamental categories that things fall under. As fundamental categories, they cannot be taken to be pre-existing universals, for universals are capable of existing even when they are uninstantiated by particulars, and so they could exist even if there were no particulars. To take just one example, the universal or property of having positive charge does not pop into existence when the first positively charged particular does. It pre-exists the first positively charged particular, and hence all positively charged particulars, so it does not owe its existence to them, so it is not ontologically dependent on the positively charged particulars.

The argument admits of an obvious generalization that shows that universals are not ontologically dependent on particulars, which further entails that they are not ontologically dependent on God, who is a particular, not a universal. It follows that God is not the one thing on which everything else ontologically depends, for the universals themselves do not depend on him. But this is absurd, so any such fundamental categories are not universals.

Sometimes the point that the fundamental categories must be dependent on God is recognized within traditional theism by saying that the categories are "ideas in the mind of God" where these "ideas" are understood as particular items ontologically dependent on God and his mentality. Nevertheless this is still a flawed conception of the fundamental categories. God's mentality must have a certain character *anyway*, independently of what depends on it, such as the ideas he has of that mentality. This independent character of God's mentality sets the standard of the truth and adequacy of these ideas God has of his own mentality. The independent character of God's mentality depends on the attributes he has, and once we see this it is immediately clear that those attributes are not themselves further ideas in the mind of God. But then those attributes have a good claim to be among the fundamental categories anyway, independently of God's having ideas of them. The traditional notion of categories as "ideas in the mind of God" thus inverts the structure of ontological dependence. As God comes to self-understanding, certain ideas *of* the categories will come to exist in the mind of God, but the categories themselves are not these ideas, but rather the "intentional objects" of these ideas, namely God's attributes. Those attributes set the standard of correctness or adequacy of these ideas.

Once the fundamental categories are identified with the attributes of God their fundamentality is no longer a threat to God's absolute ontological independence. The eide/categories/attributes of God emanate from God and so are ontologically dependent on him. Furthermore, the notion of "falling under," the relation that "non-eidetic" particulars bear to eide that I started this discussion with (for the sake of argument), is one that is then replaced by a complex of notions, (i) being a part of the matter of a formal eidos, (ii) imitating an eidos, and lastly (iii) being a construct that is made up of things that fit the first two characterizations. In all three cases, non-eidetic particulars are ontologically dependent on the eide, and hence on God; for they get to have the character they do by being parts of eide or by imitating eide, or by being constructs made up of things that are either parts of the attributes of God or that imitate those attributes.

Zimmerman begins his criticism of the theory of the eide by noting the following:

> Whatever the difference is between the non-*eidetic* particulars and the *eide*, it must be deep and important. The *eide* are the only things that show up on the wheel, and it will turn out that God's goal, which we are all to serve, is coming to understand the nature and interrelations among the *eide*. Belonging to this category *matters*; they are much more important than mundane individuals and their mundane states and relations.

He asks what the *eide* have in common in virtue of which they are set off from the non-eidetic particulars. In response to the obvious answer, namely that they are attributes of God, Zimmerman then offers this objection:

> Here is a truism if ever there was one: The *attributes* of a thing can be truly *attributed* to it. Another truism: The attributes that

> may truly be attributed to a thing are not to be distinguished from its *features* or *characteristics*; the latter terms are virtually synonymous with "attributes". So, assuming anything like the usual meaning of "attribute", if F is an attribute of X, it must at least be possible for there to be a name, "N", that picks out the attribute, and by means of which it can be attributed to X. In other words, there must, for each such F, be a name "N" that could be used in the following sort of sentence to say something true: "X has the attribute N", or, equivalently, "X is characterized by N". Names are available for many of Ammonius's *eide* that can, with some plausibility, figure in truths of this form, with Ammonius's God as the subject. "God has the attribute *Being*"; "God has the attribute *Godhead*"; "God has the attribute *Intelligibility*"; and so on. For other *eide*, however, it is not at all obvious how to regard them as in any sense attributes of God. Take, for instance, The Block Universe: the four- (or however-many-) dimensional world of space-time that contains everything concrete (p. 63). "God has the attribute *The Block Universe*" does not sound right; "God has the attribute *being the Block Universe*" can't be right, either, since it is only God's body, not God Himself. "God has the attribute of *having the Block Universe as a part*" cannot be right, since God has no parts (p. 53). It is simply not clear how The Block Universe could be construed as an attribute that characterizes God in any ordinary sense of the word "attribute"…Other *eide* are at least as difficult to regard as attributes of God; and some of them are explicitly barred, by Ammonius himself, from being attributes of God — again, in the ordinary sense of this term. *Choosing*, for example, is an *eidos*; but, on Ammonius's conception of God, it is not an attribute of God. If "God has the attribute of *Choosing*" were true, then God would choose; God would be the kind of Person who makes choices — but God "neither makes nor acts upon choices" (p. 97).

Here a certain procrustean and unnecessary semantics of "attribute" is getting in the way of seeing things clearly. One way to recognize that is so is to notice that Zimmerman's proposal would also make all-too-short work of Spinoza's Monistic ontology in which Thought and Extension figure as two of God's attributes. Is Spinoza then really committed to absurdities like "God is Extension" and "God is Thought"? Spinoza is not committed to these absurdities, instead the fault seems to lie in Zimmerman's account of how attributes are to be predicated.

The eide are fundamental aspects or features of reality and hence, given the Monist's understanding of the structure of reality, fundamental aspects or features of God. This is how Spinoza conceived of Thought and Extension, and as *Coming to Understanding* makes clear, Spinoza's conception of God's attributes is a guiding light for the more detailed account of God's attributes.

We only get Zimmerman's linguistic garbling if we agree to jump into his procrustean semantic bed and suppose that an attribute of God can be naively predicated of God in a simple subject predicate sentence, such as "God is Choosing" or "God is the Block Universe". All this garbling of language can be avoided if we understand the rule for predicating an attribute as this:

> If N is an attribute of X, then it is true that N is a fundamental aspect of X, and the name "N" can truly figure in a predication of the form "N is a fundamental aspect of X."

So now we have, in place of the strange remarks Zimmerman derives, remarks like "Choosing is a fundamental aspect of God" and "The Block Universe is a fundamental aspect of God". Are these not precisely what was urged in the main text of *Coming to Understanding*?

Does The Meaning of "Eide" Change from Part 1 to Part 2?

Partly because of his restrictive idea of what it is to predicate an attribute of God, Zimmerman charges that there is a crucial change in the meaning of eide between Parts I and 2. He writes:

> the reader who goes no further than Part 1 can come away with a quite definite idea of what Ammonius's *eide* are, and why he calls them all "particulars". The *eide* are dependent entities that, like Plato's *eide*, play the resemblance-making role; they are sparse, accounting only for fundamental aspects of resemblance; and the relation in virtue of which particulars "fall under" them is one of imitation…

But when it comes to Part 2, Zimmerman supposes that

> many *eide* could only be attributes of God in some Pickwickian sense of the term "attribute". …. My hypothesis is that, when [in Part 2] Ammonius calls a thing an *eidos* or an Attribute of God he simply means: It is the kind of thing that shows up on this wheel [of ontological dependence]. It need play no role in explaining similarity; and it might be impossible to *attribute* it to anything, even God.

Here again Zimmerman is misled by his own absurdity-yielding strictures on the semantics of "attribute". He might as well say that since remarks like "God is Thought" and "God is Extension" make no good ontological sense, Spinoza is using "attribute" in a merely Pickwickian sense throughout the first two parts of his *Ethics*. Because of his confusion over attributes, Zimmerman fails to see the transition in the discussion of eide from Part 1 to Part 2 for what it is, *namely the introduction of a further substantive claim about the eide* over and above the characterization provided in Part 1. The substantive claim is just this:

> The eide, namely entities that, like Plato's eide, are the sources of resemblance-making among non-eidetic particulars (thanks to those non-eidetic particulars imitating the eide or being parts of them) *are also none other than the attributes or fundamental aspects of God.*

Clearly this further substantive claim does not change the meaning of "eide" but simply tells us more about the eide themselves. And the argument for this further substantive claim is that the sources of real resemblances among non-eidetic particulars can neither be ontologically prior to God, nor merely a limited subset of the aspects of God, such as the ideas in his mind. They cannot be ontologically prior to God, for then there would be no God, no one thing on which all else ontologically depends. They cannot be merely a limited subset of the aspects of God, for the other, excluded aspects will have an equal claim to also be among the sources of real resemblances among non-eidetic particulars. Oddly enough, Zimmerman fails to appreciate how far belief in God constrains the ontological status of the eide, understood as the sources of real resemblance among non-eidetic particulars.

Are the *Eide* Really Universals After All?

Coming to Understanding tells us that the eide are not universals but particulars; they are not instantiated but instead are imitated and (some of them) have parts. To be sure, the eide are ontologically *preeminent* particulars; they are not in space and time, and they are ontologically prior to the ordinary particulars that are their parts and that imitate them. Leaving aside the parthood relationship that non-eidetic particulars bear to some eide, at various points Zimmerman talks as if the other conditions are enough to make the eide universals. For example, he writes:

> It would be natural for a metaphysician to say: “let us use the term ‘instantiation’ or ‘participation’ or ‘exemplification’ for that relation, *whatever it is*, that holds between individuals and a further thing, just in case standing in that relation to that further thing is what grounds their similarity in some respect; and let us call that further thing, a ‘universal’.” Such a metaphysician would say: “In Part 1, Ammonius, like Plato, has offered us a theory about the nature of the instantiation relation, namely, that it consists in *imitation*; and he has also, thereby, offered us a theory about the nature of universals, namely, that they constitute a sort of *paradigm*.” … I suspect that the *eide*’s being

> outside of time, playing the resemblance-maker role, and failing to admit of perfect duplication would be enough to clinch the deal: If Ammonius's *eide* are not universals, they will wonder, what would it take to be one?

The nameless metaphysician Zimmerman mentions seemed to have missed something, namely that the three conditions they invoke, i.e.

1. Playing the resemblance-making role thanks to being imitated by non-eidetic particulars
2. Being outside of time
3. Failing to admit of perfect duplication

are not jointly sufficient for being a universal. Take God; he is outside time. He also fails to admit of perfect duplication, since he is by definition the one thing on which all else ontologically depends. Moreover, to the extent that two non-eidetic particulars both imitate God they come to really resemble each other in being godlike. But it does not follow that God is a universal. On any reasonable understanding God is a particular.

The real problem here is with the contemporary analytic use of the term "universal". *Coming to Understanding* follows the medieval discussion and uses this term to mean the same as "predicable", that is, an arbitrary semantic value for a predicate. Universals, in this sense of predicables, are mentioned in passing by way of observing that Plato's developing theory of forms begins with the semantical conception of a form as a universal and then is driven by absurdities like the existence of the form of dirt and the form of the bed to a different ontological account of the forms as the basis for real resemblance among particulars.

In contemporary analytical philosophy "universal" has come to mean something else entirely thanks to the influential work of David Armstrong, and Zimmerman appears to be strongly influenced by this. When David Armstrong revived discussion of universals in his *Universals and Scientific Realism* (Cambridge University Press, 1978) he offered what he called a "sparse" theory of universals. The actual theory turns out to be this: states of affairs have common parts, and these common parts are the properties which figure in the fundamental laws of nature. What Armstrong calls “thick particulars”—namely particulars considered as embedded in all the states of affairs in which they figure—have these properties as common parts. So far we simply have an odd theory of the components of certain entities— thick particulars— that do not seem to be ontologically fundamental. Armstrong names these common parts of thick particulars universals *in res* or “Aristotelian universals”, in contrast to universals *ante rem* or “Platonic universals”. Yet Armstrong’s theory has very little to do either with the actual Platonic theories of forms or with Aristotle’s own theory of predication. The real philosophical cash value of this distinction for Armstrong lies in his assertion of what he takes to be an Aristotelian principle of instantiation, namely

> The only universals that exist are those that are instantiated somewhere or other in space and time.

Put aside the historical anachronism built into the very idea of a sparse theory of “Aristotelian Universals”. There still is a deeper problem with Armstrong’s account. There is a well-known argument that Armstrong’s principle of instantiation is unstable if it is interpreted as metaphysically necessary, and the existence of the future relative to a given past is metaphysically contingent. Suppose that in this world the universal U is not instantiated until 1999. As already noted, universals understood as properties do not come into existence as they are instantiated, universals exist period, not relative to this or that time. So “U exists” is true whenever uttered. This truth then holds in 1998, and indeed throughout the vast extent of time before that. But now suppose that instead of continuing after 1998 the world comes to an end in 1998. “U exists” should remain true in this alternative scenario, but by hypothesis U is uninstantiated. So in the alternative scenario Armstrong’s principle of instantiation is false.

Perhaps there is a reply to this argument, but in any case the important thing to see is that what is called “Armstrong’s theory of universals” is a theory of the common parts of states of affairs and the thick particulars they make up. Zimmerman’s suggestion that the theory of the *eide* presented in *Coming to Understanding* collapses into a theory like Armstrong's is thus very wide of the mark.

As a way of asking why the *eide* are not after all universals, Zimmerman writes

> Armstrong, famously, defends a sparse theory of resemblance-makers; in this respect, Ammonius and Armstrong are in agreement. But of course Armstrong's resemblance-makers are universally agreed to deserve the name "universal"; Armstrong is the paradigmatic "Aristotelian realist about universals".

The crucial thing to see is that the *eide* are not common parts of non-eidetic particulars in general or more specifically of states of affairs. But this is the only sense that Armstrong has actually given to "universal". His universals are not arbitrary predicables, and in fact they do *not* make for the relevant sort of resemblance among the items they figure in, namely states of affairs. For if the universal Being F figures in two states of affairs, say *a's being F* and *b's being F* it does not in general follow that the two states of affairs resemble each other in being F. It is typically only *a* and *b* that resemble each other in respect of being F. Neither state of affairs is F, or has the property of being F.

Recall that on Armstrong's theory, universals are *common parts of states of affairs*, and that his candidates for such common parts are the properties that figure in the basic laws of nature, properties like the charge e on the electron. Now the problem of resemblance or significant similarity which universals are invoked by Armstrong to solve (what he calls "the problem of sameness of type") is this kind of problem: how can electrons *a* and *b* be similar in respect of having charge e? But in the end that problem remains unaddressed on Armstrong's theory; the bump in the carpet is simply relocated. For all Armstrong's theory of universals allows him to do is to say things like

> *a* and *b* are similar in respect of having charge e because some of the states of affairs involving *a* and some of the states of affairs involving *b* are similar in respect of having a common part, namely the universal that is the charge e.

Now we may ask: why should some *other* things having a common part make *a* and *b* similar? The thing to conclude is that Armstrong does *not* actually deliver a general theory of resemblance makers. His theory of a sparse group of properties as common parts only explains why things are similar in respect of having common parts, not why things are similar in the respects which originally drove the problem of sameness of type, respects like having charge e. It only seems that Armstrong is addressing this problem so long as we forget that there is no general true principle, which says that if X has the universal U as a part then X is U. After all, on Armstrong's own theory reality, the totality of everything that exists includes as a part the universal which is the charge e, but reality does not have this charge, *reality is not negatively charged or positively charged to any degree.*

What Armstrong, and Zimmerman when invoking Armstrong, misses is this: resemblance cannot in general be explained in terms of common parthood!

Of course, as well as real resemblances there are the merely apparent resemblances among constructed entities. These resemblances are imposed by our ways of thinking of objects and demarcating them according to our interests and needs. Here the medieval Nominalists were broadly correct; we need have no appeal either to universals or to *eide* to explain *these* resemblances. For these resemblances are merely the consequences of how things strike us. How things strike us is to be explained by our common, though idiosyncratic, sensibility—our particular human style of demarcating entities. As the Nominalists insisted, it is not necessary to appeal to the metaphysical joints of reality in order to explain such resemblances. Instead, we should turn to what is now called "cognitive science"—specifically its treatment of human perception and categorization.

How Do We Determine Which Eide There Are?

Armstrong appealed to "Scientific Realism" in order to determine just which universals exist. For him, the existent universals are those that figure in the fundamental physical laws. He thus embraced a reductionist and scientistic account of the basic structure of reality.

Theists like Zimmerman may be attracted to Armstrong's realism and feel that it can be detached from the scientism and reductionism which generates Armstrong's list of the true universals. They may feel that they can have the realism about universals, without the scientism and reductionism, and so can embed realism about universals within Theism. This is a misconception. Realism about universals is an *inherently* Godless doctrine. God is a particular, not a universal. Universals are not ontologically dependent on particulars, particulars come to being and have the character they do by instantiating universals; the universals exist and have the character they do *anyway*, they do not come into being with the particulars which instantiate them. Indeed, as argued above, the attempt to tie the existence of universals to their subsequent instantiation seems unstable. But since universals are not ontologically dependent on the existence of any particulars, and God is a particular, it follows that universals are not ontologically dependent on God. And this is to say that there is no God, no being on which everything else is ontologically dependent.

One might suppose that this argument that realism about universals is a Godless doctrine could be met just by supposing that God creates the universals themselves, so that they are, after all, ontologically dependent on him. However, recall what universals are supposed to be, they are supposed to be resemblance makers: things really resemble each other in virtue of instantiating a common universal. Now universals will only play this resemblance-making role if they also play another more fundamental role, what we might call "the nature conferring role". Two things really resemble each other in respect U because they each have U as part of their nature, and the friend of universals will add that they have U in virtue of instantiating the universal U. On the theory of universals it is the instantiation of universals that confers natures on things. Absent the instantiation of universals there would be no natures had by things.

We can now see the problem with the idea of God *creating* the universals; the idea produces a deep "ungroundedness" in fundamental metaphysics. In order for God to create the universals he would have to have some nature or other, indeed a very impressive kind of nature that allows him to confer existence on items in an entirely different category from himself. Yet, according to the theory of universals, in order to have some nature or other God would have to instantiate some universals. But instantiation is supposed to be a genuine relation, it only holds among existing things. So in order for God to create the universals, some of them, the ones which figure in the specification of God's nature, would "already" have to exist. This is impossible. (Of course, here as elsewhere, we are not speaking of a process in time but a pattern of ontological dependence. What is impossible is that God's nature is ontologically dependent on the existence of the universals which make it up, *and* that all things, including those universals, are ontologically dependent on God.)

The doctrine of universals was always at odds with the idea of God as the being on which everything else is ontologically dependent, and which is not itself dependent on anything else. Zimmerman suggests at one point that we might think of *universals* as ideas in the mind of God, but he nowhere makes the crucial claim that God's ideas *are* universals rather than particulars. No matter, suppose that claim somehow could be made. Would this help?

Upon reflection, a similar problem arises. The basic doctrine of universals is still supposed to be in force; namely that universals are nature-conferrers and hence resemblance-makers. The novel element is that these nature-conferrers are ideas in God's mind. God's having these ideas in his mind is part of his nature. Is God's having that part of his nature ontologically dependent on his instantiating some of the universals that are supposedly among the ideas themselves? The doctrine of universals says so. But now these ideas can be seem to be very odd things. They are all supposed to be ontologically dependent on God, but since they are universals, God's having these ideas (that very aspect of his nature) is ontologically dependent on his instantiating *some* of them. But instantiating a universal is ontologically dependent on the existence of that universal. So God's having these ideas is ontologically dependent on the existence of a universal. But if part of God's nature is in this way ontologically dependent on the existence of a universal, he will not be the one thing on which all other things ontologically depend without his depending on them.

A similar sort of problem arises for what Zimmerman calls, after Armstrong, an "abundant" theory of universals, a theory which postulates universals merely as the semantic values of predicates. In Part 1 of *Coming to Understanding* this theory was criticized on the grounds that it leads to an implausible regress. By making an individual's satisfying a predicate depend upon its instantiating a universal the theory of universals as semantic values ends up requiring that an infinitude of universals be instantiated whenever any one universal is instantiated.

In the present context, there is another objection worthy of mention. It is now easy to see that the abundant theory of universals is also a Godless theory. On this theory, universals are understood to be the metaphysical underwriters of predication, and so are common to all those who satisfy the corresponding predicates. According to this theory, universals exist as the meanings of predicates *anyway*, and the other things that exist, including God, "subsequently" instantiate one or another group of the preexisting universals, and as a result have this or that nature. This is also a "two-realms" doctrine. There is the abstract realm of instantiatible universals, standing complete in itself, and then there is the concrete world of particulars, perhaps arranged according to God's creative plan. However, since universals are independently existing abstract entities, which give concrete things their natures when they are instantiated, universals cannot themselves be ontologically dependent on anything in the realm of particularity, including God. But this breaks with the fundamental characterization of God as the source of all being. God must already have a nature in order to create, i.e. manifest His Will in the generation of other beings. But according to the view that God's Attributes are universals, in order that God have a nature He must instantiate a certain range of universals, namely those constitutive of that nature. And this requires the ontologically prior existence of the universals themselves. Hence universals are themselves not ontologically dependent on God Himself. In a certain sense this amounts to the denial of the existence of God, at least if we take seriously the characterization of God as the source of all being.

These reflections help to further motivate the basic picture of *Coming to Understanding*. If God is the source of all being then the eide must be ontologically dependent on him, and so must be particular rather than universal. If God is to be the source of all being then God must in some way be the source of the eide. They must emanate from God, and it is only by giving a systematic account of this pattern of emanation that we can determine in broad terms which things are eide.

In this way we arrive at a God-centered account of the nature-conferrers, which make for the real—or “non-constructed”—similarities among things. We need not suppose in the fashion of Armstrong that only a reductionist or scientistic world-view will provide an account of the nature-conferrers, which make for the real similarities among things. Indeed, as *Coming to Understanding* makes clear, it is only by reflecting on the emanation of the eide understood as attributes of God that we can discern just which elements in the conceptual framework of science are good candidates to be among the eide!

It is by imitating aspects or attributes of God’s nature, or by their being parts of those attributes, that non-eidetic particulars come to have real “non-constructed” natures of their own, and exhibit real resemblances. It is thus God’s attributes which are the genuine nature-conferrers for non-eidetic particulars. So it is only by reflecting on God’s attributes in a systematic way that we can discover the real similarities among non-eidetic particulars. The solution to the so-called “problem of universals” thus reinforces the God-centered character of metaphysics.

Notice the importance of insisting that the eide are *not* substitutes for an abundant stock of universals in a general semantic theory of predication. If what it meant to predicate “Choosing” of someone was to assert that the person in a certain way imitated the eide Choosing then this would be a perfectly general semantic fact. What it would mean to predicate “Choosing” of God would then be to assert that God imitates the eide Choosing. But God does no such thing. God has Choosing as an emanated aspect of his nature, as an attribute. And these attributes are the eide, imitation of which or being the parts of which, confers real “non-constructed” natures on non-eidetic particulars. Instead of a general semantic theory of predication, we have a local ontological account of nature-conferring by imitation and parthood.

How General is the Matter/Form Distinction?

Why think that every *eidos*, including formal eide such as The Godhead, should display hylomorphic structure, and so be further divisible into matter and form? As Zimmerman notes, on the original Aristotelian conception of matter and form, while the matter of a thing exhibits hylomorphic structure all the way down, the form of a thing would not be thought to be *further* divisible into matter and form. Of course, Aristotle rejected Plato's eide, so we have nothing to go on, one way or the other, as to whether he would have applied the matter/form distinction to the eide. History aside, Zimmerman himself is not persuaded that the matter/form distinction is of quite general application, pertaining to all particulars, even to the eide. Part of this is due to the previously discussed confusions about universals, which lead him to think that the eide must be particulars in name only, or must count as particular only by mere stipulation. In this vein he writes:

> The basis of Ammonius's eduction of universal hylomorphic structure is his axiomatic claim that everything is particular. But recall the sense in which an *eidos* that plays the resemblance-making role is a particular: it is caused to exist, and it is not part of a plentitudinous theory of resemblance-makers. Beyond that fact, the *eide*, as they figured in Part 1, appeared much like the universals of other metaphysical systems; they (or some of them, at any rate) satisfy the universal-like sides of the distinctions (i), (ii), and (iii). So Ammonius's eduction only goes through if matter-form structure is somehow required by a thing's (a) *depending upon God*, and (b) *not being part of a plenitude of resemblance-makers*.
>
> I do not, however, see any connection between Ammonius's two criteria for particularity, on the one hand, and matter-form structure, on the other. What is it about simply *being caused to exist* (in one or another sense of "cause") that *demands* divisibility into matter and form? The history of philosophy is replete with metaphysical theories that would reject the implied connection…. Even Aristotle, and metaphysicians who borrow a

> matter-form distinction from Aristotle, will typically allow for created things that are not further divisible into matter and form. Examples would include Thomistic souls (which are created forms, and not further divisible into form and matter), and universals-conceived-of-as-Divine-Ideas (which, though dependent upon God, also do not divide naturally into form and matter; they are not modifications of a passive, divine, mental stuff). If ubiquitous hylomorphic structure is to be supported by the particularity of everything, *in Ammonius's very special sense of "particularity"*, he must say a good deal more about the connection between dependency and sparseness, on the one hand, and matter-form construction, on the other.

Clearly, this is just a puzzle that Zimmerman has made for himself by supposing that the particularity of the eide simply reduces to (a) dependence on God and (b) not being part of a plenitude of resemblance-makers. These are not, as he puts it, "criteria of particularity" but features of each of the eide, which are also themselves particular. The fact that the matter/form distinction applies to the eide follows from their being particulars, or more specifically *metaphysically genuine particulars*, and not from their being either (a) dependent on God or (b) not part of a plenitude of resemblance makers.

Metaphysical particulars or, equivalently, metaphysically genuine particulars—as stated in Principle 1 at the beginning of Part 2—include the parts of one or another material eidos, the eide themselves, and God. These are contrasted with constructed particulars, which are parts of, or groups of, metaphysical particulars that appear to operate (in one respect or another) as one thing. So, for example, a self is a constructed particular consisting of two genuine metaphysical particulars: a cognitive agent and a physical agent. These are concatenated together in a self-image, which treats them as one thing. This is typical of the way in which the unity of a constructed particular *comes from without*; it derives from our patterns of thinking about things, its constituents are concatenated together in some conception *we* have. There are equally good constructions that vary in myriad ways from any given constructed entity. We need only articulate them in thought or language in order to make them salient.

By contrast, each genuine metaphysical particular is a genuine unity, not a mere collection of parts that falls under one of our singular concepts, and so appears as a unity relative to our cognitive style of demarcating objects. A metaphysical particular is a unity in itself, which any adequate conceptual scheme would have to recognize. The genuine unity of a metaphysical particular makes it the particular that it is, set over against particulars. This unity lies in its nature, and is not imposed by a scheme or conception.

As *Coming to Understanding* urges early in Part 1, Aristotle's hylomorphism is not to be construed as a primitive and long-outdated anticipation of modern natural science, and hence as a simple-minded attempt to explain what happens in the world. A better interpretation of hylomorphism is to see the matter/form analysis as an account of the unity of any particular, an account of what makes it one thing rather than a mere collection of parts. The doctrine of hylomorphism is best understood as an attempt for each genuine entity to answer the question of what makes that entity a *unified* particular set over and against other unified particulars. What are the particular's complex elements, and how do they hang together? Thus matter and form are aspects of a complete answer to a specific metaphysical question of what makes *this* particular thing the unified thing that it is.

Now, perhaps in the case of constructed particulars the obligation to explain the unity of a given particular can be discharged by referring to our cognitive style of demarcating entities. But there is more to the unity of a genuine metaphysical particular than this. And so, on the interpretation of the four (indeed of the six) causes presented in *Coming to Understanding*, all genuine metaphysical particulars must admit of a hylomorphic analysis, and hence of further division into matter and form. Since the eide are among the genuine particulars, they too must admit of a hylomorphic analysis. *This* is the source of the fact that the matter/form distinction applies to the eide themselves.

Let me sum up once again the motivation for applying matter and form, and indeed, the other causes to all genuine metaphysical particulars. This is that such particulars are intrinsically individuated by their own properties; they are not individuated externally by our cognitive style of demarcating entities; they are individuated by their forms, matters, efficient causes, and so on.

The Whitehead Charge

One theme that runs through much of Zimmerman's review of *Coming to Understanding* arises from what he takes to be a certain threat to any philosophical approach that coins new terminology or that creatively changes already accepted terminology. Zimmerman warns that "one mustn't go too far," and he writes:

> Whitehead's Process Philosophy, in its full-blown form, arguably did just that: "actual entities", "actual occasions", "concrescence", "prehension" … after awhile, only a few true believers claim to be able to make sense of the whole system. For the rest of us, the new taxonomy Whitehead introduces is too alien, too poorly understood in its own right, for it to cast light upon the metaphysical problems it is supposed to solve; the capacity of Whitehead's system to really *explain* anything has, for us, evaporated.

Sometimes, as in the case of Whitehead, the philosophical profession—or much of it—thinks this is what happens. In other cases, such as that of Kant, an equally forbidding, alien, and invented terminology, is nevertheless embraced by a large proportion of the field. Presumably there are cases in the middle. Perhaps Heidegger is one of those.

It is clear that Zimmerman fears this to be the fate of *Coming to Understanding*. For he charges that central notions such as "matter," "form," "efficient cause" and so on, are stretched beyond their normal philosophical usages. He claims that the general discussion of these notions offered in *Coming to Understanding* do not illuminate the particular applications of them to the *eide*, and he claims further that the specific eductions, or most of them, provide little by way of clear examples for how these notions are to be applied.

I grant that there are aspects of the eductions that many will find unclear. *Coming to Understanding*, however, is a work in progress. That is the point of my repeatedly stressing the fallibilism that is built into the system. A side effect of this, of course, is some unclarity or difficulty with the concepts employed. I do claim, in addition, that the diagrammatic constraints on the eductions are a crucial part of how we are to understand "matter," "form," and so on, as these notions are applied in the system described in *Coming to Understanding*. The situation is analogous to the physical sciences, where the kinds of constraints that mathematics places on physical concepts in scientific theories, e.g., quantum mechanics, is compatible with the professionals in that area, even quite able ones, denying that they fully understand the concepts in play. The on-going-in-progress success of a system of concepts does not require that they be fully understood at any one time.

Evaluating the Ethical Outlook of *Coming to Understanding*

I turn now to Zimmerman's worries about the ethical outlook of *Coming to Understanding*. These worries are driven in large part by (i) the conflict he sees between that ethical outlook and conventional morality, and (ii) the grounding role that *Coming to Understanding* assigns to metaphysics relative to ethics.

P. F. Strawson famously made a distinction between descriptive metaphysics, which characterizes the implied ontology of our conceptual scheme, and revisionary metaphysics, which argues for a new ontological conception on the basis of first principles and novel systematic resolutions of conflict that arise within the implied ontology of our conceptual scheme. Many philosophers are now comfortable with the fact that an adequate metaphysics will revise the implied ontology to some considerable extent. Many would agree with some form of the thesis that most of the objects of our thought and talk are "constructed" entities, which owe their salience not to their ontological status but to our cognitive style of demarcating entities. It was this frame of mind, which led Bertrand Russell to stigmatize the implied ontology of our conceptual scheme as “the metaphysics of the stone age”. Russell’s idea was that our conceptual scheme was not developed to adequately limn the structure of reality; it is instead an accumulation of rules of thumb for practical dealings with the variety of situations our remote ancestors encountered. Our remote ancestors were selected in part on the basis of the success of these practically vindicated rules. So the rules themselves, and their obvious consequences, which appear to govern how things must be, will even now initially seem to us to deeply intuitive, even undeniable. Nevertheless, a little work in ontology quickly shows up cracks and fissures in this comfortable outlook, particularly when that work is guided by a systematic attempt to answer the hard questions of what is ontologically fundamental, and hence of what is ontologically dependent on what.

For example, in defending the “common sense” ontology, some philosophers have supposed that their identity over time as selves is, as Bishop Butler put it, “perfect and complete”. That is to say that whether my *self* exists at some future time is a fundamental metaphysical fact that does not admit of degree or of vagueness, and is never susceptible to merely conventional determination. Against this, the detailed reflections on the structure of ontological dependence provided in *Coming to Understanding* suggest that the self is not a metaphysically genuine particular, but rather a constructed entity consisting of a cognitive agent and a physical agent. On this view, the self is an entity demarcated by a person’s self-image, and not by the underlying joints of fundamental reality. As Derek Parfit and others have pointed out, such a discovery cannot help but have profound effects on our understanding of ethics.

While many metaphysicians have repudiated the “metaphysics of the stone age” a pervasive conservatism rules in philosophical ethics, where the ambition seems to be to explicate and defend “common sense” or conventional morality, despite its obvious roots in the “morals of the stone age”. The great exception to this conservative tendency, of course, is philosophical Utilitarianism, which consists of three theses, what is sometimes called Practical Teleology, what is sometimes called

Universalism, and what is sometimes called Hedonism or Eudaimonism, depending on the version it takes.

> **Practical Teleology**: An action is right to the extent that it promotes the greatest good.
>
> **Universalism**: The greatest good is to be measured by the good conferred on all persons, with each counting equally.
>
> **Hedonism/Eudaimonism**: A person's good consists in his enjoying a predominance of pleasure over pain/happiness over unhappiness.

By combining these three principles we arrive at the canonical formulation of Utilitarianism in either its hedonistic or eudaimonistic form.

> **Utilitarianism**: An action is right to the extent that it promotes the predominance of pleasure over pain/happiness over unhappiness with each person counting equally.

Utilitarianism first emerged in the work of Jeremy Bentham as a revisionary principle to be applied to "morals and legislation". Bentham offered a quasi-scientistic defense of the hedonistic element in his Utilitarianism, namely that while the concepts of right and wrong were obscure and hard to pin down, pleasure and pain were matters of fact easily ascertained and widely agreed upon. But to the extent that Utilitarianism focuses more plausibly on happiness and unhappiness the alleged "scientific precision" of Utilitarianism is no longer a good argument for it. The remaining argument is this: the point of action is to secure the good, so an action is good of its sort just to the extent that it promotes the good; but for an action to be good of its sort is for it to be *right*. In short form, the argument is that when acting you cannot go wrong if you aim to promote, and actually promote, the best state of affairs.

As many have pointed out, this remaining argument is *not* an argument for Utilitarianism per se, but simply an argument for Practical Teleology, the definition of the rightness of an action in terms of its tendency to promote the good. Only this practical teleological aspect of Utilitarianism should be endorsed by a God-centered ethics of the sort propounded in *Coming to Understanding*. For a God-centered ethics is an ethics focused on what *benefits God* and not on what benefits the greatest number of persons overall, with each person counting equally. So a God-centered ethics will obviously deny

> **Universalism**: The greatest good is to be measured by the good conferred on all persons, with each counting equally.

since this principle obliterates the distinction of value between creature and creator. As noted earlier, to the extent that this principle is at the heart of common sense ethics, common sense ethics represents a form of idolatry of human persons, placing them on the same level as God.

Moreover, an ethics based on the metaphysically distinguished process of coming to understanding, which is in effect also God's coming to self-understanding, will not make either pleasure *or* happiness central to the determination of what is right. Such an ethics will therefore also reject

> **Hedonism/Eudaimonism:** A person's good consists in his enjoying a predominance of pleasure over pain/happiness over unhappiness.

For whether a person experiences pleasure or happiness is quite arbitrarily related to whether he or she is contributing to the promotion of coming to understanding. So the ethical outlook of *Coming to Understanding* is consistently teleological without being either universalist or pleasure/happiness-based. It is based on the good of God rather than the good of man. This is why right action is identified with pious action, action that aims to serve the will of God. The will of God, namely his own coming to self-understanding, defines what is good. And so, it is an upshot of the metaphysics of *Coming to Understanding* that the concept of an act's being good and the concept of its being pious, though different concepts, are one and the same in extension.

This also helps us to characterize in metaphysically adequate terms what it is to be a good person. How far a person's behavior is in accord with his divinely ordained purpose determines the degree of goodness, and hence the rightness or wrongness of his behavior. A good person is one whose pattern of choices is pious—that is, sufficiently in accord with the will of God.

Zimmerman's Objections to the Ethical Outlook

Zimmerman objects that this ethical outlook does not entail or "recover conventional morality" and that in some cases "moral enormities [by the standards of conventional morality] would be justified" in the name of promoting the good. As for the recovery of conventional morality, this is no more a proper constraint on a metaphysically grounded ethics than is the recovery of the metaphysics of the stone age from the true revisionary metaphysics. (Zimmerman also objects to grounding ethics in metaphysics, but as we shall soon see this objection involves a confusion of epistemological and metaphysical factors.)

One way to see that the constraint of recovering conventional morality from the true metaphysics is misplaced is to see that *just in virtue of endorsing Practical Teleology, as any God-centered ethics must, an ethical outlook must inevitably be at odds with conventional morality.*

Rigorously interpreted, conventional morality regards its moral rules as absolute side-constraints on the pursuit of the good, *however* that good is conceived. Not only can you not murder someone for the benefit of the greatest number; you cannot murder someone, say a crime boss, to prevent a host of murders. Not only can you not lie to promote a worthy end; you cannot lie, say to a con man, to entrap him legally so that he will no longer mislead others with his lies. Conventional morality says: there is the pursuit of the good and there is morality, and these are *quite* different things. Morality concerns the permissibility, or better the non-permissibility, of using certain means in pursuit of any good. Murder, lying, etc. are just not permissible means in the pursuit of any good, no matter what that good is.

That sounds very high-minded and serious, except that this rigorist interpretation, which authoritarian parents often promote when instructing their children, is hard to sustain in the face of the actual facts of moral life. So the rigorist interpretation of morality often goes with the notion that certain lies are not really lies but only "white lies", and certain morally shady killings, like the congressionally sanctioned assassination of those who threaten our way of life, are "not really" murders. Perhaps a more clearheaded account of conventional morality is that it aspires to do two inconsistent things at once; (i) present, largely for pedagogical purposes, its own moral rules as providing absolute and inviolable side constraints on the pursuit of any good, and (ii) also have an "emergency powers act" for the cases where the costs of hewing to these constraints are enormous. So it is sometimes said, more clearheadedly, that we should lie to the threatening madman at the door who asks us whether we have a gun in the house, and that the allies were justified in the terror bombing of Germany even though it targeted civilians and thereby violated the rules of war. No one should pursue justice if the whole world would perish as a result.

Whether or not conventional morality is thereby actually inconsistent, it should be clear enough that the embedded view of moral rules as absolute side-constraints is itself at odds with

> **Practical Teleology:** An action is right to the extent that it promotes the greatest good.

For according to Practical Teleology the only court of appeal in defending the rightness of an action is the court that considers only the goodness of the consequences of the action. (An act is objectively right if it does in fact promote the greatest good, and subjectively right if this was the agent's aim.) Given Practical Teleology, the moral rules of conventional morality do not define rightness and wrongness; they are at best *generally correct* but exception-ridden rules of thumb for pursuing what is in fact good. Thus there is an inevitable conflict between any Practical Teleology and a central element of conventional morality.

Given that Practical Teleology is a consequence of a God-centered ethics, it follows that there will be an inevitable conflict between a God-centered ethics and conventional morality. So Zimmerman's constraint, namely that an ethical outlook should recover conventional morality, is not a reasonable constraint to impose on a God-centered ethics.

To this we may add something that is covered quite extensively in *Coming to Understanding*, and which is akin to what Utilitarians say about conventional morality. Many of the rules of conventional morality are good rules of thumb in social institutional settings in the sense that following them will avoid seriously debilitating problems in achieving the true good of increasing understanding. And as the text emphasizes, we are made to function in social institutions, from small institutions like marriage and the family to the wider wholes that include them. So the rules of conventional morality are valid for the most part.

That, after all, should *not* be so shocking a thing to say, even from the point of view of conventional morality. For the very existence within conventional morality of an "emergency powers act" is a kind of recognition that the moral rules, the general principles of permissibility and impermissibility, cannot be totally exceptionless!

As for Zimmerman's particular examples of what he supposes to be moral enormities (the unfair tenure letter, etc.) wrongly permitted by the God-centered account of ethics, the friend of Practical Teleology should here take another feather from the cap of the Utilitarian and insist that these will only count as permissible relative to certain assumptions about the side consequences of such acts, as those consequences actually ramify through the various institutions we inhabit. Given the actual psychology of human beings, we cannot expect them to explicitly mobilize around *directly* promoting Divine self-understanding, nor can we (even more absurdly) expect the taxpayers of New Jersey to explicitly valorize the metaphysicians in their midst. People serve God by decently working through the intermediate institutions they inhabit, according to their appropriate level of understanding and sophistication. And, as already noted, decently working through these institutions involves taking common understandings and conventional moral rules seriously. Nor can we violate them without eroding our common commitment to these rules, whose directions are for the most part correct. (That is one reason among many why Zimmerman should not falsify the tenure-letter to block the advance of the anti-metaphysical philosopher.)

This is just to re-iterate the point made in the very passage that Zimmerman himself quotes from Part 4, namely

> A key part of being functional human persons, therefore, is that one is able to perform in the context of such groups. Many of the virtues and vices [of conventional morality] can be justified by the mere fact that if human persons are to function successfully within groups, they need to behave towards one another in ways that allow the group to operate as a unit — as a self — as well as allow everyone to function successfully within the group. Virtues such as "justice," "humility," "patience," and vices such as "arrogance," "hatred," and "laziness," often express solutions and problems (respectively) either in the successful functioning of a group as a self or in the successful functioning of individuals within that group.

These observations seem to pass from view when Zimmerman oddly objects that it follows that we only have moral obligations when we are on the job, and indeed only when we on the job in the metaphysics seminar. Zimmerman is here reading an unacceptable intellectualism into the ethical outlook of *Coming to Understanding*; he reads it as only valorizing metaphysical research, thereby neglecting the work's firm emphasis on the interconnectedness of institutional roles. So he is led to write such things as this:

> Ammonius connects institution-building with God's Will in an interesting way. Many metaphysical facts are too complex and numerous for individual minds to know; but, in principle, a large enough institutional Person could go further than its individuals would get, working independently—in terms of the complexity of what is known, and in sheer volume. But this generates moral norms that directly apply only *while at work*, and only when working in institutions that *promote metaphysics*.

This fails to take into account the deep interconnectedness of institutions and the way they serve each other's ends when they are functioning properly. As *Coming to Understanding* emphasizes, genuinely pious contributions do not have to be intellectual achievements. There are many essential functions that have to be performed if an institution is to become a Person, or contribute to a meta-institution's becoming a Person. Very few institutions have metaphysics as their explicit goal, and most people will never have the opportunity to participate in one of them. Nonetheless each can serve God's will by conscientiously and decently attending to his or her "station and its duties" as F.H. Bradley put it. These themes were heavily emphasized in *Coming to Understanding*, particularly in passages like the following:

> We have uncritically inherited the idea from many sources that certain vocations are intrinsically higher or more valuable in and of themselves, independent of the ends to which they are directed. So the philosopher looks down on the scientist, the scientist looks down on the entrepreneur-businessman, the entrepreneur-businessman looks down on the professional doctor or lawyer, professionals look down on office workers, office workers look down on janitors, etc.—all in endless attempts to shore up the inevitable insecurities that are produced by a system of prestige and reward that is not sufficiently aware of the vast variety of ways that various job-activities actually facilitate God's Will. Indeed, the janitor and the sanitary worker may save more lives than doctors by protecting us from germs and disease; they may thereby be more effective servants of God simply in virtue of the sheer numbers of Persons they enable to survive…In a very real sense, focusing on the goal of institutional awareness of God, God's Attributes, and other real metaphysical particulars democratizes the activity of facilitating coming to understanding. It is not a process to be engaged in by lonely philosophers, by a small oligarchy of wise men, or by scientists and scholars engaged in pure research. It is something in which a whole community must be involved. This means that *whatever people do to facilitate coming to understanding,*

> *according to their abilities, is good.* And this includes not only directly increasing the awareness of institutions, but also helping to build and maintain the infrastructure of all the communal institutions in which we collectively participate. Plumbing, waste-removal, the construction of highways, computer programming, agriculture, scientific research, child-rearing, education, and the like are all ways that people function valuably to facilitate coming to understanding.

These consequences of Practical Teleology should be no surprise; what determines both the rightness of a specific act and the piety of a person is the contribution he, she or (in the case of an institution) it makes to the realization of the good. In determining a person's degree of piety, it is not conscious awareness of the realization of the good that is crucial, or even particularly important. This same logical structure remains in place when the good is properly identified with God's coming to self-understanding. What determines a person's degree of piety is his or her or its contribution to God's coming to self-understanding; not the person's intellectual grasp of the metaphysical structure of God's nature.

Are There Incommensurable Goods and Evils?

As Zimmerman notes, when an individual person's life is complete or when an institutional person's spatio-temporal spread is complete, there is a sort of reckoning which is loosely analogous to judgment after death—what is called the "particular judgment" of the soul in the Judeo-Christian tradition. Now that the unified spatio-temporal footprint of the individual person or the institutional person is complete, the question arises as to whether the person was on balance good or bad, by the standard of contributing to the promotion of God's will. If the person was on balance good, then the person has become a Person, and thus has a soul. That soul's cognitive achievements, in so far as they represent adequate knowledge of metaphysical truths, become a part of God's consciousness and hence achieve a kind of eternity in the mind of God.

Here there is a strong affinity between the doctrine of *Coming to Understanding* and Spinoza's surrogate for immortality presented in the Part 5 of the *Ethics*, especially at and around the famous Proposition 23 of Part 5, viz. "The human mind is not completely destroyed with the body, but there remains some part of it which is eternal." But according to the doctrine of Coming to Understanding this is only true of those minds, or more exactly of those persons, who are on balance good.

Zimmerman has a clever objection here: he asks "What if there are incommensurable goods and evils? In that case, "on balance" would not be applicable." To fill out Zimmerman's thought a little, consider what some offer as incommensurable goods, namely beauty and understanding. The achievement of great beauty and the achievement of great understanding may be more than hard to commensurate, there may be no good scale on which to measure or compare them together. So a life that has suppressed one at the cost of promoting the other may be neither good nor bad on balance. Does it then have a soul associated with it or does it not?

The response to this objection is that on the God-based conception of goodness, absolutely everything is evaluated as good or bad in terms of the extent to which it promotes coming to understanding. All goods are therefore commensurable on this view. So Zimmerman's problem does not arise in the form in which he envisages it. Of course, it could be that in a given circumstance there are ties; two different acts A and B could promote coming to understanding to the same degree. But then Practical Teleology tells us that they are both equally right, and hence both equally permissible. There is no air of paradox here.

However, Zimmerman raises other concerns about the "one iota above 50%" suggestion, in particular, he mentions that there are other alternatives. He writes:

> Consider a person who starts out well-meaning and innocent and industrious, and who gradually becomes a cynical, nasty, vicious character. So long as the early part of his life outweighs the later part of it, be it ever so slightly, he gets to be a soul. But does it not seem that there is a kind of intrinsic goodness to moral *growth*? The life of a person who is growing in virtuous

> characteristics, and shedding vices, should—one might think—get a kind of "value-boost" over a person with the self-same virtues and vices, possessed to the same degree over a period of the same length but "in reverse". (The first person exemplifies what Brentano called the "*bonum progressionis*", the latter the "*malum regressus*".)

Zimmerman also raises this issue:

> Why does God get to know everything (at least every metaphysically important thing) that a person knew, so long as they were, on balance good? Why not say that, when a person is displaying vices, anything the person knows only at that time is "blocked" from becoming part of God's consciousness; God only knows what the person knows when he or she is being virtuous. This would seem to be in keeping with the notion that God's mind, though it is a sort of function of our minds, is, unlike ours, without moral blemish.

These are good suggestions, and perhaps it is the case that the "one iota above 50%" criterion should be rethought. Let me, however, offer this response to the "trajectory-insensitivity" of the criterion I have urged. This is that I concede that *we* certainly feel that there is a moral difference between two characters, one with a downward trajectory in moral worthiness the other with an upward trajectory in moral worthiness, but who are otherwise exactly the same. However, it should also be clear that from *God's* point of view, the result upon the completion of these lives is nevertheless the same. Furthermore, there are reasons to think that the "otherwise exactly the same" condition is not being honored when we feel this moral difference. Consider the two cases. Because the memories of the two individuals are not the same, what we would describe as their realizations about what they are doing will not be the same either. The individual with an upward trajectory has the experience of wresting him or herself free from earlier immoral habits, and of *achieving* moral growth. The other individual, on the contrary, has the experience of losing sight of what he or she knew earlier. These “experiences” cannot but have an effect on the actions of these individuals. In short, I submit that the “all things being equal” clause crucial to Zimmerman’s counter-example, is one that may be impossible to meet.

That said, I like Zimmerman’s second suggestion, that refinements are needed on what God becomes conscious of with respect to a soul. Perhaps it is true that God only knows what a person knows when that person is being virtuous.

Should We Seek to Ground Ethics in Metaphysics?

At the end of his piece, Zimmerman raises what would be the deepest objection if it could be made to work, the objection that we should not look to ground ethics in metaphysics. Recall that while many metaphysicians have repudiated the “metaphysics of the stone age” a certain conservatism nonetheless rules in philosophical ethics. The ambition seems to be to explicate and defend “common sense” or conventional morality, despite its obvious roots in the “morals of the stone age”. If we are prompted to revise significantly the implied ontology of our everyday conceptual scheme, as Monism and Generalized Hylomorphism suggest, then we have no choice but to examine the consequences of this revision for our ethical outlook. Hence the suggestion made in Part 4 of the main text:

> The only sufficiently rigorous procedure is to first ground morality in metaphysics. Only then can one see clearly enough the status of our various moral intuitions about vices and virtues, where these intuitions are merely conventional, and where they are of enduring value. Only then can one discern which should be kept and which should be discarded.

Zimmerman explicitly rejects this approach, and he tries to drive a wedge between it and something of which he approves, namely “to try to reach reflective equilibrium within the body of one’s metaphysical and ethical beliefs.” Achieving reflective equilibrium is adjusting one’s beliefs to the extent required to achieve overall plausibility, consistency and mutual supportiveness among all of those beliefs. Many, like Zimmerman, seem to regard reflective equilibrium as an inherently conservative process, like adjusting to a suit that does not quite fit; you suck it in a little here, and you let out the waist and the shoulders a little there. Thus he writes that "reflective equilibrium is consistent with allowing one's deepest ethical convictions to trump metaphysical intuitions".

That is right: reflective equilibrium is *consistent with* this moral conservatism, but it does not *entail* that conventional morality will be conserved in all of its details. After all, reflective equilibrium is not a once-and-for-all-time matter, our beliefs change over time under the impact of perception, inference as well as the construction of hypotheses and their evaluation, and we are then required to bring our new set of beliefs into reflective equilibrium. But if the resulting input from metaphysics is sufficiently radical or revisionary then a correspondingly deep revision in our ethical outlook may well be required in order to bring the totality of our beliefs into reflective equilibrium!

Notice that by this point in the discussion Zimmerman has already made his objections against the revisionary aspects of the metaphysics presented in *Coming to Understanding*. He is now making another, more general argument, namely that since that we are only required by reason to bring our beliefs into reflective equilibrium there can be no overturning of conventional morality by metaphysics, and hence no real grounding of an alternative ethical outlook in a revisionary metaphysics. But this argument will only work if we disbar the possibility of a deep revision in our ordinary metaphysical beliefs, such as the revision developed and defended in *Coming to Understanding*. Reflective equilibrium, especially when it is understood diachronically—that is as operating across time as our beliefs change—is not *inherently* conservative.

It is not, as Zimmerman puts it, that

> For Ammonius, grounding morality in metaphysics *means* discarding "conventional morality" and recovering whatever one can of conventional moral principles by justifying them on metaphysical grounds. (my italics)

It is rather that the revisions prompted in our ethical beliefs by the requirement of reflective equilibrium will be in a certain way tailored to the revised metaphysical beliefs we have taken on board. In Bertrand Russell's terms, "the morals of the stone age", and its conventional descendents, will not survive the jettisoning of "the metaphysics of the stone age".

The fact of ethical disagreement, even over the cardinal virtues such a chastity and courage, along with the hodge-podge of vices and virtues hallowed by our conventional ethical judgments are relevant here because they serve as reminders of the historically shaky and often dark origins of conventional morality, and urge us to think again about morality's real foundation.

Zimmerman notes that Utilitarianism is also a revisionary ethical theory and wonders what is to be said against it.

> Granted, no tidy moral theory has completely won the day, revealing a deep unity to our intuitions about right and wrong; but several moral theories have offered theories that *do* purport to reveal a theoretical deep structure to morality, and diverge only in extreme cases from the judgments about morality most of us tend, instinctively, to make. Consequentialist theories, such as varieties of utilitarianism, are certainly still going concerns; virtue-theories are being developed; and Kantians have made a real comeback. Why does Ammonius reject all these attempts to display ethical norms as more than a "hodge-podge"? Utilitarianism does not, I believe, get a mention.

This is quite right; that *was* a glaring omission. I hope I have now said enough above to indicate why the Practical Teleology built into Utilitarianism is acceptable, while both Universalism and Hedonism/Eudaimonism are not.

I am further intrigued by Zimmerman's reminder to the effect that "Serious attempts to unify the virtues have been made, and not all will be "deeply undercut by recent discoveries in empirical psychology… because not all are intended to ground morality in a purely naturalistically definable notion of "flourishing". He mentions Linda

Zagzebski's virtue ethics, articulated in her *Divine Motivation Theory*. I have no hostility towards this kind of project at all. If it were properly carried out it would systematize a set of virtues and vices in terms of how those dispositions of character *by and large* serve God's will, given the actual context of human lives. Zagzebski and I may disagree about the content of God's will, but the structure of her project is entirely sympathetic to the suggestions made earlier. A God-centered Teleologist can justify a derivative system of virtues and vices in a way that is isomorphic to the Practical Teleologist's justification of exception-tolerating moral rules.

What should not be a matter of dispute between Zimmerman and me is that *if* the content of God's will is as it is argued to be in *Coming to Understanding then* the resultant list of good and bad dispositions of character—virtues and vices—may be quite different from the list provided by conventional morality. For something counts as a good disposition of character or a "virtue" only if it disposes one to acts which promote God's will.

Here again, in these conservative remarks of Zimmerman's, I detect a certain complacency of the kind that emerged in his discussion of universals. Just as he assumed that we can just add the ontology of universals to a God-centered metaphysics, he assumes that we can deduce something like conventional morality from a God-centered ethical outlook. Zimmerman appears to underestimate both the metaphysical and the ethical effects of God-centeredness.

Perhaps the problem here is exacerbated by the baleful influence of Kant's moral theory. (Zimmerman himself asks why Kant's ethical theory does not get more discussion in *Coming to Understanding*.) Kant puts persons "outside of time" and claims that our noumenal nature makes us morally considerable, indeed beings of "infinite worth" that generate absolute side-constraints on the pursuit of any good. (Here Kant is emphasizing the rigorist interpretation of ordinary morality, and deftly omitting discussion of the "emergency powers act".) But as metaphysical reflection reveals, we are *not* beings of infinite worth; to suppose that we are is to idolatrously put finite persons on a par with the Divine Person. Kant is often lazily regarded as recovering the Christian ethical outlook within a secular philosophical framework, but that is a contradiction in terms if the Christian ethical outlook is truly God-centered.

No doubt it is my fault, but Zimmerman also misunderstands the minor role of the remark about moral disagreement. It is not meant to threaten the objectivity of ordinary moral claims, but rather to remind us of the conflicted origins of ordinary morality. Zimmerman is led to observe:

> In *The Abolition of Man*, C. S. Lewis argued, with some plausibility, that the amount of ethical disagreement across the globe and across the millennia, is much less than one might have supposed. A persistent theme in philosophical responses to arguments for relativism is to point out just how much disagreement about what is right and wrong can be attributed to differences of opinion about *non-moral facts*. Often, the source of the ethical disagreement is not due to *moral* disagreement at all, but rather to *metaphysical* disagreements. To take an obvious example: two people may agree that, to deprive a thing of a future full of value is, *prima facie*, to do something terribly wrong; but they may disagree about the conditions under which persons come into and go out of existence, thus differing about whether abortion at such-and-such stage deprives anything of a future that *it* would have had. A fair number of "moral" disagreements can plausibly be construed as metaphysical, and irresoluble not because of failure to agree about morality, but failure to agree about metaphysics.

Even putting aside the nearly irrelevant issue of the actual extent of moral disagreement, this is not an entirely happy thing for Zimmerman to be saying, given that he is so averse to "grounding ethics in metaphysics". For here he is actually observing that derived ethical claims are grounded in metaphysical convictions. If the derived claims are so grounded, how is it that the more basic claims are immune from metaphysical influence? Who can suppose for example that accepting the metaphysics of Christianity, for example the doctrines of creation, the fall, the incarnation, and the last things, as C.S. Lewis and Zimmerman both do, does not rationally have an immense impact on one's basic ethical outlook? Why should acceptance of the alternative God-centered metaphysics of *Coming to Understanding* not also rationally have an immense impact, albeit a different one, on one's basic ethical outlook? Once these obvious points are granted, where is there room left to quibble about whether ethics should be "grounded" in metaphysics?

Zimmerman does have one last argument against grounding ethics in metaphysics. He writes:

> It seems obvious that, on any sensible way of measuring the amount of agreement about substantive matters between two bodies of beliefs, there is vastly more agreement among ordinary people about right and wrong than there is agreement among metaphysicians about metaphysical matters. So,… if ethics needs grounding in something more sure, similar considerations ought to show that metaphysics needs grounding in something more sure. Absent such grounding, metaphysics is not the place to look for firmer foundations for ethics.

Neither Zimmerman nor I are prepared to claim that ethics needs grounding in something more certain or sure; the tentative fallible claim of *Coming to Understanding* is that we need to revise our metaphysics in the direction of a more God-centered conception. Throughout, the results are not offered as sure and certain, indeed, the details of the God-centered view on offer are constantly hedged with remarks to this effect. Zimmerman may have his own reasons for doubting the details of the God-centered conception on offer; fair enough I say. But what he cannot sensibly doubt is that *if* such a revisionary metaphysics is true *then* a revision of ordinary morality in the direction of a more God-center ethical outlook is likely to be rationally required. Zimmerman's discussion here mixes up his motivated skepticism about the details of the God-centered conception with a quite unmotivated skepticism about the conditional. The relative epistemological status of metaphysics and ethics, their relative sureness or certainty, is not to the point.

Conclusion

Graham and Zimmerman have raised many interesting objections to the thesis and arguments found in *Coming to Understanding*. In responding to those objections various important issues have emerged, but we may close with one overarching point. Both Graham and Zimmerman, each in their own way, end up balking at the radically God-centered character of the metaphysics and ethics of *Coming to Understanding*. They hope to retain something of the man-centered point of view, be it the centrality of beauty and style in Graham's case or the idolatrous universalism of conventional morality in the case of Zimmerman. They may naturally fear that a radically God-centered metaphysics and ethics, especially one which does not go on to flatter humanity in the fashion of Christianity, with its doctrine that God became a man, will eclipse human beings by treating them as at best mere instruments of the Divine will.

The fear is understandable, but it is often borne of an antecedent hubris, the idea that we are in our own way Gods—ends in ourselves, uncaused initiators of action, and fundamental metaphysical items. Any developed fundamental metaphysics will inevitably overturn that hubris.