

Lecture Notes on *Meditation Five*

G. J. Matthey

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The title of the Fifth Meditation (M5) is “The essence of material things, and the existence of God considered a second time” (AT VII 63, CSM II 44).

Descartes’s description of the M5 in the Synopsis is the shortest description of any of the Meditations. He points to three features of M5: “an account of corporeal nature taken in general,” “a new argument demonstrating the existence of God,” and “the sense in which it is true that the certainty even of geometrical demonstrations depends on the knowledge of God” (AT VII 15, CSM II 11). Although there are links binding these three topics together, to a large extent they cover quite different subject-matters.

In addition to a discussion of these three topics, there is below a brief account of the alleged problem of the “Cartesian circle,” raised in the Second and Fourth Objections, which is related directly to the claim that certainty of geometrical demonstrations depends on the knowledge of God.

Properties of Material Things

The Fifth Meditation begins with the resumption of Descartes’s quest to build up a body of knowledge after having cleared away his preconceived opinions. The only knowledge of existence he has thus far is of his own and of God’s existence. His final task is to prove that material objects exist.

Before undertaking this proof, Descartes declares that he “must consider the ideas of these things, in so far as they exist in my thought, and see which are distinct, and which are confused” (ATM VII 63, CSM II 44). Presumably this is because only when he understands what material things are is he in a position to prove that they exist. And he can understand what material things are only through distinct ideas, which are the only ideas which are subjects of judgments about which it is impossible for him to go wrong (M4).

It is interesting to note that this procedure is exactly the reverse of what Descartes in M2 used in establishing his own existence and determining what he is. His first step was to prove that he exists, and only afterwards did he show what he is (a thinking thing). In M3, Descartes begins with an idea of a perfect being and proceeds to argue for its existence. This is the pattern followed in the present Meditation.

In the process of trying to understand what material things are, Descartes is able to further his hidden agenda in the *Meditations*: to overthrow Aristotelian science. (In a letter to Mersenne dated January 28, 1641, Descartes had state his “hope that readers will gradually get used to my principles, and recognize their truth, before they notice that they destroy the principles of Aristotle” AT III 298, CSMK 173). In M4, he had already proscribed the use of final causes in physics, on the grounds that they would have to be traced to God’s ends, which are inscrutable to finite minds (AT VII 55, CSM II

39). The final work to be done is to reduce the all attributes proper to material things to those which are mathematically quantifiable, thereby eliminating entirely any purely qualitative attributes that are not susceptible to rigorous mathematical treatment.

This task has already been begun in M1, where the possibility that he is only dreaming that there are bodies is said not to affect the certainty of beliefs about “certain even simpler and more universal things” than bodies and their anatomical parts (ATM VII 20, CSM II 14). At this point, Descartes was non-committal about what these things are, stating that “this class appears to include corporeal nature in general, and its extension; the shape of extended things; the quantity, or size and number of these things; the place in which they may exist, the time through which they endure, and so on” (AT VII 20, CSM II 14).

In M2, it is said that the mind knows a piece of wax better through “purely mental scrutiny” than through the senses or the imagination (AT VII 31, CSM II 21). After taking away “the features which I arrived at by means of the senses” (sweetness, fragrance, whiteness, etc.), he finds that he is left with “merely something extended, flexible and changable” (AT VII 30-31, CSM II 20). While being changable is not confined to bodies alone, the (quantifiable) ability to change size and shape are purely corporeal.

In M3, Descartes uses the example of two different ideas of the sun in illustrating that there is a great disparity between some ideas and the objects they represent. He notes that “reason persuades me that the idea which seems to have emanated most directly from the sun itself has in fact no resemblance to it at all” (AT VII 39, CSM II 27). (The idea in question here, which he presumably receives through the senses, represents the sun as being very small.) The idea of the sun that seems to have some resemblance to the sun itself “is based on astronomical reasoning, that is, it is derived from certain notions which are innate in me (or else it is constructed by me in some other way)” (AT VII 39, CSM II 27). The idea based on astronomical reasoning represents the sun as “several times larger than the earth,” and is the reasoning involved in producing it is purely quantitative.

Also in M3, Descartes distinguishes between ideas that are “confused and obscure” (light, colors, sounds, smells, tastes, heat, cold) and others that are “clear and distinct elements in my ideas of corporeal things” (AT VII 43, CSM II 30). Extension, shape, position, and motion are proper to material things and are quantifiable, while substance, number and duration apply to other things as well. The four items in the first group are quantifiable, while only number and duration from the second group are quantifiable.

In M5, Descartes begins his examination of what material things are with the claim that he distinctly imagines what the philosophers call “continuous” quantity. Here he seems to have in mind the extension of a thing in length, breadth and depth. We may get a clue as to what a “continuous” quantity is from the *Geometry*, where Descartes states that:

we understand by ‘geometry’ that which is precise and exact . . . ; and if we consider geometry as a science that teaches a general knowledge of the measures of all bodies, we must no more exclude complex lines from it than simple ones, provided that we can conceive them as being described by a continuous movement, or by several successive movements of which the latter are completely

determined by those which precede: for by this means, we can always have an exact knowledge of their measure. (Second Book, AT VI 389-390)

So a continuous quantity with respect to extension may be a quantity that could be produced by a continuous motion. (Compare Euclid's *Elements*, Postulate 2, "To produce a finite straight line continuously in a straight line.")

In the later *Principles of Philosophy*, Descartes states that "however many parts a body is divided into, each of the parts can still be understood to be divisible and so we shall hold that quantity is indefinitely divisible" (Part One, Article 26, AT VIII A 15, CSM I 202). (Descartes calls that for which, from some point of view, we cannot understand a limit "indefinite," on the grounds that any attempt by a finite mind to determine anything about the infinite would impose a limitation on it.) The term 'infinite' is reserved for application to God (Article 27).

That being indefinitely divisible is at least one intended meaning of 'continuous quantity' can be seen from the next sentences in the *Meditations*. Besides the extension of a thing, Descartes can enumerate various of its parts. Any extended thing, because it is continuous in its quantity, can be (at least in thought) sub-divided into things with a smaller extension. "And to these parts I assign various sizes, shapes, positions and local motions; and to the motions I assign various durations" (AT VII 63, CSM II 64).

We know these things transparently "in a general way," but we also know "countless particular features" of shape, number, motion, etc. that are perceived "when I give them my attention" (AT VII 63, CSM II 44). These would presumably be discovered by the sciences of geometry, arithmetic and mechanics.

Descartes claims that it is as if he is remembering these things, or noticing what had been present in him but without his having fixed his "mental gaze" upon them. The reason he feels this way is because "the truth of these matters is so open, and so much in harmony with my nature" (AT VII 63-4, CSM II 44). To say that the truth in these matters is "so open" seems to mean that they are "transparently clear" to the intellect. It is hard to see in what respect they are "so much in harmony with my nature," since his nature is that of a thinking thing rather than an extended thing.

Natures

The lesson Descartes draws from this survey is that the ideas he has of the quantities of possible material things must represent something, rather than nothing. Although he can think of them when he wants to, or at will, "they are not my invention but have their own true and immutable natures" (AT VII 64, CSM II 44). He illustrates his claim with the example of a triangle that he imagines: whether or not an actual triangle exists, there corresponds to his thought "a determinate nature, or essence, or form of the triangle which is immutable and eternal, and not invented by me or dependent on my mind" (AT VII 64, CSM II 44-45). Here he seems quite at ease with Aristotelian metaphysical notions such as "essence" and "form," despite his aim of undermining Aristotle's scientific principles.

One must ask, however, what a nature is, and where it stands in Descartes's ontology. For example,

natures would not seem to be substances in the manner of himself and God, and they do not seem to be modes or accidents of substances either. Substances exist, as do their modes or accidents, but natures may not be instantiated by any existing thing.

Another question is whether natures are created or uncreated. As we will see, Descartes holds that there is a nature of God, and presumably this nature is uncreated. As for the nature of, say, a triangle, Descartes claims in the Sixth Replies that “I understand, quite correctly, that there cannot be any class of entity that does not depend on God” (AT VII 436, CSM II 294). Descartes also states in the Fifth Replies that the immutability and eternality of a nature is the result of a decree by God. “I do not think that the essences of things, and the mathematical truths which we can know concerning them, are independent of God. Nevertheless I do think that they are immutable and eternal, since the will and decree of God willed and decreed them to be so” (AT VII 380, CSM II 261).

The basis of the argument for the being of natures is that if there were no such natures, it would be impossible to prove the features of the ideas in such a way that the force of the proof is irresistible. And these may be features that have never been experienced at all. If they have not been experienced, they must reveal something about a nature that is truly represented by the ideas.

Someone we would now call an “empiricist” would argue that the idea of a triangle is based on objects that “have come to me from external things by means of the sense organs” (AT VII 64, CSM II 45). But this would not account for the “countless” other shapes that Descartes can “think up” without having experienced any objects that have them. Although he has never experienced them, he can prove geometrically that they have various properties. (An example might be the thought of a chiliagon, or regular thousand-sided plane figure. He has presumably never encountered one, and in M6 (AT VII 72, CSM 50) he tells us that he cannot even imagine one. But he ought to be able to prove theorems about its properties.) The reader might wish to compare Descartes’s views on this point with those of Plato in the *Meno*, which Descartes himself invokes in another context in a letter to Voetius of May, 1643 (AT VIII B 167, CSM II 222-3). He shares with Plato a “realist” ontology of natures as well as the basic argument for accepting that there are natures, though there are differences in detail.

Descartes argues that because he has a clear awareness of these natures, they are something rather than nothing “for it is obvious that whatever is true is something; and I have already amply demonstrated that everything of which I am clearly aware is true” (AT VII 65, CSM II 45). Even without this demonstration (which comes at the end of M4), “the nature of my mind is such that I cannot but assent to these things, at least so long as I clearly perceive them” (AT VII 65, CSM II 45). In fact, even when he was in the thrall of the senses, his assent was very strong: “I always held that the most certain truths of all were the kind which I recognized clearly in connection with shapes, or numbers or other items relating to arithmetic or geometry, or in general to pure and abstract mathematics” (AT VII 65, CSM II 45).

The conclusion is that “the mere fact that I can produce from my thought the idea of something entails that everything which I clearly and distinctly perceive to belong to that thing really does belong to it” (AT VII 65, CSM II 45). The paradigm case is the production of the ideas used in mathematical arguments and the proofs of their various properties.

The only opposition Descartes draws to these realist claims that there are natures comes from the nominalist Hobbes (Third Objections) and the mechanist Gassendi (Fifth Objections). Both espouse a kind of empiricism.

Hobbes claims that a nature only belongs to what exists somewhere. “For what is nowhere is not anything, and so does not have any being or nature” (ATM VII 193, CSM II 135). Any visualizable idea in the mind is either a copy of what is seen or constructed from what has been seen. We use the word ‘triangle’ to refer to a seen triangle, and then the name ‘triangle’ “remains even if the triangle itself is destroyed” (ATM VII 193, CSM II 135). The persistence of names is what explains what are called “eternal truths.” But although the names endure, if there were no more triangles in existence, there would be no more natures of triangles.

Descartes responds quite simply: “And this talk about eternal names, as opposed to concepts or ideas of eternal truths, has already been amply refuted” (AT VII 194, CSM II 136). It is not clear what it is that is supposed to refute Hobbes’s account, unless it is the arguments of M5. A possible further place is in the First Replies, where Descartes takes on the question of natures. He claims that ideas that are put together by the mind (such as that of a triangle inscribed in a square) can be broken up into their component ideas, but those which cannot be split up in this way “were clearly not put together by the intellect” (AT VII 117, CSM II 84). He concludes that the composite has a true and immutable nature just as much as the component square and triangle do.

Gassendi raises the same objection as does Hobbes. “It is impossible to grasp how there can be a human nature if no human being exists, or how we can say that a rose is a flower when not even one rose exists” (AT VII 319, CSM II 222). He goes on to claim that it is the intellect that forms the nature of a triangle after it has seen material triangles. “The triangle is a mental rule which you use to find out whether something deserves to be called a triangle” (AT VII 320-321, CSM II 223). The properties of an ideal triangle derive from those of real triangles. In general, we need the senses in order to gain ideas of figures. Once one has these ideas, it is easy to make up more complex ones, so the ability to do this does not imply that there are natures.

Descartes responds that “as for the essences we know clearly and distinctly, such as the essence of a triangle or of any other geometrical figure, I can easily make you admit that the ideas of them which we have are not taken from particular instances” (AT VII 380, CSM II 261). The reason is that Gassendi claims that these ideas are false because they do not conform to his atomistic account of the world. This fact, if it is a fact, “is merely an extraneous feature that changes nothing.” In geometry, we are able to demonstrate many truths about essences, such as that of a triangle. “And since they are always the same, it is right to call them immutable and eternal” (AT VII 381, CSM II 262). Descartes admits that there are no purely geometrical objects such as lines with no width, but there are boundaries of extended things that have geometrical properties.

Then Descartes launches into an argument against Gassendi’s empiricist view that the idea of a triangle (or any other geometrical figure) must first come from the senses, which was the common belief at the time (“there is nothing in the intellect which was not first in the senses”). Here, Aristotle and the

ancient atomists Democritus and Epicurus are the common target. There may be insensibly small straight lines, but the lines we perceive are wavy curves, when examined closely through a magnifying glass. The rough triangles we were exposed to in our youth are not really triangles, and we can gain no knowledge of real triangles from them. “The true triangle is contained in the figure only in the way in which a statue of Mercury is contained in a rough block of wood” (AT VII 382, CSM II 262). So when we sense the figure, we recognize a true triangle, which was known previously and more easily. Descartes draws an analogy with a line-figure drawn in ink. We would not recognize it as the face of a friend unless we were first acquainted with the friend's face. “Thus we could not recognize the geometrical triangle from the diagram on paper unless our mind already possessed the idea of it from some other source” (AT VII 282, CSM II 262).

The Existence of God

Descartes gives two accounts of why he provided a second proof of the existence of God in M5 after it had already been done in M3, and of why the two proofs occur in the order that they do.

The chronologically first reason is found in the First Replies, after Descartes reformulates his M5 proof.

But as I readily admit, it is the kind of argument which may easily be regarded as a sophism by those who do not keep in mind all the elements which make up the proof. For this reason I did have considerable doubts to begin with about whether I should use it; for I feared it might induce those who did not grasp it to have doubts about the rest of my reasoning. But there are only two ways of proving the existence of God, one by means of his effects, and the other by means of his nature or essence; and since I expounded the first method to the best of my ability in the Third Meditation, I thought that I should include the second method later on. (AT VII 120, CSM II 85).

In his conversation with Burman in 1648, Descartes is asked about the fact that in M3 he said that the argument for God's existence there was the only one he could find (AT VII 42, CSM II 29), but that he in fact gave a second argument in M5 (AT V 152, CSM II 337). Descartes explains that in M3, he was referring only to arguments *a posteriori*, or from effect to cause. The only argument of this kind that he could find was that which begins with the idea of God as an effect to the existence of God as a cause. The argument in M5, by contrast, is *a priori* and is not an inference from effect to cause. Descartes says that the order of arguments in the *Meditations* reflects the order of his discovery of the two arguments, but that in the later *Principles*, the order is reversed. The reason for the reversal is that his method in the *Principles* is “synthetic,” and the book itself is expository (rather than being exploratory like the *Meditations*). To be “synthetic” in this context means to proceed by way of deductions from first principles, as is done in geometry.

In the *Discourse*, we find an early version of the argument in M5. Descartes looked once more at his idea of a perfect being, and “I found that this included existence” just as the idea of a triangle includes its having its three angles equal to two right angles. “Thus I concluded that it is at least as certain as any geometrical proof that God, who is this perfect being, is or exists” (AT VI 36, CSM I 129).

In the *Meditations*, Descartes again affirms he has an idea of God, that is, an idea of a perfect being,

within him “just as surely as the idea of any shape or number” (AT VII 65, CSM II 45). Just as I have a clear and distinct understanding of the properties of shapes or numbers when I consider the ideas I have of them, I have an equally clear and distinct understanding of the supreme being: “that it belongs to [God’s] nature that he always exists” (AT VII 65, CSM II 45). From this Descartes concludes that God exists, and he regards his conclusion as at least as certain as any drawn from mathematics (whether or not he was right about other things in the earlier Meditations).

This first pass at the argument is very quick (as it is in the parallel passage in the *Discourse*), and Descartes was quite well aware that it looks suspicious on its face. “At first sight, this is not transparently clear, but has the appearance of being a sophism” (AT VII 66, CSM II 46). That is, it appears initially that the argument is fallacious. As a result, Descartes launches into a defense of the argument.

The first problem seems to be that he has been accustomed to distinguishing between essence (or nature) and existence. In general, these two are separable, and it can be said that the essence (nature) of something does not imply its existence. For example, there may be no existing chiliagons, although there is a nature of a chiliagon. But the case of the nature of God is such that it is not possible that a thing with God’s nature (supreme perfection) does not exist. Descartes claims that existence cannot be “separated” from God’s nature, any more than the properties of a triangle can be separated from the nature of a triangle. Thus it is a “contradiction” in trying to think of God as not existing, just as it is a contradiction to think of a triangle whose angles are not equal to two right angles. Or to take another example Descartes uses, the thought of a mountain is inseparable from the thought of a valley, and it would be a contradiction to try to think of a mountain with no valley.

The fact that I cannot consistently think of God without thinking that God exists does not, in itself, establish that God exists. For I cannot think of a mountain without a valley, yet this inability does not prove that a mountain or a valley exist. “Similarly, it does not seem to follow from the fact that I think of God as existing that he does exist” (AT VII 66, CSM II 46). The problem seems to be that “my thought does not impose any necessity on things” (AT VII 66, CSM II 46). The fact that I cannot think of God except as existing does not, apparently, require that God must exist.

Descartes rejects this line of argument, claiming that it contains a “sophism” or fallacy. The fallacy in the objection is that the argument depends on thought imposing necessity on things: I necessarily think of God as existing, therefore God necessarily exists. But this is not how the argument works, according to Descartes. “On the contrary, it is the necessity of the thing itself, namely the existence of God, which determines my thinking in this respect” (AT VII 67, CSM II 46). Thus it seems that Descartes is claiming that the structure of the argument is the opposite: God necessarily exists, therefore I necessarily think that God exists. The reason is that “I am not free to think of God without existence (that is, a supremely perfect being) without a supreme perfection” (existence) in the way that he can think of a horse with no wings. It is generally thought that Descartes is claiming here that existence itself is one of the “supreme perfections” of a supremely perfect being, others being limitless power, limitless knowledge, etc. We will later see an alternative characterization of the connection between supreme perfection and existence.

This argument is not very convincing. Suppose that Descartes is not free to think of God without existence. This means only that there is a necessary connection between the idea of God and that of existence. It still remains to be shown that the necessity in Descartes's thought implies anything other than a restriction on what he can think.

This criticism is not original. It was made by Thomas Aquinas against Anselm's version of the argument (*Summa Theologica*, Ia, ii, 2). Caterus, in the First Objections, noted the similarity between Descartes's argument in M5 and the Anselmian argument. While Descartes denied in the First Replies that the arguments were the same, Thomas's objection still seems to apply to it. Here is how Caterus adapts Thomas's argument: "Even if it is granted that a supremely perfect being carries the implication of existence in virtue of its very title, it still does not follow that the existence in question is anything actual in the real world; all that follows is that the concept of existence is inseparably linked to the concept of a supreme being" (AT VII 99, CSM II 72).

Caterus illustrates the point with a whimsical counterexample. I have an idea of an existing lion, and I cannot separate existence from this idea. Existence seems to belong to the essence of an existing lion, so would it not follow that there must be an existing lion?

Descartes has an answer to the first objection, but he has not yet used it in his defense of the argument. The missing element is that the idea he has of a supreme being is "an image of a true and immutable nature" (AT VII 68, CSM II 47). So the (hidden) form of the argument is really this. I have an idea of a supremely perfect being. This idea expresses a true and immutable nature, which is outside of my thought. In my idea I recognize that existence is inseparable from being a supremely perfect being. So existence is inseparable from the nature of God. Since there is a nature of a supreme being, a supreme being exists.

Here is how Descartes himself reformulates the argument in the First Replies:

That which we clearly and distinctly understand to belong to a true and immutable nature, or essence or form of something, can truly be asserted of that thing. But once we have made a sufficiently careful investigation of what God is, we clearly and distinctly understand that existence belongs to his true and immutable nature. Hence we can now truly assert of God that he does exist. (AT VII 115-116, CSM II 83)

Descartes states that this argument is valid. He states moreover that the major premise (the general claim made in the first sentence) is true, as following from the general proposition that whatever is perceived clearly and distinctly is true. The only problem he sees is with the minor (second, specific) premise, "that existence belongs to [God's] true and immutable nature" (AT VII 116, CSM II 83). There is "considerable difficulty" in accepting the premise. One difficulty had been raised already in the M5 discussion of the argument: the fact that we are accustomed to distinguish essence from existence rather than thinking of the two as inseparable. The other is that we do not know whether the alleged immutable nature was made up or not. This problem is addressed at the end of the discussion of the argument, and we will turn to it later.

In the meantime, Descartes in the First Replies gives a more precise reason for the claim that God's essence and existence are unique in being inseparable from each other. He makes a distinction between

necessary and merely possible existence. All essences in fact contain existence in one of these two ways. Thus the essence of a triangle or a horse with wings contains possible existence. But these essences do not contain actual existence, and so “our understanding does not show us that it is necessary for actual existence to be conjoined with their other properties” (AT VII 117, CSM II 83). The idea of God, and that idea alone, necessarily carries with it actual existence. “But from the fact that we understand that actual existence is necessarily and always conjoined with the other attributes of God, it certainly does follow that God exists” (AT VII 117, CSM II 83). The idea of God before the understanding reveals that the nature of God is such that it contains necessary existence.

While this distinction is helpful in that it breaks down the traditional distinction between essence and existence, it remains to be understood why actual existence “is necessarily and always conjoined with the other attributes of God.” The First Replies offers a new consideration to further this claim, namely that it is the specific attribute of supreme power, which belongs to God’s nature, that implicates actual existence.

The first step is to reiterate the claim that a supremely perfect being possibly exists. “Next, when we attend to the immense power of this being, we shall be unable to think of its existence as possible without also recognizing that it can exist by its own power” (AT VII 119, CSM II 85). So Descartes can conclude that it is possible that a supremely powerful being that can exist is able to do so by its own power. The next claim is that it is “quite evident by the natural light that what can exist by its own power always exists” (AT VII 119, CSM II 85). Finally, the conclusion is drawn that “this being does really exist and has existed from eternity” (AT VII 119, CSM II 85). Here is the argument in stepwise format.

1. A supreme being is possible.
2. A supreme being has supreme power.
3. So, a being with supreme power is possible. [1,2]
4. If a being with supreme power is possible, then it can exist by its own power.
5. If a being can exist by its own power, then it does exist by its own power.
6. If a being does exist by its own power, then actual existence belongs to its nature.
7. So, actual existence belongs to the nature of a being with supreme power. [3-6]
8. So, actual existence belongs to the nature of a supreme being. [2,7]

This account of the connection between supreme perfection and (actual) existence seems to differ from the claim that existence is one of the perfections of God, made in the body of M5. Existence seems to be a consequence of the perfection of power, rather than being a perfection on its own. Yet Descartes claims that the reformulation of the argument in the First Replies “does not differ from anything I have written before, except for the method of explanation adopted” (AT VII 120, CSM II 85).

There is a twist to this argument. One could equally well infer the weaker conclusion, that actual existence belongs to the nature of any being with supreme power. This would seem to leave it open that a supremely powerful being other than God could exist. But Descartes had claimed just before giving his reformulated argument that “our mind, which is finite, normally thinks of these perfections only separately, and hence may not immediately notice the necessity of their being joined together”

(AT VII 119, CSM II 85).

We will now focus on the conclusion, that actual existence belongs to the nature of a supreme being. In the Second Objections, we find an objection by Mersenne directed against what he calls “an argument that others have stated, as follows: ‘If there is no contradiction in God’s existing, it is certain that he exists; but there is no contradiction in his existing’” (AT VII 127, CSM II 91). The claim that there is no contradiction in God’s existing (and hence that God’s existence is possible) is taken by some to be problematic. Mersenne states that some have doubted and others have denied outright that the idea of God’s existence is free from contradiction. Given the possibility of doubting it, the existence of God is not certain, and given that the idea of God is contradictory, God’s existence is impossible.

Descartes gives an extensive response to this objection. First, he thinks that the only problem would lie in the possibility of a nature that a supreme being would have. The principle that would be used against Descartes is that “What we clearly understand to belong to the nature of a thing cannot for that reason be affirmed of that thing unless its nature is possible or non-contradictory” (AT VII 150, CSM II 107). The basic response proceeds as follows.

It is the clarity and distinctness of our idea of God that assures us that the nature of God harbors no contradictions. The reason lies in the nature of “self-contradictoriness or impossibility,” which exists only in our thoughts and arises when “we make the mistake of joining together mutually inconsistent ideas.” This in turn results “merely from their obscurity and confusion” (AT VII 152, CSM II 108). Although our understanding of the “few attributes of God which we do perceive” is “inadequate,” it is clear enough to reveal that the nature of God is not self-contradictory. Quite the opposite: “all the attributes which we include in the concept of the divine nature are so interconnected that it seems to us to be self-contradictory that any one of them should not belong to God” (AT VII 151, CSM II 108).

Having discussed the premise that existence belongs necessarily to the nature of God, we will turn to the question of whether there is a nature of God. Descartes asserts that, “The idea of God is an image of a true and immutable nature” (AT VII 68, CSM 45). Recall that there must be such a nature corresponding to the idea, for otherwise the only conclusion Descartes could draw would be that he cannot have an idea of God without thinking that God exists, which Aquinas noted does not imply that God exists.

Descartes claims that “there are many ways in which I understand that this idea is not something fictitious which is dependent on my thought, but is an image of a true and immutable nature” (AT VII 68, CSM II 47). In fact, Descartes gives three reasons for his realism concerning the nature of a supreme being.

The first reason is that “apart from God, there is nothing else of which I am capable of thinking such that existence belongs to its essence” (AT VII 68, CSM II 47). The reasoning here seems to be as follows. I am accustomed to thinking of existence and essence apart from each other. For any essence (besides that of God), I can conceive of there not existing a thing with that essence. In order to fabricate an idea of God, I would have to conceive essence and existence as being necessarily

connected. But I cannot conceive of their being necessary connected if I myself connected the two (which I would have to do if the idea of God is only a fiction).

The second reason is composed of two parts. The first part is that “I cannot understand how there could be two or more Gods of this kind.” The second part is that “after supposing that one God exists, I plainly see that it is necessary that he has existed from eternity and will abide for eternity” (AT VII 68, CSM II 47). What seems to be going on in the first claim is that if I fabricated the idea of God, I should be able to do so in such a way that I could think of the existence of more than one of them. I would seem to be at liberty merely to put my conceptions together a second time, so to speak. So if I contrive the idea of a unicorn, I can just as well think of two unicorns. On the other hand, the idea of God seems to exclude any other God. A being that is supremely perfect in power, for example, would not seem able to coexist with another being that is supremely perfect in power, since their powers would limit each other. (A similar argument to the same conclusion was made explicitly by Spinoza, *Ethics*, Part I, Proposition 14.)

The third reason is grammatically the second part of the second reason, but it is more closely related to the point marked “and finally.” Given that I have an idea of a single God, I am forced to think of such a being as having eternal existence, yet it would seem that I could think of God otherwise if the idea of a supreme being were of my creation. Moreover, “I perceive many other attributes of God, none of which I can remove or alter.”

This third reason seems to be one to which Descartes gave a lot of weight, since he uses it in the First Replies to defend the thesis in question (that a nature of God corresponds to my idea of God). There, Descartes notes that ideas “which are invented and put together by the intellect” are always able to be “split up by that same intellect, not simply by an abstraction but by a clear and distinct intellectual operation” (AT VII 117, CSM II 83). Any ideas that cannot be split up in that way “were clearly not put together by the intellect” (AT VII 117, CSM II 83). For example, I might think of a triangle which is inscribed in a square (such that the three vertices of the triangle lie on the sides of the square). I am quite capable of thinking the triangle and square apart from each other by a clear and distinct intellectual operation. On the other hand, I am not capable of intellectually splitting from the triangle the property that the sum of its angles equals two right angles. So it is with God: we cannot split any of the attributes from God by a clear and distinct intellectual operation.

We will end the discussion of the second proof for God’s existence with a prototype of a Kantian challenge, put forward by Gassendi in the Fifth Objections. Kant claimed (more than a century after the publication of the *Meditations*) that “to be is obviously not a real predicate, i.e., it is not a concept of anything that can be added to the concept of a thing” (*Critique of Pure Reason*, “On the Impossibility of an Ontological Proof of the Existence of God,” A598/B626). Here is Gassendi’s formulation: “It is quite all right for you to compare essence with essence, but instead of going on to compare existence with existence or a property with a property, you compare existence with a property” (AT VII 322, CSM II 224). Thus, one can compare the essence of a mountain with the essence of a valley and find them inseparable. But the same cannot be done with existence or an essence or a property.

Descartes has two responses. One is that he does not understand why existence should not be taken as a property, “if we take the word ‘property’ to stand for any attribute or for whatever can be predicated of a thing; and this is exactly how it should be taken in this context” (AT VII 382-3, CSM II 263). I can predicate existence of God by saying that God exists. But this is only a weak sense of the term ‘property.’ Yet even in “the strictest sense of the term,” necessary existence is a property of God, “since it applies to him alone and forms a part of his essence as it does of no other thing” (AT VII 383, CSM II 263).

Descartes seems to be saying that ‘existence’ when applied to God does not have the same meaning as it does when it applies to objects like triangles. The reason is that God’s existence has a necessary relation to God’s essence, while a triangle’s existence does not have a necessary relation to the triangle’s existence. “Hence the existence of a triangle should not be compared with the the existence of God” (AT VII 383, CSM II 263). Perhaps what Descartes has in mind here is because of its necessary connection to other properties, the existence of a supreme being must be treated like a property “in the strictest sense of the term,” while existence is detachable from the nature of a triangle, unlike its essential properties.

On the other hand, there is something analogous to the property of necessary existence in triangles, and that is possible existence. “I do not, however, deny that possible existence is a perfection in the idea of a triangle, just as necessary existence is a perfection in the idea of God” (AT VII 383, CSM II, 263). In both cases, the two are inseparable. In contrast, a chimera does not even possibly exist, which makes the idea of a triangle superior to that of the idea of a chimera.

The final objection Descartes considers in the body of M5 is that he begins with the supposition that God has all perfections and ends necessarily with the conclusion that God exists “(since existence is one of the perfections)” (AT VII 67, CSM II 46). But because the supposition itself is not necessary, he is free to reject the conclusion of his argument. Descartes admits that some suppositions have necessary consequences which are false. The supposition that all quadrilateral figures can be inscribed in a circle has the consequence that a rhombus (equilateral parallelogram) can be inscribed in a circle. But it is impossible to inscribe a rhombus in a circle.

The first response has to do with the ambiguity of ‘necessary’ when it is claimed that the supposition that God has all the perfections is necessary. If it means that he necessarily makes the supposition, then it is clearly not necessary, since he may never have come upon the idea of God. On the other hand, once he does bring forth the idea of God “from the treasure house of my mind, as it were,” he must attribute all perfections to God, even if they are not enumerated at the time. So the alleged supposition is not a supposition at all, but a necessary truth, and it is a premise of a sound argument. On the other hand, when he starts with the idea of all the figures that can be inscribed in a circle, he is not necessarily led to the conclusion that all quadrilateral figures can be inscribed in a triangle, which is in fact a false conclusion.

The Dependence of Knowledge on God

The final topic of M5 is the claim that “the certainty and truth of all knowledge depends uniquely on

my awareness of the true God, to such an extent that I was incapable of perfect knowledge of anything until I became aware of him” (AT VII 71, CSM II 49). This conclusion is reached in the last six paragraphs of the Meditation.

While one can prove the same thing in different ways, as with the two arguments for God’s existence or three arguments that the idea of God represents a true and immutable nature, all proofs have something in common. “I am always brought back to the fact that it is only what I clearly and distinctly perceive that completely convinces me” (AT VII 68, CSM II 47). Some of what is clearly and distinctly perceived is “obvious to everyone,” and other things are the result of close and careful investigation. “But once they have been discovered, the latter are judged to be just as certain as the former.” An example is a right triangle. It is obvious that the angle opposite the hypotenuse (the right angle of the triangle) is the largest angle. On the other hand it takes a mathematical proof to show that the sum of the squares of the side is equal to the square of the hypotenuse. “But once one has seen it, one believes it just as strongly” (AT VII 69, CSM II 47).

Now take the case of God. While it is not initially obvious that God exists, due to the influence of our preconceived opinions and the images in our minds, once these are cleared away, God’s existence is self-evident, and in fact no less so than anything else.

A much bolder claim is that “the certainty of all other things depends on this, so that without it nothing can ever be perfectly known” (AT VII 69, CSM II 48). This claim is explained in the next two paragraphs.

While he is attending to the proof of the proposition that the sum of the angles of a triangle is equal to two right angles, Descartes has a very clear perception of its truth, and indeed cannot help believing that it is true. This appears evident to him because of his great familiarity with the principles of geometry. More generally, “my nature is such that I so long as I perceive something clearly and distinctly I cannot but believe it to be true” (AT VII 69, CSM II 48).

However, even a geometer is not always attending to his proofs, and more generally “I cannot fix my mental vision continually on the same thing, so as to keep perceiving it clearly” (AT VII 69, CSM II 48). Now suppose that I remember that I did perceive it clearly. This memory does not have the force of actually perceiving it clearly. It becomes just a reason for thinking that the proposition is true, not a perception that compels assent. As such, it must compete, as it were, with reasons for thinking the proposition might not be true. For example, “I can convince myself that I have a natural disposition to go wrong from time to time in matters which I think I perceive as evidently can be” (AT VII 70, CSM II 48). This conviction is reinforced by the observation that in the past “there have been frequent cases where I have regarded things as true and certain, but have later been led by other arguments to judge them false” (AT VII 70, CSM II 48).

Here is where knowledge of God’s existence, the fact that everything depends on God, and that God is no deceiver, enters the picture. Descartes has drawn from this the conclusion that “everything which I clearly and distinctly perceive is of necessity true” (AT VII 70, CSM II 48). (Cf. M4, where Descartes asserts that every clear and distinct perception “is undoubtedly true” (AT VII 62, CSM II 43).) With

this in mind, my memory of having had a clear and distinct perception is sufficient to overwhelm any counter-arguments such as those listed in the preceding paragraph here. I do not have a natural disposition to go wrong when “my understanding is transparently clear,” because I was made by a God who is no deceiver. And as for what I once regarded as true and certain only to judge false later, these were not clearly and distinctly perceived. The reasons they were believed were less reliable, as it turns out, than clear and distinct perception. Descartes ends by citing a new reason for doubt, that he might be dreaming. But he rebuts this by noting that even if he is dreaming, anything clearly evident to his intellect in the dream is true.

At this point, in the final paragraph, Descartes concludes that perfect knowledge depends on awareness of “the true God” (AT VII 71, CSM II 49). This awareness is generalizable, so that he can be confident in being able to attain “full and certain knowledge of countless matters.” These include knowledge of God, of other intellectual beings, and corporeal nature, insofar as it is the object of geometry. As to whether there actually exist any objects which have a corporeal nature—that is a main topic of the Sixth Meditation.

The Cartesian Circle

We are now finally ready to take up one of the most vexing topics in Descartes interpretation, which is the charge that in some way, Descartes has engaged in, or is forced to be engaged in, circular reasoning.

The alleged problem is based on four passages in the *Meditations*, one each from M1, M3, M4 and M5.

In M1, Descartes, in his search for all possible reasons for doubt, finds one in “the long-standing opinion that there is an omnipotent God who made me the kind of creature that I am.” Although he does not state it explicitly, he suggests that this God might have “created me such that I am deceived all the time,” even “every time I add two and three or count the sides of a square, or perhaps in some even simpler matter” (AT VII 21, CSM II 14). He must, in the remaining Meditations, dispel the doubt based on his having been created so as to be always deceived.

In M3 (AT VII 36, CSM II 25), the doubt is dispelled, although in a limited way. First, the implicit reason for doubt of M1 is stated explicitly here: “perhaps some God could have given me a nature such that I was deceived even in matters which seemed most evident.” Examples of these matters are “something very simple and straightforward in arithmetic or geometry, for example that two and three together make five.” This possibility is reinforced by a “preconceived belief in the supreme power of God,” so great that “it would be easy for him, if he so desired, to bring it about that I go wrong even in those matters which I think I see utterly clearly with my mind's eye.”

The antidote to this reason for doubt is to turn away from the possibility of, or preconceived belief in, the God and toward “the things themselves which I think I perceive very clearly.” When Descartes does this, he is so convinced that, at this very moment, he rejects the possibility that he is in error about, for example, the belief that two and three make five. “I spontaneously declare: let whoever can do so deceive me, he will never bring it about that . . . two and three together are more or less than five,

or anything of this kind in which I see a manifest contradiction” (ATM VII 36, CSM II 25).

At this point, he has not proved that there is a God, much less that there is a deceiving God, so “any reason for doubt which depends simply on this supposition is a very slight and, so to speak, metaphysical one.” This doubt must be removed by determining whether a deceiving God exists, “for if I do not know this, it seems that I can never be quite certain about anything else” (AT VII 36, CSM II 25).

This doubt is finally removed at the end of the Fourth Meditation. It has been proved that God exists and is no deceiver. All my error is the consequence of my misuse of my own free will, assenting to what is not clearly and distinctly perceived. If I restrict my judgments to clear and distinct perceptions, “it is quite impossible for me to go wrong,” because they have God as their author, and God is no deceiver (AT VII 62, CSM II 63). Here Descartes seems to be making a stronger claim than in M3. Not only is it (doxastically) impossible for me to doubt what I am currently clearly and distinctly perceiving, but it is (metaphysically) impossible for a judgment based on such a perception to be false.

At the end of M5, there is a reference back to M4, “I have perceived that God exists, and at the same time I have understood that everything else depends on him, and that he is no deceiver; and I have drawn the conclusion that everything which I clearly and distinctly perceive is of necessity true” (AT VII 70, CSM II 48). To this conclusion Descartes adds a higher-order claim about it. The knowledge he has of God allows him to suppress any doubts that might arise about the conclusion he has just noted. “Accordingly, even if I am no longer attending to the arguments which led me to judge that this is true, as long as I remember that I clearly and distinctly perceived it, there are no counter-arguments which can be adduced to make me doubt it, but on the contrary I have true and certain knowledge of this” (AT VII 70, CSM II 48). The neutralization of all counter-arguments to the conclusion that everything I clearly and distinctly perceive must be true is then generalized to “all matters which I remember ever having demonstrated, in geometry and so on” (AT VII 70, CSM II 48). Finally, Descartes re-states more precisely the claim he made originally in M3, that “I see plainly that the certainty and truth of all knowledge depends uniquely on my awareness of the true God, to such an extent that I was incapable of perfect knowledge about anything else until I became aware of him” (AT VII 71, CSM II 49).

It is easy to confuse the two separate issues addressed in M4 and M5, respectively. M4 provides a metaphysical basis for the truth of what is clearly and distinctly perceived. M5 provides an epistemological consideration that removes doubt in certain contexts, i.e., those in which one is not attending to what one clearly and distinctly perceives. This epistemological conclusion depends on the metaphysical conclusion, that clear and distinct perceptions must be true because they are the creations of a God incapable of deception. This distinction between the two conclusions is important, because when the circularity charge is explicitly made by Arnauld, Descartes will defend himself by appeal only to the epistemological claim he makes, not addressing an apparent problem pertaining to the metaphysical conclusion. This is the reason that one tends to be puzzled when considering Descartes’s response to Arnauld’s objection.

One thing that seems to threaten to generate this problem is the nature of this “awareness of the true

God.” In M3, Descartes undertook a proof (or perhaps two proofs) of the existence of this God. Many of the premises of the proof are justified by appeal to “the natural light” or “light of nature.” Perception by way of the natural light is nothing more than clear and distinct perception, as Descartes stated in the Reply to the Thirteenth Objection by Hobbes (AT VII 192, CSM II 135). So the premises of the argument(s) for God’s existence are accepted because of their great clarity. In one place, Descartes states, “The longer and more carefully I examine all these points, the more clearly and distinctly I recognize their truth” (AT VII 42, CSM II 29).

At the end of the proof(s), Descartes writes, “Altogether, then, it must be concluded that the mere fact that I exist and have within me an idea of a most perfect being, that is God, provides a very clear proof that God indeed exists” (AT VII 51, CSM II 35). But why are clarity and distinctness to be trusted in the proof of God's existence, when it seems that we need to know that God exists in order to trust what we clearly and distinctly perceive? This is the heart of the “Cartesian circle.”

Mersenne in the Second Objections poses a problem that is not one of circularity, but which brings us close to it. When the circularity charge is later raised explicitly in the Fourth Objections by Arnauld, Descartes refers to his Second Replies to rebut it, so we should look at the response to Mersenne in order to understand how Descartes dealt with the claim that he might be forced into circular reasoning.

In M2, Descartes makes a strong claim that he is a thinking thing. “At present I am not admitting anything except what is necessarily true. I am, then, in the strict sense only a thing that thinks; that is, I am a mind, or intelligence, or intellect or reason” (AT VII 27, CSM II 18). Mersenne describes this section of M2 as containing the “conclusion that you clearly know what you are” (AT VII 125, CSM 89).

But at this point in the process of meditation, Descartes has not yet proved that God exists. And without knowledge that God exists, by his own admission Descartes is “not certain of anything, and cannot know anything clearly and distinctly” (AT VII 125, CSM II 89). Thus, it seems that the requirement of knowledge of God as a necessary condition for all other knowledge is too strong, in that it makes Descartes ignorant before he knows God, when he needs to be able to make a knowledge claim such as that he is a thinking thing.

The argument can be laid out as follows.

1. For any p, if I know clearly and distinctly that p at t, then I know at t that God exists.
2. I do not know in Meditation Two that God exists.
3. So, for any p, I do not know clearly and distinctly that p in Meditation Two.
4. So, I do not know clearly and distinctly that I am a thinking thing in Meditation Two.

The claim alleged by Mersenne to be too strong occurs at step 1. Let us call the consequent attribution of ignorance at step 2 “Mersenne’s Gap.”

Another way to argue that the condition, requiring knowledge of God to know anything else, is too strong is to give a counter-example. Mersenne’s example is about an atheist, who has no knowledge of

God, while being “clearly and distinctly aware that the three angles of a triangle are equal to two right angles” (AT VII 125, CSM II 89). Presumably, the atheist knows that this mathematical proposition is true, but his knowledge does not depend on the atheist’s knowledge of God, whose very existence is rejected by the atheist on the basis of an argument Mersenne recounts. Thus, the knowledge of God is not required for all knowledge.

In response, Descartes first invokes a distinction made by “the dialecticians” between knowledge and awareness of first principles. The point of this distinction seems to be that awareness that I am a thinking thing, for example, is awareness of a first principle and not knowledge as such. These “first principles” are recognized “as self-evident by a simple intuition of the mind” (AT VII 140, CSM II 100). This evasive move would acknowledge the soundness of Mersenne’s argument but declare that it is harmless, since Descartes never meant to make the claim expressed in step 4.

A potential problem with this approach to filling the gap is that in M3, Descartes had described the claim that he is a thinking thing “the first item of knowledge” (“*primâ cognitione*”) (AT VII 35, CSM II 24). However, in M5, Descartes had required God’s existence only for “true and certain knowledge” (“*veram & certam scientiam*”). Thus, Descartes is not using the same Latin word to describe the epistemic status of “I am a thinking thing” in the two Meditations, and we might translate the phrase in M3 literally as “the first item of cognition.” So it is possible to take “I am a thinking thing” as a first principle and not an item of knowledge in the M5 sense, as the word ‘*primâ*’ in the M3 passage suggests.

Descartes’s next point is that someone can have such awareness without having knowledge. This is precisely what is going on in the case of the atheist geometer. The atheist fails to know because his conviction depends on his present awareness. Being an atheist, he has no way to overturn the possibility that he is “being deceived in matters which seem to him to be very evident” (AT VII 141, CSM II 101). Because this doubt could occur to him or be brought to his attention by someone else, his conviction is unstable, and “no act of awareness that can be rendered doubtful seems fit to be called knowledge” (AT VII 141, CSM II 101). Descartes goes on to try to refute the atheistic argument suggested by Mersenne, but that refutation is not germane here.

Later in the Second Replies, Descartes returns to the issue of the basis of our conviction. He states that in cases of clear and distinct perceptions, “we cannot ever think of them without believing them to be true” (AT VII 145, CSM II 104). Some of these truths are evident whenever we think of them, while others as such that one must rely on arguments to be convinced of their truth. We may forget the arguments and remember only the conclusions, and the only way that people can have the same conviction as they have with what is self-evident is when “knowledge of God enables them to understand that the intellectual faculty which he gave them cannot but tend towards the truth” (AT VII 146, CSM II 104). This is precisely what the atheist lacks.

Thus we have two ways of filling Mersenne’s Gap. First, regarding the first principle that “I am a thinking thing,” we have only an item of indubitable awareness, but not an item of knowledge. Because of the requirement that knowledge cannot be rendered doubtful, the atheist lacks knowledge, though he may have (temporarily) indubitable awareness. Second, what blocks knowledge in these

cases is the recognition at other times that one has been made in such a way as to be deceived in matters that are perceived clearly and distinctly. This blockage is removed with the proof that God exists and is no deceiver. The atheist cannot avail himself of this proof and so is lacking in knowledge even of what he has proved geometrically.

Now we turn to the suggestion of circularity, made by Arnauld in the Fourth Objections. A circular argument is an argument which has a premise that is justified by appeal to the conclusion. It should be noted that merely having the conclusion as one of the premises is not a formal defect of an argument. In fact, every argument which contains the conclusion as one of its premises is valid, in the sense that if all the premises of the argument are true, then the conclusion is true as well. Thus, the following argument schema, which appeals to the rule of Reiteration that allows any step in a argument to be repeated, is valid and not circular:

1. p [Premise]
2. Therefore, p [1, Reiteration]

However, the following argument schema would be circular and is the kind of argument that Arnauld suggested is used by Descartes:

1. p [2]
2. Therefore, p [1, Reiteration]

Arnauld writes:

I have one further worry, namely how the author avoids reasoning in a circle when he says that we are sure that what we clearly and distinctly perceive is true only because God exists.

But we can be sure that God exists only because we clearly and distinctly perceive this. Hence, before we can be sure that God exists, we ought to be able to be sure that whatever we perceive clearly and evidently is true. (AT VII 214, CSM II 150).

Arnauld is not claiming that Descartes actually employed a circular argument, but rather that there is a gap in an argument that seemingly could only be filled by using the conclusion of the argument as the basis for one of its premises. (The claim that there is a gap in some part of Descartes's reasoning is, then, common to Mersenne and Arnauld.) The conclusion of the apparently defective argument is that God exists.

Descartes's first response to the objection is to state it in his own words.

The only reason we have for being sure that what we clearly and distinctly perceive is true is the fact that God exists, but we are sure that God exists only because we perceive this clearly. (AT VII 245-246, CSM II 171)

Here he actually gives a hint of how the circularity might develop. In the following reconstructions, for brevity, "God exists" abbreviates "God exists, created me, and is no deceiver."

The gap can be seen in the following set of claims.

Version 1 (Gappy)

1. I clearly and distinctly perceive at t that God exists. [M3]
2. So, I am sure at t that God exists. [1]

This argument is invalid. As Arnauld states, before we can draw the conclusion, “we ought to be able to be sure that whatever we perceive clearly and evidently is true.” So let us fill the gap by adding the claim from M4 as a premise and a further premise that seems trivial.

Version 2 (Unjustified)

1. I clearly and distinctly perceive at t that God exists. [M3]
2. I am sure that whatever I clearly and distinctly perceive at any time t is true. [M4]
3. So, I am sure that my clear and distinct perception at t that God exists is true. [1, 2]
4. If I am sure that my clear and distinct perception that p at t is true, then I am sure at t that p. [Trivial Premise]
5. So, if I am sure that my clear and distinct perception that God exists at t is true, then I am sure at t that God exists. [4]
6. So, I am sure at t that God exists. [3, 5]

The problem of the circle arises in the justification of premise 2. The justification seems to lie in the thesis of M4, which is that being certain that everything that is clearly and distinctly perceived is true requires a proof of God’s existence. Once we make that justification explicit, we get an explicitly circular argument.

Version 3 (Circular)

1. I clearly and distinctly perceive at t that God exists. [M3]
2. If I am sure that God exists, then I am sure that whatever I clearly and distinctly perceive at any time t is true. [M4]
3. I am sure that God exists. [8]
4. So, I am sure that whatever I clearly and distinctly perceive at any time t is true. [2, 3]
5. So, I am sure that my clear and distinct perception at t that God exists is true. [1, 4]
6. If I am sure that my clear and distinct perception that p at t is true, then I am sure at t that p. [Trivial]
7. So, if I am sure that my clear and distinct perception that God exists at t is true, then I am sure at t that God exists. [5]
8. So, I am sure at t that God exists. [5, 7]

It might be thought that the circle could be broken by changing the antecedent in 2 to some proposition p and substituting p for step 3. Step 2 would read, schematically, If p, then I am sure that whatever I clearly and distinctly perceive at any time t is true. Step 3 would be the assertion of the proposition p. If p is not what is asserted in step 8 (or any other subsequent step), circularity would be avoided. But

this kind of maneuver is ruled out by Descartes's admission that the only reason he has to believe that what he clearly and distinctly perceives is true is the fact that God exists. So it looks like steps 2 and 3 are necessary for the argument, and thus it appears that Descartes is forced into the circle.

Descartes rather casually notes that the reason that he is not guilty of circularity is to be found in the Second Replies. In particular, he points to the distinction he made there "between what we in fact perceive clearly and what we remember having perceived clearly on a previous occasion" (AT VII 246, CSM II 171). The first point is that when we attend to the arguments that God exists, we are "we are sure that God exists." (AT VII 246, CSM II 171). And after we have attained this surety, we can use our knowledge that God exists and is no deceiver to be certain about other things so long as we remember that we perceived them clearly and distinctly previously.

In terms of the above argument, the problem lies in step 2 of Version 2, which is the same as step 4 of Version 3. That is, there is no need for Descartes to rely on a generalized statement that whatever he clearly and distinctly perceives at any time is true.

Version 4 (Limited)

1. I clearly and distinctly perceive now that God exists. [M3]
2. I am sure that what I clearly and distinctly perceive now is true. [M3]
3. So, I am sure that my clear and distinct perception now that God exists is true. [1, 2]
4. If I am sure that my clear and distinct perception that p now is true, then I am sure now that p . [Trivial Premise]
5. So, if I am sure that my clear and distinct perception now that God exists is true, then I am sure now that God exists. [4]
6. So, I am sure now that God exists. [3, 5]

This is basically the claim made in M3, where Descartes finds himself unable to doubt that he exists because he perceives it so clearly and distinctly. Note that the conclusion of this argument is epistemological, a statement that Descartes is sure that God exists, not simply that God exists. Note also that this assurance is good for the time at which he is attending to the argument, but not for all times, since to make that claim, he would have to argue in a circle.

Now the idea would be that with the argument that God exists in mind, and being unable to doubt it, he then concludes that whatever he clearly and distinctly is true at all times.

Version 5 (Generalization)

1. I am sure now that God exists. [Conclusion of Version 4]
2. If I am sure now that God exists, then I am sure now that whatever I clearly and distinctly perceive at any time t is true. [M4]
3. So, I am sure now that whatever I clearly and distinctly perceive at any time t is true.

One more move is required, and it is the trickiest. My present certainty that whatever I clearly and

distinctly perceive at any time is true must become fixed in my mind, so that I am unable to doubt it later. Once it is so fixed, I am no longer able to doubt what I remember to have clearly and distinctly perceived, since there was a time that I clearly and distinctly perceived it. This is what is required for knowledge, and this is what the atheist lacks, for I need to establish that God exists before I can generalize my current recognition of the truth of what I clearly and distinctly perceive to all times. This completes Descartes's solution to the circularity problem posed by Arnauld. It should be noted that it is an epistemic problem about why Descartes is sure that God exists.

The last time the alleged circle is mentioned in the *Meditations* is in the Appendix to the Fifth Objections and Replies, which is a response to Gassendi's anti-Cartesian book *Metaphysical Inquiry: Doubts and Counter-Objections* of 1644.

All the points my critics note concerning the other three Meditations are ones which, so far as I can see, I have fully answered elsewhere. This applies to the following objections which they make (1) that I was guilty of circularity in proving the existence of God by means of certain notions which are in us, yet saying afterwards that one cannot be certain of anything without prior knowledge that God exists; . . . On this topic see my reply to the Second Set of Objections labeled *Thirdly* and *Fourthly* and the end of the second part of the Fourth Replies. (AT IXA 211, CSM II 274)

So there is nothing here that was not stated in the Fourth Replies.

Descartes's final comment on the matter comes in the conversation with Burman, who quotes a passage from the *Discourse on Method*.

But if we did not know that everything real and true within us comes from a perfect and infinite being, then however clear and distinct our ideas were, we would have no reason to be sure that they had the perfection of being true. (AT VI 39, CSM I 130)

Descartes responds as follows.

If we did not know that all truth has its origin in God, then however clear our ideas were, we would not know that they were true, or that we were not mistaken—I mean, of course, when we were not paying attention to them, and when we merely remembered that we had clearly and distinctly perceived them. For on other occasions, when we do pay attention to the truths themselves, even though we may not know God exists, we cannot be in any doubt about them. Otherwise, we could not prove that God exists. (AT V 177, CSMK 353)

Here at least Descartes acknowledges that there could be a problem here and points straightforwardly to the solution given above.

If there is such a simple and straightforward solution, one which Descartes himself recognized, why does the Circle persist as an interpretive problem? There seem to be two possible reasons. (1) The problem is as stated, but Descartes's solution is deemed inadequate, (2) There are one or more different unsolved problems that could be called "the Circle." We will not pursue these matters any further here.

[Note on citations. Citations from Descartes are given first with the volume and page from the Adam

and Tannery edition of Descartes's works (*Œuvres*), which are given in the margins of the Cottingham, Stoothoff and Murdoch translations, *The Philosophical Writings of Descartes*. The citation 'CSM' with volume and page numbers are to the translation. 'CSMK' makes reference to the third volume, of which Anthony Kenny was a co-editor. Thanks to Chuck Watson for pointing out some errors in the original version of these notes.]