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What Wisdom is According to Heraclitus the Obscure

Marie I. George

Truth, Adequacy and Being in Spinoza's *Ethics*

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Whichever Way You Slice It A Response to Baldner and Staley

Ronald Keith Tacelli, S.J.

In a recent issue of the *Lyceum* (Spring '91), I argued that if the world is without beginning, the past must comprise an actual infinity of events. Certain thought-experiments, like the following, helped propel the argument along. Suppose the universe is everlastingly old. Suppose, further, that on each past day God created an immortal soul. This means that there would exist right now an actual infinity of souls—i.e., that there would currently exist a plurality of souls more numerous than any finite quantity. Now in the past history of this universe there must **have occurred** as many days as there **are** presently existing immortal souls. Since there **is** an actual infinity of immortal souls, there **could have occurred** no fewer days. And so there must in the past have occurred a succession of events more numerous than any finite quantity. Therefore the past of this universe must be actually infinite.

It surprises me that anyone would raise even an eyebrow about this conclusion, let alone a question; and yet two able philosophers¹ have argued in these pages that it is not merely questionable but false. Why?

I

Kevin Staley says that “a beginningless past entails only that there has been a potential infinity of past events” (p. 17). He concedes that past events are actual, in the sense that each past event “has really occurred.” But still the past events of a beginningless universe do not comprise an actual infinity, merely a potential one.

What is a potential infinity? According to Staley, it is “an indeterminate collection, which, because it is ever in the process of increasing or

¹ Kevin Staley in “Infinity and Proofs for God's Existence” (Fall '91); Stephen Baldner in “The Past Just Ain't What it Used to be” (Fall '92). References to these articles will be given in parentheses in the body of the text.

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decreasing, fails to be a completed whole or totality. As soon as this process ceases, it finds itself to be actually finite. It is infinite only with respect to process . . ." (p. 20). Staley proposes the following illustration:

Suppose that matter, a Thanksgiving turkey for example, is infinitely divisible. Suppose also that an immortal master carver exists, who is so skilled in his craft that he is capable of cutting any slice of turkey, no matter how thin, in half again. On Thanksgiving morning, he is slicing turkey and placing these slices in a pile on a platter. He cuts a nice thick slice, and he cuts it in half. He places one half of the slice on the platter, and cuts the remaining half in half again. He places this half of the half on the platter, and slices the remaining half in half again. He continues in this fashion for eternity. (p. 19)

Now neither the turkey nor the carver nor the original slice is actually infinite. All three are wholes with determinate limits. But the first thick slice is potentially infinite, says Staley, because it **can be** cut into smaller and smaller pieces without end.

Staley notices that there is a problem with applying his example to the case of the beginningless universe. For everything in the example is actually finite² until the process of slicing begins. But in the case of the beginningless universe, what is it that corresponds to the first slice, and what to the act of slicing? Is the first slice the entirety of the past, or a bit of the past? If the entirety of the past, then, since the slice is actually finite, Staley would have to say that the past is actually finite, that it contains only so many events. (And in that case what does the act of slicing correspond to?) If the first slice corresponds to a part of the past (say the last billion years), the turkey from which it was taken would represent the whole of the past. But then is the turkey

² Except perhaps the age of the Master Carver!

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of limited or unlimited size? If limited, then the same problems arise; if unlimited, then the example involves the **actual** infinity of the past.

So nothing Staley has proposed in his example corresponds to the potential infinity of the beginningless past.³ We might try to make his example correspond by changing it a bit. We might suppose that the Master Carver has been carving for all eternity. In that case, the platter would be piled with infinitely many slices. This quantity would at any point in time **already** have resulted from the process of carving, and would therefore be actually infinite. It would not be actually finite and infinite with respect to process only.

Now if every slice resulted from an act of slicing, could there have been in the history of this Master Carver fewer acts of slicing than there are actual slices? Clearly the answer is No. And so all the acts of slicing that have terminated in **this** (present) slice cannot comprise a potential infinite; for infinitely many acts of slicing must have led up to this act and this slice.

That is what I was trying to point out in my original article. If quantitative predicates can apply to such a past at all, then it cannot be spoken of as a potential infinite, because the kind of finitude proper to the potential infinite is lacking here. There is **another** kind of infinity involved in our apprehension of a beginningless past—a kind that is not merely capable of indefinite extension or division.

I spoke of this quantitative infinite as “actual” and as a “completed” set. Why? Because the members belonging to it are infinitely many, and because, since the set is formed by successive addition, this infinite plurality **has been achieved**: no further successive additions are needed to reach it. At any point the succession of days has **already** accumulated to infinity; just as, to get

³ And Staley himself admits as much: “[S]ome . . . speak about the past of a beginningless universe as an actual infinity, since there actually have been infinitely many past events in a universe without beginning (quite unlike the pile of turkey slices). But,” he continues, “to say that there actually have been infinitely many past events is to say something like there have really been or truly been infinitely many events.” (p. 24).

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back to our Master Slicer, at any point his acts of slicing, and the slices resulting, have **already** reached infinity.

But Staley's dissatisfaction goes deeper. He thinks that my analysis of a beginningless past involves the claim that the past is an infinite totality. But no such totality is possible, he insists; the very "notion of an infinite totality is an incoherent notion, analogous to the notion of a square circle" (p. 22).

Perhaps it is. But this in no way counts against my claim that an actual infinite follows from the hypothesis of a beginningless universe; it counts instead—if it counts at all—against the hypothesis from which an actual infinite follows. Let me illustrate:

Three people are standing before you, discussing the meaning of life.

A: All reality is illusion.

B: Then it would follow that at least some illusions are real.

C (rebuking **B** sharply): That can't be right! If you claim that something is real and an illusion, you are claiming that something is real and not real—which is absurd!

B: Well, sure; then so much the worse for **A**'s hypothesis; but **not** (surely?) for my claim that this really follows from it.

Just so here. I never claimed that an actually infinite past is possible. In fact, I believe with Staley that it is not. I merely claimed that **if** the universe is without beginning, **then** the past is actually infinite. Staley's argument seems to run: an infinite whole or totality is impossible; but an actually infinite past means some sort of whole or totality; therefore the hypothesis of a beginningless universe **does not entail** an actually infinite past. But no: whether or not the notion of an infinite whole or totality is incoherent, the hypothesis surely entails it. And that is my claim.

Staley says that his position is

born out by the way in which we ordinarily use the terms 'whole' and 'infinite'. If one reflects carefully on those sorts

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of things within one's experience that one considers to be wholes of a certain sort, note that each of these wholes has certain limits and is a whole precisely in virtue of those limits. A story is a whole story because of its beginning, middle, and end. A wall is a whole wall because of its top, sides, and bottom. A wall which had no top simply would not be a whole wall. That which is infinite is that which lacks a limit, and so fails to be a whole in some respect

I want to avoid talking about “the set” of past events, “the series” of past events, or “the past” considered as the collection of all past events, because phrases such as “the set,” “the series,” and “the past” falsely suggest that we can talk about past events as some sort of totality—which is just what cannot be done in a beginningless universe. (p. 22-3)

With much of this I sympathize. But as a way of dealing with the implications of a beginningless past it seems pretty forced and unnatural.

Suppose, for example, you see what looks like a wall, but stretching up, up until the clouds take it from your sight. Nearby stands a philosopher. “Gosh!” you say to him. “It doesn't seem as though that wall even **has** a top!” He answers: “If it's a **whole** wall, of course it would have a top. But it's not a whole wall. In what you see, there is a brick above any brick you care to name. And in that sense the wall is **potentially** infinite. There really or truly are infinitely many actual bricks here. But we don't have an actually infinite wall. We've got to avoid talking about “the wall,” that means we can talk about what's here as some sort of totality—just what we **can't** do with all these vertically arranged bricks that have no top limit.”

Now this seems to me a very strange sort of answer. For if the structure—in deference to the philosopher, we can call it that instead of ‘wall’—if the structure is not being extended continuously upward, then **all** the bricks that make it up **already** have their places in the vertical arrangement. And if the

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structure has no top, the bricks that make it up must be infinitely many. So in some sense the structure is infinite. But not just potentially infinite. If it were, it would have a finite number of bricks, and would merely be capable of unending extension. We mean by its infinity something more than that. If there cannot be an infinite multitude, then we know the wall must have a top; but we also know that it cannot be just potentially infinite in lacking one.

I will even make Staley a present of the word ‘actual’. I would ask him only to admit that when we consider the hypothesis of a beginningless universe, we are faced with a kind of infinity which is other than potential. Since that infinity has at any and every point in the history of the universe already been achieved, I called it ‘actual’. If Staley can think of a better word, so be it. But ‘potential’ is emphatically not that word.

II

For all my criticism of its main conclusion, much of Staley's article strikes me as sound. But Stephen Baldner's is another kettle of fish—or, to keep with the metaphor, another platter of turkey.

Baldner will not admit that the past of a beginningless universe is any sort of infinite at all.⁴ He writes that “the past of this universe is, if eternal, neither a potential nor an actual infinite; because it has no actuality at all it is wrong to characterize it as any sort of infinite” (p. 3).

Why wrong? Because by ‘actuality’ Baldner means ‘present existence’. Since the past is not present, it cannot be actual in any sense; and therefore can be neither an actual infinity nor a potential one—since the potentially infinite must be actually finite.

⁴ Baldner qualifies this: “There is, however, a sense in which an eternal past might be said to be potentially infinite: if the past were eternal, we could always count more and more past days. We could never count an actually infinite number of them, but we could always (potentially) count more. In this sense only I would agree that the past would be, if eternal, a potential infinity.” (pp. 2-3) He would probably also agree that, if the universe were not eternal, there is a sense in which the bounded past might be said to be actually finite.

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Now by ‘actual’ I could not have meant ‘presently existing’. The argument is, after all, about the past. And my point is simply this: the hypothesis of an everlasting world leads us to affirm some kind of infinity about the past—but a kind that is not merely potential, since **this** event’s happening depends on there **having actually occurred** infinitely many successive events before it. This infinite succession must **already** have happened, **already** been achieved. And so ‘actual’ seemed the most natural word to describe it. But I have no wish to quibble about words. Let Baldner limit the term ‘actual’ to ‘presently existing’. This merely leaves us without a name for what we notice. And clearly Baldner does notice that my examples point to a kind of infinity that the word ‘potential’ will not cover—but a kind that cannot in his sense be called ‘actual’. Thus:

Fr. Tacelli has raised problems about counting successions of Popes in an eternal Church He uses this as an example to show that an eternal past would necessarily entail the existence of an actual infinity. Now I might concede to him that the Church could not have existed eternally in the past . . . but such considerations are only accidental to the question Whether the eternal past of **this** universe, if it existed eternally in the past with all of its currently existing species (including man), would imply an actual infinity, is a secondary question. The prior question for the debate . . . is whether the material universe in **some** form could have existed eternally in the past without resulting in an actual infinity. (pp. 3-4)

But such considerations are in no way accidental to the question I was asking: Does the eternity of the world—of this material universe—entail an actual infinite? Baldner says he “might concede . . . that the Church could not

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have existed eternally in the past.”⁵ But why? The Popes would not constitute an infinite set of **presently** existing members; and so the problem of an actual infinite (given Baldner's understanding of ‘actual’) should not—could not—arise. Why then the concession? Because he sees that a kind of infinity **more than merely potential** is entailed by the affirmation of a beginningless Church. But clearly an infinity **of that very kind** is entailed by the same affirmation about the world.

I had supposed in my example that the Church were as old as the beginningless universe. Well, suppose the universe did begin—say, 2000 years ago. Would this assumption cause Baldner to question the possibility of there being a present Pope? No. And why not? Because he would know **ahead of time** that there could have been only **so many** of them, i.e., that the succession of papal reigns leading to this present reign must be a **finite** succession. And if we believe that this universe began, then we believe that the realm of spatio-temporal being has a **finite** history; i.e., we believe that there was a first event, and that only so many events could have occurred from that first to this present. Never mind that the events in happening cease to be present; all of them have happened (just as all previous papal reigns have occurred), and their having happened is a necessary condition for the universe's reaching **this** point in its history (just as all papal reigns before the present one are necessary conditions for **this** succession to the throne). But ‘all’ means ‘as many as there were’. And in an eternal universe this could have been no fewer than infinitely many. And so the affirmation of an eternal universe involves the affirmation that the universe must have suffered infinitely many successive transformations in order to arrive at this point in its history.

⁵ Just for the record: The point of my example was not to show the **impossibility** of an infinitely old Church (or even of an infinitely old universe); it was to show that questions of actual infinity arise in sets or series only one of whose members is presently existing. As I put it then: “[S]ince it is the series of Papal elections that [this present] election is part of, the possibility of [this present] election stands or falls with the possibility of there having been infinitely many Papal elections (and completed terms) before [it].” (p. 20).

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Granted: I assume that there is a unity underlying all the changes taking place in the universe; that history is not a mere punctiform substitution of one thing for another. If it were, we could not even say that one thing really follows after another; and in that case, I agree, there could not have been an infinite succession. There could be no real history at all. But that is not the sort of mad universe Baldner believes in, is it? Could his willingness to avoid an unwelcome conclusion drive him to embrace even **that**? If so, then he needs not an argument but a prayer.⁶

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⁶ I am deeply grateful to Kelly Clark, Norris Clarke, SJ, Michael Pakaluk, and Sharon Yannaccone, who criticized an earlier draft.

Does a Beginningless Universe Imply an Actual Infinity of Past Events?

Robert A. Larmer

Recent discussions of the kalam cosmological argument have focused on the issue of whether an actual infinity of past events is impossible. Settling this question, it is thought, will settle the question of whether a beginningless universe is conceivable. Unfortunately, this focus on the issue of whether an actual infinity of past events is impossible, has obscured the question of whether a beginningless universe does, in fact, entail an actual infinity of past events.

It is to this largely unexamined question that Ronald Tacelli, Kevin Staley and Steven Baldner have turned their attention in a recent series of articles.¹ Tacelli has argued that a beginningless universe does entail an actual infinity of past events: both Staley and Baldner have denied this, albeit for different reasons. My own view, which I will defend after summarizing the argument to date, is that Tacelli is correct in his claim and that neither Staley nor Baldner provide any reason to doubt that a beginningless universe entails an actual infinity of past events.

Tacelli's thesis is that the existence of an everlasting, i.e. beginningless, universe entails the existence of an actually infinite set of past events. His argument for this is that "the present motion would not be the present motion of an eternal [beginningless] universe unless infinitely many motions preceded it."² On Tacelli's view, it is precisely our realization that a beginningless universe implies an actual infinity of past events that explains our insistence that in such a universe there must always exist an event which occurred before any past event.³ If there were a first event, i.e. an event not preceded by another event, this would imply not only that the universe had a beginning, but that there

¹ See R.K. Tacelli, "Does the Eternity of the World Entail an Actual Infinite," *Lyceum* 3 (Spring 1991), pp. 15-22, K.M. Staley, "Infinity and Proofs for the Existence of God," *Lyceum* 3 (Fall 1991), pp. 15-26, S. Baldner, "The Past Just Ain't What it Used to be: A Response to Kevin Staley and Ronald Tacelli, S.J.," *Lyceum* 4 (Fall 1992), pp. 1-4.

² Tacelli, p. 21.

³ Tacelli, p. 18.

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is a finite number of events in its past. Only if there exists no first event and thus no finite number of events in its past is it possible that the universe be beginningless.

Staley has criticized Tacelli on the basis that the existence of a beginningless universe implies not an actual, but rather a potential infinite. He contends that “in a universe which lacks a beginning the past is infinite, but only potentially so.”⁴ Tacelli, he argues, fails to distinguish between the notions of actual and potential infinity and is thus led into error.

Baldner's criticism of both Tacelli and Staley is that neither has come to grips with the ontological status of the past. Both Tacelli and Staley think that the existence of a beginningless universe implies the existence of an infinity of past events; whether that infinity be conceived as actual or potential. Baldner's view is that “the past of . . . [the] universe is, if eternal, neither a potential nor an actual infinite; because it has no actuality at all it is wrong to characterize it as any sort of infinite.”⁵ Since there is no sense in which past events actually or potentially exist, the question of whether the number of past events in a beginningless universe is actually or potentially infinite cannot be raised.

My own view is that Tacelli's thesis is correct and that the criticisms of Staley and Baldner are ill-founded. This can be made clear by a closer examination of their criticisms.

Staley's criticism is that Tacelli has failed to distinguish clearly between an actual and potential infinity and that once this is done it will become evident that a beginningless universe implies not an actual, but potential, infinity. Staley argues that a beginningless universe could not imply the existence of an actual infinity of past events, since “when applied to the notion of infinity . . . actual means complete in the sense of constituting some sort of

⁴ Staley, p. 23.

⁵ Baldner, p. 3.

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whole or totality.”⁶ Since a necessary condition of a set of events being a whole or totality is that it have “a beginning, a middle and an end,”⁷ a beginningless universe could not imply the existence of an actual infinity of past events. Thus Staley is not only prepared to say that the set of past events in a beginningless universe does not constitute an actual infinite, but that an actually infinite set cannot exist. He comments, “to put my argument differently, even in a beginningless universe, the past cannot be an actual infinity, that is, an infinite totality, simply because the notion of an infinite totality is an incoherent notion, analogous to the notion of a square circle.”⁸

In saying this, Staley agrees with proponents of the kalam argument who argue that an actually infinite set of past events cannot exist. Where he disagrees is that rejecting the possibility of an actually infinite set of past events commits one to the view that the universe had a beginning. The usual strategy of those defending the kalam argument is to argue that, since a beginningless universe implies an actually infinite set of past events, and since an actually infinite set of past events cannot exist, the universe must have had a beginning. Staley does not think this inference is well-founded, since he thinks that a beginningless universe implies not an actual, but a potential, infinity of past events, and that a potential infinity of past events, unlike an actual infinity of past events, is conceptually possible.

Staley's claim that a beginningless universe implies not an actual, but a potential, infinity of past events seems the product of a misunderstanding and misapplication of the concept of potential infinity. First, by definition, a potential infinite is always finite.⁹ It was for this reason that Cantor referred to it as a false infinite.¹⁰ To say, therefore, that the number of past events in the

⁶ Staley, p. 21.

⁷ Staley, p. 22.

⁸ Staley, p. 22.

⁹ See, for example, J.P. Moreland, *Scaling The Secular City* (Grand Rapids, Michigan: Baker, 1987), p. 22.

¹⁰ See Robin Small, “Cantor and the Scholastics,” *The American Catholic Philosophical Quarterly* Vol. LXVI, No. 4 (Autumn 1992), pp. 407-428, p. 408.

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universe is potentially infinite is to admit that only a finite number have occurred and that the universe had a beginning.

Staley shows some awareness of this difficulty when he comments that the potential infinity of a beginningless universe is not completely analogous to the potential infinity of sub-dividing a finite quantity.¹¹ He goes on to note that “a beginningless universe is . . . infinite at every moment of its existence”¹² This, however, is to give away the game. If, by definition, a potential infinite is at every moment finite, it makes no sense to call the past of a beginningless universe, which is infinite at every moment of its existence, a potential infinite.

Second, Staley seems to confuse the process of counting the members of an actually infinite set with defining such a set. From the fact that it is impossible to reach by counting backwards any first event in a beginningless universe, he wants to deduce that such a universe implies only a potential infinity of past events.¹³ It is true that the process of counting is potentially infinite, in the sense that, although at any point in the counting process one will only have counted a finite number of events, one could keep counting indefinitely. This, however, is only to emphasize that one can neither traverse or form an actual infinite by counting. What Staley fails to realize is that the condition of being able to continue counting indefinitely is the existence of an actually infinite number of past events. As Tacelli comments in his original article,

before we begin to count, we know (on our hypothesis) that the events which have preceded this one cannot be counted. We know that this succession really did precede the present. Our question is: Must it comprise a completed infinite series?

¹¹ Staley, p. 24.

¹² Staley, p. 24.

¹³ Staley, p. 17.

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Our inability to count is another way of answering the question Yes. It is our apprehension of the quantitative infinity involved in the hypothesis that makes us realize we cannot count the members.¹⁴

A large part of Staley's confusion arises from the fact that he fails to realize that the concept of potential infinity has no application in set theory.¹⁵ Inasmuch as the concept of a potential infinite is not a set theoretic idea,¹⁶ to describe the set of past events as a potential infinite is fundamentally mistaken.

Staley is not oblivious to this difficulty, but his response is not adequate. At one point in his article, he comments that he wants to be taken as making a claim about past events taken individually, not as a collection or series. Unfortunately, he is not consistent in this. At numerous points he is quite prepared to talk of the set or series of past events.¹⁷

Neither will it do, having emphasized the impossibility of referring to past events in a beginningless universe as a set or collection, to introduce the notion of a "set, loosely conceived"¹⁸ of past events. Not only is it difficult to understand what is meant by a "loosely conceived set," it is puzzling how, if it is nonsense to talk of the set of past events in a beginningless universe, loosely conceiving such a set makes it any less nonsense. What is clear is that the concept of potential infinity cannot be applied to a set, be that set loosely conceived or not. There is, therefore, no third option: the set of past events must be either finite or actually infinite.

Turning to Baldner's criticism of Tacelli, we see that he is prepared to rule out an actual infinity of past events on the basis that past events no longer exist. Because there is no sense in which past events are actual, there can be

¹⁴ Tacelli, p. 17.

¹⁵ Moreland, pp. 21-22.

¹⁶ Moreland, p. 21.

¹⁷ Staley, pp. 23-4.

¹⁸ Staley, p. 23.

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sense in raising the question of whether there exists an actual infinity of them. Strictly speaking, “the past of . . . [the] universe is, if eternal, neither a potential nor an actual infinite; because if has no actuality at all it is wrong to characterize it as any sort of infinite.”¹⁹ Baldner allows that

there is . . . a sense in which an eternal past might be said to be potentially infinite: if the past were eternal, we could always count more and more past days. We could never count an actually infinite number of them, but we could always (potentially) count more. In this sense . . . the past would be, if eternal, a potential infinity.²⁰

Baldner's argument, depending upon how it is read, proves either too much or too little. On one reading, he might be taken as claiming that, since past events do not exist, they cannot be enumerated. If there is no sense in which the past exists there is no sense in attempting to count past events. There is no sense, therefore, in raising the question of whether the number of past events is actually infinite.

On this reading, Baldner's argument proves too much. It rules out not only the possibility of raising the question of whether the number of past events is actually infinite, but the possibility of raising the question of whether the number of past events is finite. If, in principle, it makes no sense to enumerate past events we must dismiss as nonsense any attempt to ask whether the number of events that has transpired in the history of the universe is finite or infinite. Unfortunately, we must also dismiss as nonsense a host of other questions. On this line of argument it will make no sense to ask how many Popes there have been or how many birthdays one has had, since these are past events and cannot,

¹⁹ Baldner, p. 3.

²⁰ Baldner, pp. 2-3. Baldner, no less than Staley, misapplies the notion of potential infinity.

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therefore, be enumerated. In short, the consequence is to rule out **any** attempt to enumerate past events. Not only does it become impossible to discuss infinite series in the past; it becomes impossible to discuss finite series in the past.

A more charitable reading would be to take Baldner not as denying that past events can be enumerated, but as claiming that the fact that past events are no longer actual precludes them forming any kind of actually infinite set. Put somewhat differently, this amounts to the claim that an actually infinite set would have to be composed of actual things or events.

Baldner, if this be his argument, confuses the issue of how past events are to be conceived with the issue of how many past events have occurred. He seems to think that, because past events are no longer actual, a beginningless universe does not imply that an actual infinity of past events has occurred. This is a mistake. It is true that past events are no longer actual events, but this scarcely negates the claim that a beginningless universe implies that an actually infinite number of past events has occurred. What is at issue is not whether a beginningless universe implies an actual infinity of presently existing events, but whether it implies that an actual infinity of past events has taken place. Tacelli makes essentially this point in his original article when he writes,

[Events] have indeed passed away. That is part of what we mean by calling them past. But their being past does not mean that there were not many of them and it emphatically does not mean that we cannot know how many there were. For if the universe is everlasting then we can know.²¹

He goes on a little later to say that the disanalogy between the past and the present

is not relevant to the question of actual infinity [Past events] may not be there for us to see, but that does not make

²¹ Tacelli, p. 18.

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them irrelevant to our understanding of (or possible interest in) what . . . [now occurs].²²

I conclude that neither Staley nor Baldner has provided any reason to doubt that the existence of a beginningless universe implies the existence of an actually infinite number of past events. If, as proponents of the kalam argument insist, an actual infinity of past events could not have taken place this implies that a beginningless universe is inconceivable.

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²² Tacelli, p. 20.

Certainty, Doubt and Truth
On the Nature, Scope and Degree of Doubt in
Descartes' *Meditations*

Michael O'Donovan Anderson

It has been nearly three hundred and fifty years since the first appearance of Rene Descartes' *Meditations on First Philosophy*, and the vigor of the debate they have engendered has yet to show signs of diminishing.

If the problem facing Descartes' various commentators was simply deciding on the validity of a given series of arguments, it seems reasonable to believe that there would not have been the observed level of protracted contention. Indeed, one of the few things philosophers share is the ability to detect, and the willingness to decry, invalid arguments of all sorts. And the efficiency and zeal with which this task is characteristically accomplished rules out of court the likelihood that the continuous debate reflects uncertainty with respect to the logical status of Descartes' arguments. Rather, it is a reflection of the fact that, although determining the validity of an argument attributed to Descartes by a contemporary commentator may be a simple matter, determining the accuracy of the attribution often proves troublesome.

A certain amount of trouble is to be expected, of course. The *Meditations* are not wholly unambiguous, and they utilize a style and genre that is unusual for the field. But surely we would not expect so little consensus about a work upon which the talents of some of the greatest philosophical minds of recent history have been expended.

I would like, however, to suggest that the problem lies not so much in the lack of perspicacity in the philosophers' gaze, but in its misdirection. Although the work on Descartes has consistently produced brilliant and innovative interpretations of key arguments presented in the text, this interpretive work has failed to reproduce the arguments of Descartes exactly insofar as it has tended to focus on those particular textual passages. Undeniably, the arguments connecting the *cogito*, the existence of God, and the truth of clear and distinct ideas with the quest for certainty which these

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arguments embody are the most important in the text, and will prove the key to a determination of Descartes' success or failure. But we must always be mindful of the fact that, in the context of the *Meditations*, these arguments function specifically as answers to, and the destruction of, various steps of the radical doubt enacted in the First Meditation.

My main purpose in this paper is to clarify the nature and scope of the methodological doubt utilized by Descartes in his *Meditations*. I shall argue, via a systematic analysis of the First Meditation, that the doubt enacted there consists of three stages, each based on a distinct epistemological concern. Each of these concerns is addressed individually through the course of the remaining meditations. Such an analysis clarifies both the structure of the *Meditations* and the philosophical method Descartes employs in establishing epistemologically firm foundations.

In particular, this approach illuminates the textual reasons for the actual form and placement of the (misnamed) “*cogito*” argument, and opens the possibility that the ontological argument is not, as is commonly supposed, circular. People are often surprised when they read through the *Meditations* without finding that most famous of philosophical proclamations: “*Cogito, ergo sum.*” Even philosophical veterans are often hard pressed to account for the fact that Descartes begins his ascent to truth and certitude with “I must conclude that this proposition **I am, I exist**, is necessarily true whenever it is put forward by me or conceived in my mind” in place of his catchier “*cogito.*” I would like to suggest that the simple interpretation that “put forward” and “conceived” are references to thought, making natural the conclusion that he exists (along the lines of the “*cogito*”), is flawed for the simple reason that Descartes does make a claim about himself—that he exists (as would follow directly from an assertion that he thinks)—but rather makes a claim about the proposition “I am, I exist”—that it is true. Admittedly, the conclusion that he exists follows readily, but the extra step indicates an argument of a slightly different form.

Part of the importance of clarity and precision in the analysis of the “*existo*” argument is in its implications for the Third Meditation argument for

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the existence of God. If my analysis of First Meditation doubt is accurate, then only arguments of a very particular logical structure may escape its reach. The “*existo*” is one such argument, and so, I contend, is that Third Meditation ontological argument. Because Descartes must continue to work under the onus of radical doubt until his proof of God's existence, that argument is constrained to take the same form as the successful “*existo*,” thus a thorough analysis of the one cannot help but shed light on the other.

I

Preparing the Way

It is a curious fact that, although every reconstruction of the later meditations implicitly assumes an interpretation of the first, this interpretation is rarely elucidated, and never argued for. One notable exception to this near-universal rule is the work of Harry Frankfurt. Professor Frankfurt is virtually alone among commentators, spending fully one-half of his book, *Demons, Dreamers and Madmen*, on a characterization of the nature, scope, and degree of doubt in Descartes' First Meditation. And so although I shall take the liberty of ignoring the implicit interpretations embodied in the numerous reconstructions of the later arguments (it would seem foolish to explicate all the possibilities for the sole purpose of showing them to be mistaken), letting these reconstructions stand or fall according to the perceived accuracy of my interpretations, I can take no such liberty with Frankfurt's work. Nor would I wish to, for it is a carefully argued and thoroughly interesting piece of philosophical interpretation, which nevertheless fails, in my opinion, to accurately reflect Descartes' intentions.

In suggesting the inadequacy of Frankfurt's reconstruction, therefore, I want to focus not on an enumeration of individual mistakes of interpretation—indeed, Frankfurt's textual analysis shows great clarity and intelligence—but rather on demonstrating his overall interpretation to be at odds with Descartes' project. Although Frankfurt would perhaps suggest that Descartes was simply

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wrong about his own project, much as he contends that Descartes misrepresents his method, I would like to suggest that if it is indeed possible for Descartes to be mistaken in an interpretation of himself, then it is even more likely that any independent interpretation will be flawed. It would seem reasonable to assert that an interpretation which conforms to the text has, at least *prima facie*, a better claim to accuracy than does one whose textual agreement is suspect. I shall also refrain from an exhaustive listing of those places where Frankfurt's analysis complements my own. Suffice it to say that this paper is heavily indebted to Frankfurt's insight, even though our projects are, on a very basic level, opposed.

Frankfurt's overall project is motivated by a belief that Descartes' intention was to articulate a method by which the sciences could be shown to be certain, without also requiring that they be transcendentally true. That is, he claims that Descartes' overriding concern lies not in defending some form of transcendent realism, but rather in ensuring that there will never exist internal conflict in our systems of knowledge and belief. "Certainty," Frankfurt writes,

is [Descartes'] fundamental epistemological principle, and he defines truth in terms of it. Now certainty for him is a matter of the coherence of evidence. It is a coherence theory of truth which, therefore, most authentically expresses the standards and goals of his inquiry.¹

Important as well is Frankfurt's insistence that the scope of the doubtful is restricted to only that information gleaned by and through the senses. He writes early in the book that "The skeptical excursions of the First Meditation are designed to . . . [wreck] the thoughtless confidence in sense perception with which common sense is generally content."² These two presumptions are

¹ Harry Frankfurt, *Demons, Dreamers, and Madmen* (New York: The Bobbs-Merrill Company, Inc., 1970), p.26.

² Harry Frankfurt, *Demons, Dreamers and Madmen*, p. 14.

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intertwined, and seeing the manner of this interdependence is essential to an understanding of the shape of Frankfurt's project.

I do not know of any place where the latter assumption, that the First Meditation doubt is restricted to sensory perceptions, is explicitly argued for. Frankfurt does, to be sure, defend it from objections (and we will look at those arguments in due course), but there is no explicit positive presentation of the idea. It is possible, however, to discern a pattern of reasonings that suggest such an argument.

For Frankfurt, the “general overthrow of belief” which characterizes the First Meditation occurs entirely in its first paragraph. “Descartes makes his resolution [to accomplish the ‘general overthrow of [his] opinions’] before he begins to review and criticize his beliefs; he overthrows his opinions, in this sense, at the very start of the meditations.”³ Thus, the skepticism itself actually precedes the skeptical arguments, which are, according to Frankfurt, only to ensure that “his resolution is . . . adequately reinforced [and] confirmed.”⁴

Frankfurt also notes that Descartes utilizes the principles of reason throughout the First Meditation, indeed, even accords a measure of “authority [to] reason itself.”⁵ Such a use of reason can be justified only if this faculty is free from First Meditation skepticism. And since we know that all the doubt occurred in the first seconds of Descartes' meditation, we know also that reason remains undoubted for the whole of that meditation. Apparently, from this (and the underlying assumption that the two main human faculties are sense and reason) we are meant to infer that the scope of the doubtful is restricted to questions about the reliability of sense perception. Of course, this conclusion does not follow naturally or necessarily from the few premises we have been given. Indeed, I myself believe that reason remains undoubted for the duration of the First Meditation; and yet I shall argue that although the consistent and reliable function of reason is not doubted (thus making it permissible to utilize

³ Harry Frankfurt, *Demons, Dreamers and Madmen*, p.21-2.

⁴ Harry Frankfurt, *Demons, Dreamers and Madmen*, p.22.

⁵ Harry Frankfurt, *Demons, Dreamers and Madmen*, p.28.

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its powers during the meditation), its power to produce judgments which are indubitably in accordance with reality (which are objectively true by correspondence) **is** brought into question, thus carrying Descartes' First Meditation skepticism beyond mere mistrust of the senses. But this analysis provides us with the clue we need to fill in Frankfurt's missing premise: if Descartes is operating under the rubric of truth by **coherence**, then questions as to the objective **correspondence** of reasonable judgments would simply not arise. Any questions focusing beyond the realm of sense and onto reason would naturally deal with only its coherence; but questioning the coherence of reasonable judgments is tantamount to questioning the operation of reason itself. Since we have agreed that no such inquiry occurs, we must also agree that, in so far as Descartes' aims are best expressed in terms of coherence, his skepticism ends at the boundaries of sense.

Frankfurt's claims about the scope of doubt and the nature of Descartes' project are mutually supporting in the other direction as well. Starting from the basic claim that the doubt in the First Meditation covers all, and only, doubt of sensory judgments, Frankfurt notes, quite correctly, that in the absence of any actual criteria for distinguishing deceptive from non-deceptive perceptions (which Descartes lacks until the later Meditations) the only basis to be had for the claim that the senses "sometimes deceive" are conflicting perceptions of the same object provided by the senses at different times. That is, although we may think that our friend's car is blue, having seen it whiz by one stormy Thursday night, we may later perceive it as green.⁶ Such an experience, although providing no explicit internal basis for decisions between perceptions, indicates the possibility of sensory deception.

From here the move to a prejudicial characterization of the Cartesian project, namely "to formulate an alternative policy in terms of which no judgment will be certified except those which cannot be shaken by conflicting testimony," is not very difficult.⁷ For if we accept the original terms of this

⁶ Harry Frankfurt, *Demons, Dreamers, and Madmen*, pp.31-4, 43-7, 49.

⁷ Harry Frankfurt, *Demons, Dreamers and Madmen*, p.44.

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interpretation, that the first meditation doubt extends to all and only sensory judgments, then this reading agrees with the important points of the text. If the basis of our skepticism is the internal inconsistency of our perceptions, the logical choice of remedy is to insure perceptual coherence. Indeed, Descartes explicitly advises, at the close of the Sixth Meditation, that we should use coherence as our criterion of certainty when dealing with sensory reports. He writes:

I ought not to have even the slightest doubt of the reality (of sensible objects) if, after calling upon all of the senses as well as my memory and intellect in order to check them, **I receive no conflicting reports from any of these sources.**⁸

If we agree that the first meditation doubt extends only to sensory judgments, it would seem natural to suppose that Descartes' interests lie in the direction of coherence, rather than correspondence.

It is possible that such a short presentation of the relations between Frankfurt's major suppositions is not entirely accurate, and we might endlessly debate the details. What is certain, however, is that the consistency and credibility of Frankfurt's project centrally involves these premises: that the act of skepticism occurs with Descartes' opening resolution, and not incrementally throughout the meditation, and that this doubt extends only to the reliability of perception. Further, it is essential to the interpretation that Descartes is motivated by a desire to establish his everlasting sciences on the foundation of coherence, and is therefore not concerned with matters involving truth-by-correspondence.

My strategy for replacing this Frankfurtian interpretation is twofold: first, for the remainder of this section, I shall demonstrate the inadequacy of

⁸ Rene Descartes, *The Philosophical Writings of Descartes*, vol.II, trans. Cottingham, Stoothoff, Murdoch (Cambridge: Cambridge University Press, 1984), p.62. (CSM). Emphasis mine.

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Frankfurt's reasons for supporting his positions. Second, I shall propose my own interpretation of the nature and scope of doubt enacted in the First Meditation, Descartes' overall intentions, and the relation between the two, a project that will occupy me for the remainder of this paper.

Moving from simple to complex, I begin with the contention that Descartes' overthrow of his beliefs was quick, easy, and first. Frankfurt cites outside sources which indicate that Descartes was inclined to believe that "refraining from judgment is an act of the will . . . under our control" and concludes from this, since "a person suspends judgment merely by resolving that his judgments are suspended," that for Descartes "making the [original] resolution **is** the act of overthrowing his beliefs," and thus occurs at the beginning of the meditation.⁹ The most immediate problem with this position is its direct defiance of Descartes' insistence that "the skeptical arguments of the First Meditation have an essential role . . . in the general overthrow of his opinions."¹⁰ But it puts one in other uncomfortable interpretational binds as well. In particular, every time in the meditation Descartes relies on some particular premise or belief to continue his inquiry, Frankfurt is obliged to justify this reliance given the supposed prior overthrow of all such opinions.¹¹ For one poignant example, in regard to Descartes' reference to the workings of the imagination, Frankfurt asks: "What right has he to present any theory of the imagination at all, at a point in his investigations where he presumably knows nothing, and is still bound by his resolve to empty his mind of opinions?"¹²

Unfortunately, Frankfurt's answer to what ought to be regarded as a good question leaves much to be desired. He excuses Descartes' apparent lapse in resolve by denying that the theory of imagination was ever seriously proposed or believed. Frankfurt writes: "He does not in fact assume [its] truth .

⁹ Harry Frankfurt, *Demons, Dreamers, and Madmen*, p.18. The quote from Descartes comes from AT IX, 204, ll.7-16.

¹⁰ Harry Frankfurt, *Demons, Dreamers and Madmen*, p.18. See, for instance, (AT VII, 348, ll.18-19) and (AT IX, 204, ll.16-26).

¹¹ See, for instance, pp. 40 and 57 in *Demons, Dreamers and Madmen*.

¹² Harry Frankfurt, *Demons, Dreamers and Madmen*, p.57.

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. . . and nothing in his discussion requires him to do so.”¹³ Likewise for his answer to the contradiction of his assertion about the procedure of doubting with Descartes' own account, which displays even more audacity: “Descartes gives a mistaken account of his procedure when he says that he ‘propounded the main reasons for doubting’ . . . in order to justify the general overthrow of his beliefs.”¹⁴ Such light dismissal of potentially important inconsistencies in his interpretation is entirely unsatisfying, especially in the face of a plausible alternative account, namely that the scope of First Meditation doubt increases incrementally through the meditation, just as it appears to do. Indeed, given that the transition from skeptical resolution to skeptical arguments: **For this purpose, however, it will not be necessary to show that all my opinions are false** . . . is in the future tense, indicating a task yet to be commenced, it seems most plausible to assume that doubt is enacted step-wise.

Likewise with Frankfurt's insistence that Descartes is committed to a coherence theory of truth. To lend initial plausibility to this account, Frankfurt cites a passage from the Replies to the Second Set of Objections:

What is it to us if someone should perhaps imagine that the very thing of whose truth we have been so firmly persuaded appears false to a God or to an angel, and that as a consequence it is false, speaking absolutely? Why should this absolute falsity bother us, since we by no means believe in it or even have the least suspicion of it? For we are supposing a persuasion so firm that it can in no way be removed—a persuasion, therefore, which is exactly the same as the most perfect certainty.¹⁵

¹³ Harry Frankfurt, *Demons, Dreamers and Madmen*, p.57.

¹⁴ Harry Frankfurt, *Demons, Dreamers and Madmen*, p.19.

¹⁵ Replies to the Second Set of Objections (AT VII, 145). This is Frankfurt's own translation. It appears in the CSM translation on p.104.

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Frankfurt concludes from this that Descartes is “rather indifferent to the question of whether what is certain corresponds or fails to correspond with what is real.”¹⁶ And, with no other evidence before us than this quote, this conclusion is, indeed, eminently reasonable.

The first suspicion that the quote may not prove what is claimed comes from a quick look at Cottingham's translation from the Latin, which, although it includes only one added word—“alleged” inserted before “absolute falsity” nevertheless weakens the quote's power to convey the impression that absolute truth or falsity is of no import. Interestingly enough, however, this word appears in neither the “approved” French translation nor in the Latin original. But what does appear there is worth noting, for the original Latin indicative (this) used by Descartes in his reply, *Quid curamus istam falsitatem absolutam, cum illam nullo modo credamus, nec vel minimum suspicemur?*, is a word which was often used in the context of legal writing to denote the unproven (or “alleged”) claims of the opponent.

Descartes' choice of indicative casts some serious doubt on whether he is truly allowing the possibility that there may be some discrepancy between the truth as perceived by God, and the truth perceived by humans. Given this fact, it seems unlikely that he was truly “indifferent” to considerations of absolute truth. For Descartes makes it clear that the reason for his dismissive attitude is that nothing can make him “have even the least suspicion” that the truth may not be as his clear intellectual perceptions indicate. Remember, Descartes believes himself to have proven that God is not a deceiver, which simply rules out the possibility that our clear and distinct perceptions are false “absolutely.” Indeed, Descartes might be tempted to reply directly to Frankfurt's characterization:

Despite the high degree of doubt and uncertainty involved here, the very fact that God is not a deceiver, and the consequent impossibility of there being any falsity in my opinions which cannot be corrected by some other faculty

¹⁶ Harry Frankfurt, *Demons, Dreamers and Madmen*, p.25.

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supplied by God, offers me a sure hope that I can attain the truth even in these matters.¹⁷

Now, it is perhaps true that a case could be made that God, being of infinite scope, power and purity, undoubtedly perceives things differently than do we. And this may entail that only perceptions of such infinite scope could be said to be true or false “absolutely,” since this God's eye view actually defines these notions. In fact, I would not be surprised if Descartes did believe something of the sort, although finding a textual basis for this belief might be a bit of a challenge. But the view thus stated takes the bite out of Frankfurt's interpretation, for neither the falsity of our perceptions nor their failure to correspond to reality follows from their necessary limitation.

Consider, for instance, Descartes' long discussion of the senses and the body in the Sixth Meditation (AT VII, 79-86) from which it is clear that Descartes is not a naive realist; he does not believe that all the phenomenological qualities of our sense perceptions are present in the objects so perceived. For Descartes, objects do not exist as they appear, but rather manifest the power to cause the sensations associated with them. He writes there, “I am correct in inferring that the bodies which are the source of these various sensory perceptions possess differences corresponding to them, though perhaps not resembling them.”¹⁸ But, although he clearly believes that the senses were thus not designed to provide our minds with a picture of corporeal bodies as they appear to God, who undoubtedly sees the power directly, he also believes that God guarantees that the information that is provided by the senses is sufficient to determine the actions appropriate in response to the objects in question, and for us to infer truths from that information.

For the proper purpose of the sensory perceptions given me by nature is simply to inform the mind of what is beneficial or

¹⁷ Sixth Meditation, (AT VII, 80) CSM trans., p.55.

¹⁸ Sixth Meditation, (AT VII, 81) CSM trans., p.56.

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harmful for the composite of which the mind is a part; and to that extent they are sufficiently clear and distinct.¹⁹

From the sensation of burning, therefore, we can conclude the truth that fire is harmful, and from our clear apprehension of physical objects, “It follows that corporeal things exist.”²⁰

Thus, even if these things “of whose truth we have been so firmly persuaded” do appear differently to God, and we have no textual proof that they do, it does not follow that our perceptions are incorrect, but only that they are incomplete, which “is not surprising, since man is a limited thing, and so it is fitting that his perfection should be limited.”²¹ We can hardly conclude, based on this sort of evidence, that Descartes is unconcerned with questions of absolute truth, or with the appropriate correspondence of our accepted truths with objective reality.

Finally we turn to the question of the scope of Descartes' skepticism, and the previously constructed argument for truth by coherence which it supports. The obvious anomaly for sense-only doubt is the fact that included among the things doubted in the First Meditation are mathematical propositions. This anomaly can be divided into two questions about Descartes' placement of mathematical propositions among the dubitable judgments of the First Meditation. First, the obvious, which is why include mathematics, which is naturally associated with abstraction from sensory things, in with doubt of specifically and only sensory things? And second, if Descartes' project is really only about ensuring that we never make conflicting judgments or hold conflicting beliefs, then why did he bring mathematics into the picture? It is doubtful that any faculty capable of asserting anything about a mathematical proposition will ever make conflicting statements about its truth. It seems, that

¹⁹ Sixth Meditation, (AT VII, 83) CSM trans., p.57.

²⁰ Sixth Meditation, (AT VII, 80) CSM trans., p.55.

²¹ Sixth Meditation, (AT VII, 84) CSM trans., p.58.

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is, that mathematics already has the property Descartes allegedly desires, and quite obviously at that.

In this way, Frankfurt's overall position on the First Meditation stands or falls with his interpretation of mathematics—with his answers, that is—to the two aforementioned questions. If it can be shown that the doubt of mathematics is not simply an extension of the doubt of sensory judgments, and that therefore we have no reason to accept that the First Meditation covers solely judgments of sense, then we likewise have no motivation to accept Frankfurt's attribution to Descartes of a coherence theory of truth.

Turning, then, to the first of these questions, Frankfurt has this to offer:

From the statement that mathematics has nothing to do with any particular or complex sort of object it does not follow that it has nothing to do with existing things. Even if the truth of mathematics is independent of the existence of any particular thing or complex type of thing, it does not follow that mathematics may be true even if nothing whatever exists.²²

In short, Frankfurt claims that the existence of the external world is, for the narrator at least, a necessary condition for the truth of mathematical propositions. And thus the doubt of mathematics is entailed by the doubt of the external world, itself entailed by the doubt of all sensory judgments. In defense of this claim, Frankfurt cites two pieces of textual evidence.

First he cites the text surrounding the mathematical doubt:

In the light of these considerations, perhaps we are right to conclude that physics, astronomy, medicine, and all other disciplines that depend on composite things are indeed doubtful; and that arithmetic, geometry, and others of this sort, which treat only of the simplest and most general of things

²² Harry Frankfurt, *Demons, Dreamers and Madmen*, p.75.

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and scarcely care whether those things exist in nature or not, contain something certain and indubitable. For whether I am awake or asleep, two and three joined together make five, and a square does not have more than four sides. And it seems that it cannot be the case that truths so evident should incur any suspicion of falsity.²³

According to Frankfurt's translation, Descartes says that mathematics “scarcely cares” whether or not things exist in nature. He takes this to be evidence that, in fact, existence does matter, writing:

But if no questions of existence are relevant to mathematics, why should mathematics care about existence even scarcely? To say that it scarcely cares suggests that it does care to some extent, and this would not be so if it did not depend in any way on the existence of anything.²⁴

Looking again to the Latin text, though, we find that it translates equally well as “cares not at all” or, as in the Cottingham translation, mathematics contains something certain and indubitable “regardless of whether or not (the most simple and general things) really exist in nature.”²⁵ The subsequent French translation is, admittedly, ambiguous, saying that mathematics “does not take much trouble to determine” whether objects exist in nature, but if this is where Frankfurt's support lies, then he is illicitly combining the French and Latin texts to create the hybrid “scarcely cares.” Besides, even if the Latin is most accurately rendered “cares little,” or “scarcely cares,” and so is, interpreted literally, consistent with Frankfurt's translation, we would surely want to allow the colloquial nature of this phrase to take precedence. When one

²³ First Meditation, (AT VII, 20, ll. 18-26). Frankfurt's translation..

²⁴ Harry Frankfurt, *Demons, Dreamers and Madmen*, p.75-6.

²⁵ First Meditation, (AT VII, 20) CSM trans., p.14.

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asserts that one “scarcely cares” about this or that, it really means that one doesn't care at all. Further, even if we allow Frankfurt's literal emphasis to stand, does it not seem odd to characterize mathematics as only **scarcely** caring for the existence of something upon which the very truth of its propositions rests? Indeed, it seems that mathematics would care a great deal for the existence of the external world, if it was, in reality, the basis for the truth or falsity of the whole system.

But, this is not the only evidence upon which Frankfurt's contention that math is to be understood as depending on the external world rests. He also wants to maintain that the order and proximity in which they are doubted in the text clearly indicates a relation between the two. Descartes writes:

How do I know that God has not brought it about that there is no earth at all, no sky, no extended thing, no shape, no size, no place, and that all these things should nevertheless seem to me to exist just as they do now? And what is more, just as I sometimes judge that others are mistaken about the very things that they consider themselves to know most perfectly, how do I know that God has not brought it about that I am mistaken every time I add two and three together or count the sides of a square or do something even simpler, if anything simpler can be imagined?²⁶

Frankfurt takes this to indicate that “Descartes conceives the possibility he describes in [the first] question as providing a basis for doubting the truths of mathematics.”²⁷

But even if we take the ordering of this part of the meditation to be of some import, a look at the wider context reveals that the order in which they are doubted, if not actually indicating that the two topics are to be considered

²⁶ First Meditation, (AT VII, 21) CSM trans., p. 14 Frankfurt's translation.

²⁷ Harry Frankfurt, *Demons, Dreamers and Madmen*, p.76.

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separately, at least is a natural consequence of the preceding two paragraphs, and as such certainly not meant to signify that the doubts are connected. That is, immediately preceding the assertion of the indubitability of mathematics (see p.10) is a paragraph which asserts the existence of the most general constituents of the external world, viz. “This class [of real things] appears to include corporeal nature in general, and its extension; the shape of extended things; the quantity, size and number of these things; the place in which they may exist, the time through which they may endure, and so on.”²⁸ And so without even having to emphasize that the actual doubt of mathematics starts with the qualification “And what is more”, (which indicates that the doubt of mathematics is a further fact to be considered, rather than a corollary to the doubt that has come before) we can see that the order in which they are doubted is a natural consequence of the order in which they were asserted. That is, since he asserted first the truth of certain general existential propositions, and then the truth of mathematics, it is only natural that he doubt them in the same order.

And besides all this, it is worth noting that the re-establishment of mathematical propositions as true comes long before (in the Third Meditation) the re-establishment of the external world, which doesn't occur until the Sixth Meditation. He notes, in the Third Meditation, “I have various thoughts which I can count; it is in these ways that I acquire the ideas of duration and number”²⁹ This, too would seem to undermine the possibility that mathematical propositions depend on the existence of the world in some way.

Now, then, focusing attention on the second of my two questions, (Why, if we are only interested in ensuring that we make no conflicting

²⁸ First Meditation, (AT VII, 20) CSM trans., p.14.

²⁹ Third Meditation, (AT VII, 44-5) CSM trans., p.30-1. See also the Fifth Meditation, (AT VII, 71) CSM Trans., p.49. “Thus I see plainly that certainty and truth of all knowledge depends **uniquely** on my awareness of the true God . . . now it is possible for me to achieve full and certain knowledge of countless matters . . . also concerning the whole of that corporeal nature which is the subject matter of pure mathematics. (. . . and also concerning things which belong to corporeal nature in so far as it can serve as the object of geometrical demonstrations which have **no concern with whether that object exists.**” (French version))

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judgments, are we concerned about mathematics, in the context of which this never occurs?) Frankfurt contends that we can, indeed, produce conflicting reports on the same mathematical proposition. Quite simply, we might be a bit muddled about the whole affair, and make a mistake, first asserting that two plus three are four, and then five. “Descartes' claim that we may be deceived even in simple mathematical judgments is based on nothing more elaborate or sophisticated than an awareness that men are susceptible to committing blunders of the most egregious sort, and that they sometimes become confused about even the most transparent matters.”³⁰ In short, Frankfurt is claiming that mathematics are doubted on the basis that they might not be clearly and distinctly perceived, and could thus give rise to conflicting judgments.

I have two problems with this claim. First, it is contradicted quite clearly and directly by the Cartesian meditator, who asks rhetorically of mathematical propositions: “Did I not see at least these things clearly enough to assert their truth?” and then quickly follows with a characterization of the reasons for doubt, which, incidentally, contradicts both of Frankfurt's claims. “Indeed, the **only reason** for my later judgment that they were open to doubt was that it occurred to me that perhaps some God could have given me a nature such that I was deceived even in matters which seemed most evident.”³¹

Of course, at first glance this reason does not necessarily rule out the possibility that I may simply be confused, but when taken in conjunction with the assertion that these things were seen “clearly enough to assert their truth,” it begins to emerge that Descartes is pointing to a deeper reason for doubt that is not captured by either the doubt of existential propositions or the possibility of confusion.

Which brings me to my second dissatisfaction with the claim that mathematics is doubted on the grounds of general confusion. That is, this interpretation does not make adequate sense of the progression of the First Meditation. If mathematics is to be doubted as one of those things that is not

³⁰ Harry Frankfurt, *Demons, Dreamers and Madmen*, p.78.

³¹ Third Meditation, (AT VII, 36) CSM trans., p. 25. Emphasis mine.

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seen clearly, why is it not included among those things at the beginning of the meditation that were “very small or in the distance,” and were likewise perceived unclearly? If my doubt of mathematics requires only that we accept the fact that we can be confused, why put it after a doubt of perceptions we see so clearly (that the earth, etc. exists) that it requires something so dramatic as a deceiving God to affect my certainty? Doubt of mathematical propositions would seem a bit of an anticlimax. And the counter-argument, that mathematics **is** placed with things that are perceived unclearly, in so far as everything in the First Meditation is unclear to Descartes' naive meditator, makes a frivolous farce out of first meditation doubt, implying that if only the meditator had been a bit more clear-headed, none of the rest of the meditations need have happened. This is completely unsatisfying for, as we shall see, the first meditation doubt is effectively corrosive exactly **because** it undermines even the most firmly and lucidly held beliefs. And it must, for unless the First Meditation seriously and fully reduces Descartes to the foundational beginnings of epistemology, his overall enterprise can lay no claim to the firmest foundations. No, keeping in mind Descartes' own caution, that “those who do not care to comprehend the order and connections of my reasoning and who are out only to prattle about isolated passages, as many are accustomed to do, will not receive much profit from reading this essay,” we must look for a better reason for the order in which the doubt appears.³² This, in fact, is among the things I hope my own interpretation to accomplish.

Regardless, we now see that there are no substantial reasons for the belief that the doubt of mathematical propositions is in any way connected to the doubt of sensory judgments, and so we may rightly conclude that Frankfurt's project, although ingeniously conceived and well constructed, is, nevertheless, arguably a misreading of the First Meditation.

The reader may be surprised to note the use I will henceforth make of Frankfurt's works. But as I noted earlier—much of his textual analysis shows great clarity and brilliance. And if these analyses can be used to motivate my

³² Preface to the Reader, (AT VII, 9) CSM trans., p.8.

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own reconstruction, so much the better. It has not been my intention to show that Frankfurt is a poor analyst, for clearly he is not, but rather to show that his overall reconstruction relies on a few key interpretations which are, on closer inspection, simply untenable. And needing only to topple the Frankfurtian edifice to make room for my own small project, I will be more than delighted if I can make use of some of his bricks.

II

On Structure and Interpretation

One more issue needs to be briefly addressed before I may embark on my reconstruction. That is, I need to examine the way in which the structure of the *Meditations*, and that of each individual meditation, must affect one's interpretive approach.

It should be noted, first of all, that each individual meditation, most notably the first, is written in a dialectical style. Descartes, or, more precisely, the Cartesian meditator, proceeds in the text by advancing a tentative thesis, criticizing it, asserting another thesis which responds to the critique, and so on. An example may make things more clear. Descartes' first step into what later becomes radical doubt begins: "Whatever I have up till now accepted as most true I have acquired either from the senses or through the senses. But from time to time I have found that the senses deceive, and it is prudent never to trust completely those who have deceived us even once."³³ A reasonable conclusion concerning the level of doubt at this point, based on this statement alone, might be that all those things which constitute sensible knowledge are to be considered doubtful. But in the very next line of text, Descartes' criticizes his own beginning claim, writing "Yet although the senses occasionally deceive us with respect to objects which are very small or in the distance, there are many other

³³ First Meditation, (AT VII, 18) CSM trans., p. 12.

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beliefs about which doubt is quite impossible, even though they be derived from the senses.”³⁴

This style presents two related problems to the interpreter. First, one must be careful not to hastily accept any statement at face value, for there is a fairly high probability that its meaning will be modified by the effects of later statements. Second, in interpreting the level of doubt at any given point in the first meditation, it will often not be enough to take the latest “modification” as sufficient evidence. For although the above is an especially clear case of Descartes' dialectic, in that the criticism makes explicit a revised version of the original principle, it is not always so obvious. More often than not, the criticism alone is put forward, in this example that objects which are close up and clear are immune from doubt, leaving the reader to decide, in the light of this new assertion, just what **is** doubted. This is not to say that filling in the gaps between theses is necessarily difficult, but rather to assert that oftentimes the level of doubt is to be found not in the text itself, but “between the lines,” making such reconstruction necessary. Many conclusions cannot be based on a single step in the dialectic, but must straddle two or more dialectical steps in order to discern and interpret the distance between them.

The second structural aspect of the *Meditations* which bears mentioning, in this case of the work considered as a whole, concerns the order of doubts in the First Meditation, and its relation of the establishment of certainty in the following five meditations. That there is at least a rough symmetry between the progression of the First Meditation, and the progression of the following five meditations—namely that the first thing doubted is the last re-established, while the last thing doubted is the first—is obvious on even a casual inspection of the *Meditations*. This symmetry is important for a number of reasons. First and most obvious, it establishes the relative degrees of certainty which Descartes' ascribes to the various spheres of knowledge. Those things which are least certain are doubted first (and re-established last), and the least dubitable things fall last, and are re-established first.

³⁴ First Meditation, (AT VII, 18) CSM trans., p. 13

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But more important than this is the fact that often the order in which things are considered in the *Meditations* can be used to infer relations of dependence between them.³⁵ In the most obvious example of this, since the proof of the existence of God comes before that of the external world, it might be inferred that the existence of the external world, and the certainty which we have **of** that existence, depends on God's existence. However, a note of caution is appropriate here, for the ordering of events in the *Meditations* cannot be used to **prove** a relation of dependence, but only to exhibit the possibility of such a relation. It would be illegitimate, therefore, to infer that the certainty of the existence of the external world depends on the certainty of the truth of mathematics, simply because math is established before the world. The converse of this principle **does** hold, however. That is, we can say that it is impossible for something established early in the *Meditations* to depend on the certainty of something later established. For otherwise the gradual ascent to certainty chronicled in the *Meditations* would be not only senseless, but hopeless as well.

In all of this, then, the progression of the *Meditations* is of the utmost importance. The order in which the First Meditation doubt occurs not only indicates the increasing difficulty involved in the doubting, but also classifies more and more of our experiences among the dubitable. As each step in the meditation passes, less and less remains certain, until we are left, at the end of the meditation, with what seems like nothing.

Likewise, the later meditations involve a gradual re-establishment of the certainty brought into question by the First Meditation doubt. The progression here is just as important, for it may be used to indicate, or at least show the impossibility of, various relations of dependence that may obtain between those things established by the arguments of the *Meditations*. And not to be forgotten is the fact that in so far as the constructive arguments of the later meditations are answers to the skeptical arguments of the first, we can use the

³⁵ This general principle is also supported by the previously quoted passage from the Preface to the Reader. See p. 15.

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progression of these later meditations to help us understand the progression, and the meaning, of the first.

Keeping all this firmly in mind, then, we may take our first look at the First Meditation, and the arguments contained therein.

III

A Tour of the First Meditation³⁶

“I am here quite alone,” writes Descartes, having cloistered himself in time and space to facilitate his search for Truth, “and at last I will devote myself sincerely and without reservation to the general demolition of my opinions.” A rather dramatic proposal, to be sure, but having discovered “the large number of falsehoods that [he] had accepted as true,” nothing else would suffice to adequately establish something “stable and likely to last” in the sciences.

Immediately after making this announcement of intent, Descartes begins to enumerate the method by which this overthrow of belief is to be accomplished. “To accomplish this,” he writes, “it will not be necessary to show that all my opinions are false, which is something I could perhaps never manage.”

But this is odd. His stated aim is the general demolition of his opinions, and, when taken in conjunction with the earlier assertion that it would be necessary to “demolish everything completely,” it leaves one with the definite impression that **all** his opinions are to be likewise demolished. But this last statement claims that this may be an impossible task. Perhaps this passage is simply another example of the progressive dialectic mentioned in the last section of this paper. Is the original statement, then, to be dismissed so easily? I think not. The clue that Descartes meant what he said about unreserved demolition comes in the next line: “Reason now leads me to think that I should hold back my assent from opinions which are not completely certain and indubitable just as carefully as I do from those which are patently false.”

³⁶ Unless otherwise noted, all quotation in this section will be from the first meditation

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The key word upon which the disputed line turns is not 'all', but 'false'. Descartes admits in that line that he may be unable to actually assert the falsity of some of his opinions, (where this entails actually believing they are false. Anyone can, of course, make a statement contradicting something they believe to be true.) and it is not, in any case, the falsity of all his opinions which he wishes to display. Rather, his aim is to "withhold his assent" from any of his former opinions which are "not completely certain." This is a much weaker requirement than demonstrating, or believing, the falsity of his opinions. In fact, much the same sentiment is expressed in Descartes' reply to Bourdin. Descartes writes there: "surely only someone who would not blush to be called a quibbler could pretend that it was my intention to believe the opposite of what is doubtful, let alone to believe this 'to the extent of convincing myself that it is certain and cannot believe otherwise.'" ³⁷

That Descartes admits to the fact that it may be impossible for us to regard some of our opinions as false will become quite important later in the meditation. For now, however, it is sufficient to realize that because of this fact, Descartes' demolition does not require anything so radical as believing the falsity of all one's opinions, but only that one be prepared to withhold assent from anything doubtful. And withholding assent, for the purposes of Descartes' reconstruction of the sciences, requires simply that the doubtful opinions be considered ineligible for use as the basis for any further inferences, conclusions, or constructions until such a time as their certainty has been vindicated. ³⁸

³⁷ Reply to the seventh set of objections, (AT VII, 461) CSM trans., p.309

³⁸ Frankfurt makes a similar point in *Demons, Dreamers and Madmen*, analogizing this form of skepticism with the action of a mathematician in constructing an arithmetic system. When such an individual withholds her assent to such a proposition as $2+2=4$, writes Frankfurt, she "continues, of course, to **believe** the equation, but she does not accord it a place in the system she is developing because it has not yet passed the tests for inclusion. Within the context of her theoretical work in arithmetic, then, she does not yet **believe** that $2+2=4$. When she undertook her work she **overthrew** all such beliefs in the limited sense that she decided not to take their theoretical credentials for granted." pp. 16-17.

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“So for the purposes of rejecting all my opinions,” continues Descartes, “it will be enough if I find in each of them at least some reason for doubt. And to do this I will not need to run through them all individually, which would be an endless task.” Displayed here is a definite reiteration of the goal to reject **all** his opinions. But something else more important should also be pointed out. Rejecting each of my opinions individually would be an endless task not only in the original enumeration and doubt, but also in any attempt to re-establish them. If I required a separate reason to show the doubtful nature of each of my opinions, I would likewise require an individual principle of certainty to re-establish them. Unless the reasons for doubting can be grouped and classified into a small number of more general skeptical principles, which can then be challenged by corresponding principles of certainty, the *Meditations* will never get off the ground.

Descartes is perfectly aware of this. He writes “Once the foundations of a building are undermined, anything built on them collapses of its own accord; so I will go straight for the basic principles on which all of my former beliefs rested.” My project, then, for the rest of this section, consists in enumerating and explaining the various skeptical principles which occur in the First Meditation, and in determining, for each of these steps, the scope of the doubt they entail.

Descartes' first excursion into doubt begins in a previously quoted passage. “Whatever I have up till now accepted as most true I have acquired either from or through the senses. But from time to time I have found that the senses deceive, and it is prudent never to trust completely those who have deceived us even once.” Remember, since this is only the first, tentative assertion of a dialectical process, I am not free to draw conclusions from it alone. Only a combination of the statement and its subsequent criticism is a suitable entity for evaluation. Descartes continues “yet although the senses occasionally deceive us with respect to objects which are very small or in the distance, there are many other beliefs about which doubt is quite impossible, even though they are derived from the senses - for example, that I am here,

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sitting by the fire, wearing a winter dressing-gown, holding this piece of paper in my hands, and so on.”

The importance of this passage is twofold. First and foremost, it displays the first principle of doubt utilized by Descartes. “The senses occasionally deceive us with respect to objects which are very small or in the distance” writes Descartes, and since “it is prudent never to trust completely those who have deceived us even once” we can conclude from this that we should not trust the senses when they report images of objects which are very small or in the distance. Surely, though, the smallness of the object and/or the great distance between it and myself are not the only conditions which count to making the perception a doubtful one. What if it is foggy, or dark? Or if the object is moving very quickly? I think it is clear that perceptions made under these conditions are to be considered dubitable as well. In fact, Bernard Williams makes a similar claim, insisting that what Descartes has in mind here is the delineation of a certain “class of circumstances” under which my perceptual propositions are not incorrigible.³⁹

How, then, are we to characterize the general principle which takes into account all these individual examples? It seems rather obvious from a consideration of the examples themselves, and the contrast with such things as sitting by the fire, or wearing a dressing-gown, that the classification Descartes has in mind here is of those perceptions which are in themselves unclear (the characteristics of the image they provide are uncertain). That is, any and all beliefs which are based on unclear perceptions are henceforth dubitable, and as such, these beliefs should not be assented to.

Perhaps this seems a bit trivial, and, in that this principle seems a rule of common sense, I suppose it is a bit trivial. But it is nevertheless the first step

³⁹ In fact, Williams includes not only such external circumstances as bad light, an unfamiliar room, and missing one's eye-glasses, but also internal maladies like illness among those conditions which may be inferred to contribute to the unclarity of one's sensory impressions. Bernard Williams, *Descartes: the project or pure enquiry* (London: Penguin Books, 1978), pp. 51-52.

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in a much more radical process, and as such it is as important in setting the progression and direction of doubt as is the first step of any journey. I would like to label this first level of doubt “primary” (1°): all beliefs based on unclear perceptions are doubtful. I am calling it primary not so much because it occurs first, but rather because it is the only skeptical principle which relies on a **direct** questioning of the perception itself. We might see a tower in the distance, to use one of Descartes' examples, and be genuinely unsure whether it is round or square—the perception itself provides no definitive grounds for either conclusion. Likewise, in a situation with which virtually everyone is familiar, we may be genuinely uncertain whether the next letter on the eye chart before us is an ‘E’ or a ‘B’, a ‘P’ or an ‘R’. The perception itself refuses to resolve into one or another of these shapes, thus providing no strictly perceptual basis for believing the letter to be of one type or the other. In such a case, “the senses themselves provide the basis . . . for deciding whether or not their testimony is to be accepted.”⁴⁰

Consider again the contrast between perceptions of this sort, and the experience of sitting by a fire, or holding a piece of paper in your hands. We are absolutely certain, in the latter cases, of the type of experience we are in fact having. We know, that is, that we are having a fire-sitting experience, or a paper holding experience. When looking at the eye-chart, however, what is uncertain is whether the experience we are having is a ‘P’ experience, or an ‘R’ experience. We might say that the contrast is really a question of the phenomenological acuity of the perceptions in question.

This brings me to the secondary importance of this section of the meditation. In this passage, Descartes claims that “doubt [of perceptions of the clear sort] is quite impossible.” This is an uncharacteristically unequivocal statement for a usually hesitant Descartes. In general, when a statement is tentative and about to be repealed (as this one is), Descartes will qualify it with

⁴⁰ Harry Frankfurt, *Demons, Dreamers and Madmen*, p.42.

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words like “seems” or “perhaps it is the case that.”⁴¹ Not so for this short passage. He states quite openly that “there are many beliefs about which doubt is quite impossible” and proceeds to list examples of this type of belief, that he is there by the fire, etc. Such bold assurance seems in need of explanation, occurring as it does so early in a progression which supposedly leads one to greater and greater doubts.

The easy solution, of course, is to claim that Descartes is here emphasizing the very contrast which I made previously. That is, whereas the appearance of far away objects is doubtful, that I appear to be sitting by a fire, or holding a piece of paper in my hands, is completely certain and indubitable. But this is unsatisfying, for Descartes does not write that it is indubitable that he **appears** to be sitting by a fire, but that he **is** sitting by a fire. I believe there is something a bit more subtle underfoot here. Descartes, it seems to me, really means that these beliefs are indubitable, in that it is impossible to really doubt them. (Try it yourself, see if you can convince yourself that you are not reading this paper.) Remember, Descartes' project does not entail demonstrating these beliefs to be false, but only withholding assent from them. This is a weaker condition, I would argue, than even doubting these beliefs. For doubting a belief entails doubting its truth, which is of course tantamount to entertaining the possibility of its falsity, which is impossible for some beliefs. Beliefs compelled by clear perceptions are among the types of belief for which this impossibility is operative.

But there is an even more important reason that Descartes needs these beliefs to be indubitable, in any direct sense. For the important distinction between the “unclear” perceptions, and the “clear” ones is not their phenomenological perspicuity, but rather the manner in which the beliefs based upon them may be shown to lack certainty. If we construe the beliefs based on

⁴¹ Consider, for instance, the careful formulations of statements made later in the first meditation, which were about to be overturned and so began with phrases like “so a reasonable conclusion from this **might** be . . .” or “It **seems** impossible that . . .” (AT VII, 20) CSM trans., p.14.

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these perceptions as assertive propositions of the form, for example, “That is a round tower” and “I am holding a piece of paper,” respectively, this distinction becomes clear. The uncertainty of the first proposition can be shown quite directly—what is unclear is exactly that it **is** a round tower. Doubt in this case is rather simple, since the uncertainty corresponds exactly with the proposition itself. In the second case, however, the perception on which the proposition based is so clear that it is impossible to directly attribute the uncertainty of the proposition to the corresponding uncertainty of the perception, for there is no such correspondence. What is required is some way to break the intimate relation between a perception and its proposition, and to do this Descartes can neither directly challenge the perception (for it is utterly clear), nor can he simply deny the truth of the corresponding proposition, which by itself would be unmotivated and unreasonable. What he does do, and this will be clearer when we actually examine the text, is discern the foundation on which our acceptance of certain sense-experiences as veridical is based. This foundation is, of course, the feelings of indubitability which accompany the beliefs determined by our clear perceptions. Thus Descartes continues:⁴²

A brilliant piece of reasoning. As if I were not a man who sleeps at night, and regularly has all the same experiences while asleep as madmen do when awake - indeed sometimes more improbable ones. How often, asleep at night, am I convinced of just such familiar events—that I am here in my dressing-gown, sitting by the fire—when in fact I am lying undressed in bed! Yet at the moment my eyes are certainly wide awake when I look at this piece of paper; I shake my

⁴² It should be noted that I have skipped over the so called “madman” argument. It neither adds to, nor detracts from, my reconstruction, and so I have elected not to discuss its relevance here. If pressed I would probably claim, as does Frankfurt, that it serves to indicate that Descartes' project is that of the **reasonable** person, and that questions as to the validity of reason are therefore not to be entertained.

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head and it is not asleep; as I stretch out and feel my hand I do so deliberately, and I know what I am doing. All this would not happen with such distinctness to someone asleep. Indeed! As if I did not remember other occasions when I have been tricked by exactly similar thoughts when asleep!

Descartes is not denying that our clear experiences are indubitable in that they compel us to certain beliefs. Rather, he is questioning the necessary connection between this indubitability and the truth of the corresponding beliefs. This is the basis for **secondary** doubt: Because I know of false experiences which have been accompanied by the same feelings of certainty which currently accompany the beliefs I now entertain, this feeling of certainty loses its significance. As Williams remarks, “[s]ince dreams are marked by total conviction, conviction which, moreover, often remains even if I raise the question of whether I am dreaming, the fact that I am and remain totally convinced that this is now not a dream situation makes no contribution to genuine certainty that it is not one.”⁴³ The belief that you are reading this paper may be indubitable, but the corresponding dream experience of paper-reading would be just as indubitable, and so indubitability, by itself, provides no indication of truth value.

But although this enumerates an important distinction between 1° and 2° doubt, it is not yet an adequate characterization of the latter. For as before, the scope of what is uncertain, and how this uncertainty is best understood, is a function of the contrast with what, after this step, is to remain undoubted. “Suppose then that I am dreaming,” Descartes concedes, “and that these particulars—that my eyes are open, that I am moving my head and stretching out my hands—are not true. Perhaps indeed, I do not even have such hands or such a body at all.” What Descartes seems to have in mind here is a confutation of that unsophisticated approach to the world which assumes that the world

⁴³ Bernard Williams, *Descartes: the project of pure enquiry*, p.52.

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exists as it is perceived, and that the senses accurately depict various states of being. “Nonetheless,” he continues,

it must surely be admitted that the visions which come in sleep are like paintings, which must have been fashioned in the likeness of things that are real, and hence that at least these general kinds of things—eyes, head, hands and the body as a whole—are things which are not imaginary but are real and exist. For even when painters try to create sirens and satyrs with the most extraordinary bodies, they cannot give them natures which are new in all respects; they simply jumble up the limbs of different animals.

Descartes suggests that even if the senses do not report the world as it really is, at least the ideas of the things which constitute that world must originally have been caused by something resembling those ideas, and so we can conclude that these causes must exist. That is, since my imagination really works only by phantasm, by combining old things in new combinations, and since the ideas of the old things must have come from somewhere, the realist assumption is that they come from actual old things, from which we can conclude that the parts (hands, eyes, etc.) of which my world picture is composed must exist. But he immediately rejects this inference as unsatisfactory. For how are we to decide which of the things are constructed composites, and which are actually existing composites? Is it not the case that my idea of a hand could easily have come from an idea of fingers and a palm? So which actually exists—hands, or just fingers? Likewise, what is a finger but a contiguous area of color bounded by a certain shape? So do fingers exist, or just colors and shapes? Descartes concludes:

By similar reasoning, although these general kinds of things—eyes, head, hands and so on -could be imaginary, it must at

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least be admitted that certain other even simpler and more universal things are real . . . This class appears to include corporeal nature in general, and its extension; the shape of extended things; the quantity, size and number of these things; the place in which they may exist, the time through which they may endure, and so on.

It is not so much that sensory reports may not indicate some truths about the world, but that it is impossible to decide which of the possible truths implied by a sensory experience-type this **particular** experience is to be interpreted as indicating. From a perception of a stop sign, for instance, should we conclude that octagons and the color red exist? For perhaps all that is needed is half of an octagon, which our imagination doubled and combined. Or maybe eight short line segments would do, or for that matter, the individual points which make up the line segments. However clear our perception of that stop sign may be, we cannot choose between any number of a possibly infinite series of its potential existential entailments. It is this inability which I think best characterizes 2° doubt. The scope of the doubt demonstrates the uncertainty of any and all specific existential statements made about the world, and the reason for the uncertainty is the lack of any evidence supporting one possible existential interpretation over another as an appropriate conclusion from a sensory perception—it is impossible to decide what any particular experience means for the world.

Again contrasting this with 1° doubt may help make the point clearer. In 1° doubt, what is uncertain is that a given perception is identifiable as a member of a particular class of perceptions. We may be unsure whether we are having an 'R' experience, or a 'P' experience. In 2° doubt, however, the doubt moves off the perception and onto its connections with reality.⁴⁴ We know that

⁴⁴ Having recently encountered Stanley Cavell's *The Claim of Reason* I cannot help but compare this distinction to his regarding the two contexts in which criteria are appealed to in questions of knowledge. According to Cavell, the fateful, skeptical turn in the history of thought

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our current experience is of the stop-sign variety, but we do not know whether it is an experience **of** a stop-sign. We don't even know if stop-signs exist at all, being that object from which we derived the stop-sign idea of which we are currently aware, for an idea of octagons and of red would have done just as well. We are unable, that is, to affirm any particular interpretation of a sensory experience with respect to the (existential) state of the world, even when the experience is, by hypothesis, perfectly clear.

This interpretation is borne out by the next passage.

So a reasonable conclusion from this might be that physics, astronomy, medicine, and all other disciplines which depend on the study of composite things are doubtful; while arithmetic, geometry, and other subjects of this kind, which deal only with the simplest and most general things, regardless of whether they really exist in nature or not, contain something certain and indubitable.

For the sciences which depend on gathering information about the state of the world through sensory observation, 2° doubt is a rather devastating blow. It would be difficult to put any faith in astronomy if it turned out that planets didn't exist, but were really just a concatenation of the ideas of sphericity and immensity. Where, however, the state of the world makes no difference to the

came when Descartes changed the terms of epistemic doubt from concerns over classifications (What is it? A Goldfinch. How do you know? By its red head.) where criteria of identification function as an acceptable answer to doubt, to concerns over existence (How do you know there is a table? Because I sense it. But you could be dreaming.) Here the grounding which criteria are expected to provide is undermined by the dream argument, and radical skepticism ensues. (All this is unfortunate, argues Cavell, since criteria were never meant to provide epistemic support for anything **but** classifications, so their failure to ground existence claims should not have been surprising.) Of course, while I think this is an accurate account of the early stages of methodological doubt, I do not believe that it does justice to the full extent and complexity of Cartesian doubt.

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conclusions of a science, as is the case with the mathematical fields, certainty will be unaffected by 2° doubt.

Secondary doubt thus characterized is sealed off in the next passage by the introduction of a deceiving God who has perhaps “brought it about that there is no earth, no sky, no extended thing, no shape, no size, no place, while at the same time ensuring that all these things appear to me to exist just as they do now.” Clearly, if there **is** no world, then the question of whether there might be some existential truths hidden in our sensory experiences loses its importance; coming to conclusions about the world, regardless of the method used to arrive at these conclusions, becomes rather pointless.

But note that the devastating character of 2° doubt does not require the introduction of such a deceiving God. With or without such wholesale deception, our ability to make judgments about the world is effectively neutralized by the previous arguments. So the introduction of such an all-powerful deceiver at this point must have some other purpose than motivating the extension of 2° doubt. Which brings me to the third and final type of doubt utilized by Descartes.

“For whether I am awake or asleep,” writes Descartes, “two and three added together make five, and a square has no more than four sides. It seems impossible that such transparent truths should incur any suspicion of being false.” This statement characterizes the final positive assertion of certainty of the First Meditation, and it is exactly this which I contend is thrown into doubt by the deceiving God. For after postulating the existence of such a being, Descartes asks, “Since I sometimes believe that others go astray in cases where they think they have the most perfect knowledge, may I not similarly go wrong every time I add two and three, or count the sides of a square, or in some simpler matter, if that is imaginable?” And although it is not entirely clear from the quotation alone that this doubt **depends** on the existence of a deceiving God, Descartes writes in the Third Meditation that “the only reason for my later judgment that [the truths of mathematics] were open to doubt was that it

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occurred to me that perhaps some god could have given me a nature such that I was deceived even in matters which seemed most evident.”⁴⁵

Clearly, Descartes believed that a deceiving God is somehow necessary to mathematical doubt. But both God's role in tertiary doubt, and the characterization of that doubt itself, remains murky. In fact, it is helpful to treat these two questions together. The reason that Descartes requires a God for mathematical doubt provides some clues pertaining to what is doubted, and a characterization of the doubt likewise makes clear the necessity of God's role. For what could Descartes have in mind, here? It cannot be that our perception of two, three and their combination in five is unclear. Not only is it problematic to say that we “perceive” this relation, in any normal sense of that word, but it seems in any case that Descartes is rather straightforward about the obvious perspicuity of the proposition. Nor can it be that we are doubtful of the relation between the proposition “ $2+3=5$ ” and the world, for Descartes has already established that mathematics is true “regardless of whether [things] really exist in nature or not.” Rather, Descartes is worried that it may be the case that “the propositions we find to be necessary—like the Pythagorean theorem—need not be truths at all.”⁴⁶

But this is absurd! The truths of mathematics are eternal and immutable—it is not just impossible, but completely incomprehensible that they should be false. Indeed, Brehier argues that “for doubt to be possible here, we need to imagine ‘a God who can do everything,’ ” even make mathematics untrue.⁴⁷

But is such a God possible? Indeed, for Descartes such a God is not only possible, but actual. He writes in a letter to Mersenne: “The mathematical truths which you call eternal have been laid down by God and depend on him no

⁴⁵ Third Meditation, (AT VII, 36) CSM trans., p. 25.

⁴⁶ Harry Frankfurt, “Descartes on the Creation of Eternal Truths,” *The Philosophical Review*, LXXXVI, 1 (January, 1977), p.231.

⁴⁷ Brehier, Emile, “The Creation of the Eternal Truths in Descartes' System,” *Revue Philosophique de la France et de l'Étranger*, CXIII, Nos. 5-6, 7-8 (May-August 1937), p.200.

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less than the rest of his creatures . . . It will be said that if God has established these truths He could change them as a King changes his laws. To this the answer is ‘Yes, He can . . .’ ”⁴⁸

In tertiary doubt we are being asked to assent to the possibility that mathematical propositions are, regardless of our conviction to the contrary, false. For since both our faculties of reason and the eternal truths themselves are products of God's will, “this compulsion to assent (to mathematical truths) might . . . instead occur when we consider, for instance, the negation of the proposition that one and two make three. In that case we would, on Descartes' account, construe the proposition that one and two make three as inconceivable.”⁴⁹ And, of course, that such a notion is itself incomprehensible is no argument to the contrary. Descartes himself writes: “Again, there is no need to ask how God could have brought it about from eternity that it was not true that twice four make eight, and so on, for I admit this is unintelligible to us.”⁵⁰

So regardless of its inconceivability, the fact remains (for Descartes) that it is possible for God to have brought it about that those propositions we take to be true are not, while at the same time ensuring that we are compelled to assent to them as absolute truths. And, of course, in the context of our decision to withhold our assent from those things which incur the slightest suspicion of falsity, we must also withhold our assent from mathematical truths.

A final clue, from the First Meditation, which points to the legitimacy of this interpretation comes at the very end of the meditation. Having decided that God's goodness might be incompatible with a will to deceive, Descartes

⁴⁸ Rene Descartes, *Descartes' Philosophical Letters*, trans. Anthony Kenny (Oxford: Clarendon Press, 1970), p. 11. Letter to Mersenne, 15 April 1630. It should be noted that references to God's creation of the eternal truths are not restricted to a few obscure letters, as some have claimed, but actually appear in the Replies to the Fifth and Sixth set of objections (AT VII, 380, 435-437) indicating they do, in fact, play a role in an interpretation of the *Meditations*. (For arguments to the contrary see esp. Harry Frankfurt, *Demons, Dreamers and Madmen*, p.6-7.)

⁴⁹ Harry Frankfurt, “Descartes on Eternal Truths,” p.232.

⁵⁰ Replies to the Sixth set of Objections, (AT VII, 436) CSM trans., p.294

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introduces an evil demon of “utmost power” to fill the same function as the deceiving God. He writes “I shall think that the sky, the air, the earth, colors, shapes, sounds and all external things are merely the delusions of dreams which he has devised to ensnare my judgment.” Clearly this passage echoes, in fact very nearly quotes, the first of the deceptions caused by the deceiving God of earlier paragraphs. It would not be unreasonable to expect, therefore, since he explicitly enumerated the doubtfulness of the external world as brought about by this evil demon, that he would also restate the doubt of mathematics. But he makes no such explicit reference. What he does do, however, seems to bear out my characterization of 3° doubt almost exactly. “I shall stubbornly and firmly persist in this meditation; and, **even if it is not in my power to know any truth**, I shall at least do what is in my power, that is, resolutely guard against assenting to any falsehoods”

Ordinarily, of course, we would take such a statement to mean that we lacked the intelligence or mental acuity to discover the truth, thus distinguishing our ability to **know** the truth from truth itself. We might say, that is, that we are unable to know the truth about the world because we do not see it clearly enough, or we cannot determine the truth of a sentence because we are unable to understand the vocabulary. But in the case of a mathematical proposition no such distinction can be made. In the case of such propositions, once their meaning has been understood, the only determination left is of their truth or falsity. And since we understand the proposition “ $2+3=5$,” and furthermore assert its truth, the only conditions under which our judgment could be mistaken is if, in fact, “ $2+3=5$ ” is false. Remember, this is not a problem internal to reason. As was noted in the section on Frankfurt, **we** must assume the proper functioning of reason to carry out even the most basic steps in the progression of the *Meditations*. Rather, the current level of doubt involves the possibility that reason, even at optimal performance, may not provide us with a set of truths which, even when coherent, in any way reflect actual reality.

Thus we see the three levels of doubt in the First Meditation, and their progression to a nearly total skepticism. Roughly speaking, the levels can be

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characterized as follows: Primary doubt centers on those sensory experiences which, because of their own internal unclarity, we find impossible to classify as belonging to a certain recognizable experience-type. We are unsure whether the tower in the distance really is round, exactly because our sensory experience does not itself clearly indicate roundness.

Secondary doubt picks up exactly where primary doubt leaves off. In this step, Descartes brings doubt to bear on the clearest of sensory perceptions: those whose classification as a member of a particular experience-type is never questioned. What is brought into doubt is not whether the experience you are now having is of the paper-reading variety, but rather whether, since each sensory experience has an indefinite number of possible existential entailments, we are able to interpret this experience as providing any knowledge about the state of the world.

Tertiary doubt, then, begins with those statements whose meaning is just as certain as their classification, where there is no question of driving the wedge of doubt between the experience or idea and its representation in physical reality. To intelligently classify a mathematical statement as a statement of a certain type (say, the $2+2=4$ variety, which is unquestioned at this stage) requires that one understand the proposition it expresses; since there is no question of correspondence, all that is left to doubt in this case is whether the proposition expresses a truth.

IV

The Progression of Doubt

The doubt progresses from uncertainty in classifying sense experiences as a member of a certain experience-type, through certainty of classification but an inability to correctly interpret a sensory experience as having some particular existential meaning, and finally ends with a complete confidence in classification and interpretation of, for instance, mathematical propositions, while leaving uncertain our ability to judge the truth-value of the proposition

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under examination. This progression is rather natural for Descartes, since the object of doubt moves in succession from perception, to interpretation/understanding, and finally to judgment. For Descartes, of course, this movement not only involves the increasing certainty, but also the increasing generality of the subjects within the scope of each level of doubt.

Two equally important, interrelated progressions are pursued simultaneously in this context of ever more general doubt. If we begin with three statements characteristic of the beliefs doubted at each level of skepticism, (1) That is a round tower (2) There is a hand before me (3) Two added to three is five, this movement is easy to see. The first progression involves three different senses of the verb to be, such that for each level of doubt, the characteristic belief is marked by use of a particular sense of 'is'. Thus, in sentence (1), we use the 'is' of classification—what is uncertain is just what the object perceived is. Likewise, sentence (2) uses the 'is' of existence, and we doubt whether there really is a hand before me (and wonder what, given my perception of a hand, we **can** conclude is). Finally, sentence (3) uses the 'is' of identity, and we wonder whether perhaps two plus three isn't (the same as) five after all.

Each sense of the verb to be corresponds also to a different aspect of truth, by the standards of which sentences containing a given sense of 'is' are to be judged. The second progression, then, involves increasing doubt regarding different aspects of truth, each more apparently certain, and also more general in its applications and implications than the last. The first level revolves around the concept of truth in the sense of precision or accuracy (as in "a true shot"), and manifests itself as a question about the phenomenological clarity or perceptual accuracy of individual sense experiences. Secondary doubt is based on truth in the sense of correspondence with material reality (as in "a true representation") and involves uncertainty regarding the existential entailments of our clear perceptions, questioning the general principle that there are definite ways in which sense perceptions are related to physical reality. The third and final level of doubt involves the eternal or logical truth commonly associated

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with philosophy, mathematics or logic. Because there can be no uncertainty here regarding accuracy in representation—one does not judge whether mathematical statements correctly represent the world, since their truth is not related to material existence—only the direct, inherent truth or falsity of the propositions of mathematics is under consideration. The question is whether we can be assured that the judgments of reason accurately convey the immutable metaphysical truths apparently embodied in such disciplines as mathematics and philosophy.

But perhaps the characteristic of the ordering of doubt which is most important to an interpretation of the later meditations involves the constriction of certainty to the realm of the ideal mental, entirely separated from the realm of transcendent truth. Specifically, as we move up this ladder of increasing doubt, and the certainty of the characteristics of the external world decreases, the certainty of the faculties of reason, internal to themselves, actually increases. By the end of the First Meditation we are completely confident in our ability to classify, interpret, and understand experiences and propositions of various sorts, but completely unsure about these propositions' correspondence to anything real or true.

This progression actually provides another reason for believing this interpretation of doubt to be the correct one. Primary doubt rested on the uncertainty of classification for some experiences. The transition from primary to secondary doubt was characterized by the identification of a set of experiences which escape primary doubt: sensory experiences whose correct **classification** is, in some real sense, a direct and necessary result of their clear perception. In order to doubt this group of experiences we must question our ability to correctly interpret the (existential) significance of such clear perceptions. Likewise, the transition from secondary to tertiary doubt is characterized by the discovery of a certain type of proposition whose correct **interpretation** follows necessarily from our unquestioned ability to correctly classify it, and which thereby escapes secondary doubt. To recognize a mathematical proposition as being of a certain type is to correctly interpret it,

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forcing the meditator to a higher level of doubt. On this level what we doubt is not whether we know the true interpretation of the statement, but rather that the interpretation is itself true.

If we were to continue this progression one further step, it seems logical that we would be looking for a proposition whose truth is a necessary result of its interpretation. If there were such a proposition, it would force the meditator out of tertiary doubt (for it is exactly the connection between a proposition and its truth-value that is brought into question) and onto a higher level. But, of course, the proposition(s) “I am, I exist” are of exactly the required type. The mere ability to interpret or conceive of such propositions guarantees that they express a truth. It is no coincidence that it is these propositions which embody the first answer to the First Meditation doubt.

But perhaps it would be best to put things back into perspective to make clear the importance of this correspondence between the logical culmination of the progression of doubt and the first argument in the climb to certainty. There has been much confusion surrounding Descartes' argument for his existence as presented in the Second Meditation. Neophytes are surprised not to discover the famous *Cogito ergo sum* in this seemingly obvious place, and even those familiar with the actual argument have expressed confusion regarding its expression in the Meditations. What Descartes actually writes there is this: “So after considering everything very thoroughly, I must conclude that this proposition **I am, I exist**, is necessarily true whenever it is put forward by me or conceived in my mind.”⁵¹

Note that this is not an argument which proves his existence (although one could be easily constructed around this premise), or even a claim about existence at all. It is quite specifically a claim about a certain proposition. If Descartes' primary goal were to uncover some single fact of existence which we know to be true, providing a direct answer to the materialist doubt (supposedly exclusively) enacted in the First Meditation, then the “*cogito*” would be the sensible choice of argument. Indeed, on the unsophisticated but generally

⁵¹ Second meditation, (AT VII, 25) CSM trans., p.17

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accepted version of First Meditation doubt, whereby it is our ability to know anything about the world (including perhaps our own existence in it), that is centrally and finally doubted, Descartes' actual first step to certainty must seem both puzzling and anti-climactic. Instead of the direct path to objective existence represented by the concise and simple *cogito*, Descartes deliberately uses an argument the conclusion of which is in the formal mode, about the truth of a proposition. This curious argument cannot be satisfactorily explained as simply another form of the *cogito*, or an argument from which the *cogito* can be derived. For as Ayer notes, “ ‘I exist’ is not a truth of logic: the logical truth is only that ‘I exist if I think’ ”.⁵² And this leaves open the subject matter to be cogitated—it is not required that one be considering one's existence to prove it. Bernard Williams comments: “The mere fact that I consider any proposition at all is a sufficient condition of the truth of the statement that I think,” and is therefore enough for the conclusion that I exist.⁵³ Thus the application of the *cogito* argument is wider than that of the “*existo*,” and cannot therefore be derived from it. Nor is the special nature of the proposition “I exist” captured in the fact that it is one of the many things the contemplation of which can count as fulfilling the antecedent “if I think” of the *cogito* argument. Rather it is the only proposition of which one can be certain, simply by understanding it, that it must express a truth. This is so even when, as Descartes admits after his presentation

⁵² A.J. Ayer, “I Think Therefore I Am,” from *The Problem of Knowledge* (New York: St. Martin's Press 1956), p.81.

⁵³ Bernard Williams, “The Certainty of the Cogito,” *Cashiers de Royamount, Philosophie No IV: La Philosophie Analytique* (1962), p.101. It is for this same reason that the “performative utterance” interpretation of Descartes' argument is not wholly satisfying, either. For **any** performance would do to prove one's existence (insofar as anything which can perform must **be**), but Descartes specifically chose to make a claim about the truth of a proposition with unique properties, that it is true (and certain!) simply in virtue of one's ability to understand it. Because of the doubt surrounding the Cartesian Meditator immediately prior to the assertion of “I am, I exist,” he could not be certain that he had performed anything but an act of pure understanding, and the only proposition whose truth and certainty follow simply from its understanding is the simple existential. Thus it is the characteristics of the proposition, and not the fact of its mental performance, which are most important to emerging from radical doubt.

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of the “*existo*” in the Second Meditation, we do not know the full import of the proposition, i.e., what its significance is with regard to the world. I would like to put aside any of the questions about the actual reference of ‘I’. It is a notoriously difficult problem for contemporary epistemologists and philosophers of language, and yet it gave little pause to Descartes in this context. Definitively fixing the reference of ‘I’ is neither possible, nor is it important at this stage in Descartes’ arguments. Even though we do not know the **specific** existential implications of “I exist”—not having overcome secondary doubt, we do not yet know to what, exactly, ‘I’ corresponds—it is nevertheless assured that the proposition “I exist” is true simply in virtue of being understood and interpreted. That is, in “I exist” Descartes has found a proposition, from the mere interpretation of which follow not just its certainty (which is true also of mathematical propositions) but also its truth.

It is my contention that the most sensible explanation of the form and placement of the “*existo*” argument occurs explicitly as the consequence of First Meditation doubt as I have presented it. According to my understanding of the progression of doubt, that Descartes would choose, as the beginning of his climb to certainty, to make a statement in the formal mode dealing explicitly with the truth of **propositions** is not only unsurprising, but actually necessary. The First Meditation ends with doubt centered specifically on the connection between propositions (even those correctly interpreted) and their truth; the “*existo*”, being a proposition such that its truth is the necessary result of its interpretation, is a direct answer to this final form of doubt, re-establishing the connection (for a small set of propositions) that tertiary doubt brought into question.

As a part of the ongoing dialectical process, this criticism of tertiary doubt would normally serve to lift us above tertiary doubt to a new, more corrosive version. But in this case such a formulation, if not actually impossible, is at least pointless. For in lifting us above tertiary doubt, the “*existo*” leaves us with unshakable truth—that elusive beast in search of which the meditations were actually written. Because of the character and progression

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of the doubt in the First Meditation it is the “*existo*,” exactly as formulated, which must provide the most basic first step in the eventual climb to certainty chronicled in the last five meditations. And because it is, in fact, the “*existo*” which does begin this climb, we might derive from this correspondence some indication of the validity of my interpretation.

V

Ego, Existo, Deus Est

Certain of the contents of his mind, but completely uncertain of their correspondence to anything real or true, Descartes begins the Second Meditation.

So serious are the doubts into which I have been thrown as a result of yesterday's meditation that I can neither put them out of my mind nor see any way of resolving them. It feels as if I have fallen unexpectedly into a deep whirlpool which tumbles me around so that I can neither stand on the bottom nor swim up to the top. Nevertheless I will make an effort and once more attempt the same path which I started on yesterday. Anything which admits of the slightest doubt I will set aside as if I had found it to be wholly false; and I will proceed this way until I recognize something certain, or, if nothing else, until I at least recognize for certain that there is no certainty. Archimedes used to demand just one firm and immovable point in order to shift the entire earth; so I too can hope for great things if I manage to find just one thing, however slight, that is certain and unshakable.⁵⁴

⁵⁴ Second Meditation, (AT VII, 24) CSM trans., p.16

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During this search for truth, Descartes stumbles on the proposition “I exist.” In conceiving this proposition, we note the function of ‘I’ is to refer to the one who puts forward propositions containing it. By the coherence of our language (which we do not question) we can know that ‘I’ refers to the conceiver (whatever that turns out to be). On the face of it, this certainty is equivalent to mathematical certainty, from which we know that the coherence of mathematics demands that two plus three equal five. In neither of these cases, it seems, are we able to go beyond systemic coherence to any claim of truth.

In the case of “I exist,” however, the same coherence which allows certainty of the referential function of ‘I’ also allows the reference to reach beyond itself, becoming the Archimedean point which anchors and orients language and reference to the external world. Since ‘I’ refers to the conceiver, and since there is certainly a proposition with an embedded ‘I’ being conceived, the truth of the proposition follows from its comprehension; and, of course, the truth of the proposition entails the (actual) existence of the conceiver “I.” Coming to this first, albeit meager, fact about the world requires only a correct understanding of the proposition, including a (non-specific) notion of that to which ‘I’ refers. The case is similar, I believe, for the argument for the existence of God. The perennial insistence that this argument is somehow circular (in that the proof of God's existence depends on my clear and distinct perception of Him, while the truth of my clear and distinct perceptions depends on God's existence) has always puzzled me, and I would like to suggest an alternate interpretation of Descartes' intent which, although it perhaps goes no further towards actually proving God's existence, at least avoids the charge of argumentative circularity.

What most commentators on Descartes fail to recognize is the relation between the form of the argument for one's own existence (the “*existo*”) and that of the argument for God's existence. The Second Meditation begins with the “*existo*” exactly because it is a proposition which, because of its logical structure, escapes the scope of radical tertiary doubt. But Descartes never completely escapes from tertiary doubt until **after** he proves God's existence.

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That is, he is not able to restore the connection (for more than a few select propositions) between the understanding of a proposition and its truth until the arguments of the Sixth Meditation. Until Descartes proves God's existence and establishes that He is not a deceiver, he is still working under the onus of tertiary doubt, and the only method he has to reach truth within tertiary doubt is via the discovery of propositions which are true as a function of their interpretation. In the absence of any other truth-seeking tools, we would expect Descartes to see if, in fact, there are any more propositions that share the properties which allow the "*existo*" to escape tertiary doubt. "*Deus est*," I contend, is one such proposition.

Central to Descartes' proof of God's existence is the fact that he has an idea of this God. This, of course, is tantamount to saying that he could understand the proposition "*Deus est*," i.e., that the meditator knows the reference associated with '*Deus*', and understands the meaning of '*est*'. Once the meditator contemplates his idea of God, which allows him to know the reference of '*Deus*', he realizes that this idea, much like the idea associated with 'I', belies the existence of its object. The point I am making is not simply that those who understand the concept of God understand that He necessarily exists (although Descartes certainly believed this as well), but rather that "*Deus est*" is self-affirming—true by virtue of its understanding—in the same way as the proposition "*existo*." As long as we accept the scholastic distinction between the objective and formal reality of ideas (which, since Descartes requires this distinction and I am trying to understand the form of Descartes' argument, I am going to accept as given⁵⁵), then this distinction allows '*Deus*' to act in much the same way that 'I' does. The proof of my existence revolves around the fact that 'I' refers to the one who puts forward the proposition in which 'I' is imbedded, and in this way points beyond the ideal and to the existential. With much the same form, although by a different mechanism, my idea of God also

⁵⁵ Refutations of the Third Meditation ontological argument need to be more concerned with establishing the falsehood, or at least the inadmissibility (at this point in Descartes' meditations), of this premise, rather than concentrating on its overall circularity.

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points beyond itself and into the transcendent. Because I haven't enough objective reality to have invented my idea of God, it must have had an external source (belying the existence of at least one other thing in the universe). Further, this source must have objective perfection of a degree equal to the formal representation of perfection of my idea. In short, the source must be God. Thus, the sheer ability to understand the proposition "*Deus est*" guarantees that it expresses a truth, which, in turn, guarantees the existence of God.

The two arguments for existence (my and God's) share other features as well: it is clear, for instance, that doubt on either proposition is self-defeating, in that the conditions which would have to obtain to make the statement false (while it is being considered) are the same conditions which describe the statement's truth. That is, since only a being of God's power and attributes could have provided me with the idea of Him, it would take God to "falsely" implant this idea. But, of course, if He exists to implant the idea, then this state of affairs guarantees the truth of the proposition "*Deus est*." Thus, from the fact that we are able to understand and contemplate a statement like "*Deus est*," the truth of the statement necessarily follows. Doubt of the statement "*Deus est*" (properly understood) is self-defeating, much as doubt of the statement "*Existo*" is self-defeating; the very ability to engage in such doubt presupposes the truth of the statement itself.

Under this interpretation, the so-called "Cartesian circle" disappears. We know that God exists for the simple reason that our ability to contemplate the statement "*Deus est*" demonstrates it. In Descartes' scheme, these two propositions, "*Existo*" and "*Deus est*," are of the same logical type—necessary to evade tertiary doubt—in that their truth follows necessarily from their interpretation.

This argument is preliminary and rough, and its full formulation deserves a paper of its own.⁵⁶ I can only hope that it piques your curiosity with

⁵⁶ In fact, while working on the line of argument of this section, I discovered that Carol Rovane had, in an unpublished manuscript, developed a similar line in some detail.

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respect to the further implications and applications my interpretation of First Meditation doubt, itself evidence for the worth of that interpretation.⁵⁷

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⁵⁷ I would like to thank Ivan Fox and all the members of his 1990 seminar on Descartes, as the result of which this paper was written. I would also like to thank Gyula Klima, Michael Della Rocca, and J. Colin Sample, all of whom provided helpful comments on earlier drafts of this paper.

Plato on the Beautiful

Steven Barbone

Plato writes, “[A] fellow must be a perfect fool, [who] know[s] nothing about things of beauty” (HMJ 289e).¹ That the Beautiful, or Beauty itself, (to avoid confusion, when the words ‘beautiful’ or ‘beauty’ refer to beauty itself, they will be capitalized; otherwise, they will normally refer to beautiful objects) should even be a philosophical question might seem strange and puzzling to many. After all, when one eyes a beautiful youth (over 17 of course), sniffs a beautiful flower, hears beautiful music, or even comprehends a beautiful mathematical proof, anyone would agree to know what the sense of Beautiful is in each of these cases. The claim is complicated, however, by the reference to Beauty in such ways as a beautiful black eye (“What a beaut!”), a perfectly beautiful murder, a state’s enactment of beautiful laws, or a beautiful case of chicken pox. The Beautiful, clearly then, is not recognizable by all people in each of its occurrences, nor do all people agree as to what is Beauty. It is not easily defined, and to say that Beauty is that which makes anything beautiful, though it tells how something is beautiful, still does not say what Beauty really is. What, then, is Beauty, and more specifically, what is Beauty for Plato?

That Beauty is a form is certain (PHO 100d), but knowing this does little to add to our understanding of what the Beautiful is. I do not believe that Plato would be willing to answer the question, “What is Beauty?” by responding, “The form which makes things beautiful.” Rather, I think that Plato would explain what the Beautiful is by underlining three necessary components of such an account: (1) the Beautiful as a form; (2) the signs which suggest Beauty’s presence; and (3) the criterion of the Beautiful.

¹ Plato, *The Collected Dialogues of Plato*, eds. Edith Hamilton & Huntington Cairns, various trans. (Princeton: Princeton University Press, 1989). References to Plato’s works are made using Burnet’s numbers. The abbreviations that will be used throughout the text for the individual dialogues: ALC...*Alcibiades I*, CHA...*Charmides*, CRA...*Cratylus*, EPI...*Letters*, EUD...*Euthydemus*, GOR...*Gorgias*, HMJ...*Hippias Major*, PAR...*Parmenides*, PHO...*Phaedo*, PHS...*Phaedrus*, PHL...*Philebus*, REP...*Republic*, SOP...*Sophist*, SYM...*Symposium*, THE...*Theaetetus*.

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I

The Beautiful as a Form

I do not believe that we of the 20th century can easily accept Plato's account of Beauty without at least relating it to our own. Before examining Plato, therefore, a typography of contemporary theories of Beauty is justified.² There are three dominant accounts of Beauty today. The first of these is the "Beauty Theory," and I will argue later that Plato's account of the Beautiful is clearly aligned with it. The other two theories are the "Psychological Theory" and the "Instrumental Theory."

The Beauty Theory holds that the Beautiful is an objective quality which is more or less intensified in and exemplified by beautiful or less beautiful objects respectively.³ Beauty itself is of value, and though it may be subjected to personal evaluation, it inheres or not in an object regardless of opinion. It exists independently of the object's relationship to a perceiver or of its being a means to some end.⁴ The Beautiful is an external form which supervenes upon the object and therefore may be less perceived by the senses than by intuition.⁵ The Beautiful, then, regardless of what it is, exists as a thing in itself, separate from and supreme in relation to the beautiful objects which are beautiful by somehow sharing in its being.⁶

The Psychological Theory, on the other hand, maintains that "Beauty is in the eye of the beholder." Beauty is created by a subjective judgment in which each person determines at the moment whether something is beautiful or not. Whether something is beautiful or not is determined only for the person who makes the assessment and only at the time of that assessment. Beauty comes not

² I must thank Drs. M. Wreen and L. Rice for their suggestions on aesthetics, and especially Dr. Rice for his help with the method and critical remarks.

³ Monroe C. Beardsley, *Aesthetics*, 2nd ed (Indianapolis: Hackett, 1981), p. 505.

⁴ *Ibid.*, pp. 506, 510.

⁵ *Ibid.*, p. 507.

⁶ E. F. Carritt, *The Theory of Beauty*, 6th ed. (London: Methuen & Co., Ltd., 1962), p.

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from the object itself or from some external form, but is dependent upon perception itself, and as such, lacks for the definition which could make it a proper object for science.⁷

According to the Instrumental Theory, an object is beautiful if it has some capacity to produce an aesthetic experience of some magnitude which has a specific utility.⁸ The Beautiful fulfills a function which contributes utility to an object or activity regardless of the object's created purpose.⁹ One who ascribes to the Instrumental Theory would not hold "Art for art's sake," but rather that Beauty is characterized uniquely as that which gives external value to the beautiful object by the object's usefulness in this or that particular case. Beauty is analogous to the value of a coin, which is not a property the coin possesses in itself, but is conferred on the coin by its utility as a medium of exchange.¹⁰ The Beautiful, in this sense, may not be intrinsic, in the sense that it could clearly be defined, but it is usually communicable insofar as its value can be defined in terms of some given standard(s) of utility.¹¹

In an instrumental theory, just as utility may change with circumstance, so too will Beauty cease or come to be without any change in object said to be beautiful. A similar point could likewise be made regarding the psychological theory, for with this account, too, an object could cease or come to be beautiful without undergoing any change. Rather, instead of there being any change in the object which is said to be beautiful, there is a change in the aesthetic attitude of the perceiver.

These three theories are probably best thought of as families or "theory-types." Even in contemporary aesthetics, however, there is some question regarding their precise differentiation. Nevertheless, they clearly represent distinct attitudes toward the nature of the Beautiful, and they provide a

⁷ Ibid., p. 14.

⁸ Beardsley, *Aesthetics*, p. 523.

⁹ Ibid., p. 525.

¹⁰ Carritt, *The Theory of Beauty*, p. 13.

¹¹ Ibid., p. 13.

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useful starting point for examining Plato's ideas on Beauty. His dialogues are full of references not only to examples of beautiful things, but more to the point, “absolute beauty,” (PHO 75c, 100c) “the self beautiful,” (REP 6. 507b) “the form of beauty,” (PAR 130b) “true beauty,” (PHS 248d) “the beautiful in itself,” (REP 5. 476b) or even just “the beautiful.” (SYM 211a) Plato clearly ascribes to some kind of beauty theory, but enumerating references is not enough to characterize his ideas, so a closer examination is warranted.

Perhaps the most interesting description of the Beautiful, for my purposes, is given by Diotima through Socrates in *Symposium* (210e-211b). Beauty is an unchanging, eternal, unmistakable entity by which all other things are also beautiful. There is no mistaking that Plato does adhere to a beauty theory and that he dismisses the others—the Beautiful is not subjective, “. . . as if [it were] beautiful in some people's eyes, but not in others [sic].”¹² (SYM 211a) (Here he dismisses the psychological theory.) Neither is Beauty like a value to be conferred on beautiful objects because Beauty “. . . exists for all time, by itself and with itself, [and is] unique.” (SYM 211b) (Here he dismisses the instrumental theory.) The Beautiful, then, is an external form in which all beautiful things are beautiful solely for their participation in its form.

The form of Beauty is simply that by which other objects are beautiful (PHO 100d, e). While it seems necessary that for any object to be beautiful, it must participate in the form of Beauty, it is still not clear what it means for something to be beautiful. It is not that someone may think that the object is beautiful, but that the object does indeed have a share in the Beautiful. It is also not that Beauty is somehow conferred on the beautiful object by some other standard (e.g., usefulness), but that that object is beautiful because it partakes of Beauty. We know that something is beautiful because of the form of the Beautiful, but we still do not know what it means for something to so partake, and thus be beautiful.

¹² Plato, *Symposium*, trans. Tom Griffith (Berkeley: University of California Press, 1985).

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II

The Quest for Signs

One necessary condition for being beautiful, then, has been shown to be an external form, but knowing that Beauty is some form in which objects may or may not participate, does very little to answer the question, “What is Beauty?” Plato hints at the answer throughout many of his dialogues. In *Hippias Major* he tries, through the characters of Hippias and Socrates, to answer this very question by noting the signs of Beauty and by giving many examples of what Beauty is **not**.

The first example Plato uses is that of a physically beautiful object, which in this case is a beautiful virgin, for according to Hippias, “. . . the beautiful is, . . . if I must speak the truth, a beautiful maiden” (HMJ 287e).¹³ Because Hippias asserts that Beauty is a physically beautiful thing, Socrates quickly draws the conclusion that absolute Beauty must also be a beautiful horse (HMJ 288b), a beautiful lyre (HMJ 288c), and even a beautiful pot (HMJ 288c)! No. Beauty itself cannot be the same as a physically beautiful object, because Plato insists that Beauty is a form which, of course, is no physical object, nor is it necessarily beautiful in itself (PHO 100c). Furthermore, if it were granted that a beautiful maid were Beauty itself, then absolute Beauty would not exist at all once the maid, even if she were the most beautiful girl in the world, were compared to the most ugly of goddesses, for she would cease to be beautiful in comparison, and then Beauty itself would cease to be (HMJ 289b-d).

It seems to me that Plato is correct to point out that the Beautiful is not identical with an object or person that is physically beautiful. After all, “beauty is not skin deep;” Theaetetus is physically just “not beautiful,”¹⁴ (THE 143e) yet Socrates later describes him as beautiful (THE 210d) so there is the sense

¹³ Plato, *Hippias Major*, Vol. VI in Loeb Library (London: William Heinemann, Ltd., 1953).

¹⁴ Seth Bernardete, *The Being of the Beautiful*, (Chicago: University of Chicago Press, 1984).

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that being beautiful is something other than being physically beautiful. Beauty cannot be a physically beautiful object for it appears in non-beautiful objects. Besides, if it were a beautiful thing, then only one thing could be truly Beautiful, and this is not the case.

If the Beautiful is not a physically beautiful object, neither is it something which makes objects beautiful by its addition. Hippias suggests to Socrates that “. . . beauty is nothing else than gold,” (HMJ 289e.) and by this he means that, since gold is the same as the Beautiful, the addition of gold to any object will make that object beautiful. Socrates rightly is not satisfied with this definition of the Beautiful, for even though it is fitting to the notion of absolute Beauty (since gold is an entity which is separate and external to the objects which would be beautiful by its addition), it itself is not necessary nor even sufficient for objects to be beautiful. For example, Plato has Socrates and Hippias agree that objects of ivory and certain stones (HMJ 290c) and even lowly figwood (HMJ 291c) can also be beautiful.

The gold example can be considered like the play on words found in *Euthydemus*. If gold were the Beautiful, then things would be beautiful if they had gold with them. In the same way, if Socrates were with an ox, he would be an ox, or at least ox-like (EUD 300e-301a). That the Beautiful may be some substance like gold which can be added to or taken from any object may suit a puffed up sophist, but it is altogether unacceptable to Plato.

Hippias' next attempt to identify the Beautiful is an instrumentalist definition, and it is no less a failure; he describes the Beautiful as being “. . . rich and healthy, and honored by the Greeks, to reach old age, and after providing a beautiful funeral for his deceased parents, to be beautifully and splendidly buried by his own offspring.”¹⁵ (HMJ 291d-e) Socrates easily counters this definition by pointing out that many people who are thought to be beautiful, Heracles or Achilles, for example, would never fit this description (HMJ 293a, 292e). (Heracles, in a sense, was not dead and could not die, and

¹⁵ Plato, *Hippias Major*, Vol. VI in Loeb Library (London: William Heinemann, Ltd., 1953).

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Achilles died in battle long before his parents). To be beautiful, according to this definition, has several necessary conditions—one of which is to be dead, but how could the dead be anything unless perhaps there were beautiful gods, but then these gods could not be beautiful since the gods never would have died!¹⁶ Several counter-examples of beautiful things easily come to mind, and none of them are dead Greeks; this definition just seems foolish, and Plato is right to dismiss it.

Plato next has his readers consider the appropriate or the “fitting,” and this seems as if it might be closer to an adequate definition of the Beautiful. The appropriate could be either that which causes things to appear beautiful, actually be beautiful, or both (HMJ 294a). Socrates and Hippias declare that Beauty must always somehow announce itself so that it should always be noticeable, but if this were the case, there could never be any disagreement over what was beautiful, since it would be obvious to any who noticed. This is an example of the psychological account of Beauty. Socrates argues against it persuasively by noting that ignorance of the Beautiful is the cause of all contention and fighting (HMJ 294d).

It seems that Plato has almost grasped the notion of Beauty, but that he purposely lets it get away. He himself is aware of this, for Socrates says, “Oh my! The beautiful has fled from us, Hippias, and goes away, (so that) we do not know what on earth it is.”¹⁷ (HMJ 294e) The immediate reason, though, why the beautiful has fled is because Socrates and Hippias have just agreed that if Beauty were the appropriate, it would be so only in the sense of that which causes things to appear beautiful. It seems that the two interlocutors have forgotten that they earlier had spoken of beautiful objects made of gold, ivory, and figwood, and that these objects were beautiful precisely because of an innate propriety in their functions and materials. The same could be said of the beautiful pot. If Plato had pursued the appropriate in the sense of that which

¹⁶ Bernardete, *The Being of the Beautiful*, p. xxxii.

¹⁷ Bernardete, *The Being of the Beautiful*.

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makes things beautiful—not that which makes things appear beautiful—I believe he would have been closer to answering the question of the Beautiful.

Plato's next illustration of what Beauty is not consists of the examples of the useful and good: “. . . are we not right in saying that the useful rather than everything else is beautiful?”¹⁸ (HMJ 295e) In this way, almost anything could be beautiful if it were useful—any animal, any tool, utensil, or apparatus, any of the arts or sciences, any laws, practices, or customs are all Beautiful if they are in any way useful (HMJ 295d). Plato again rejects an instrumental account of Beauty, for Socrates objects to identifying the Beautiful with the useful when he asserts that it is possible for something which is useful to be useful for some evil purpose and that this could not be an example of the Beautiful (HMJ 296c). In an attempt to save this account of what Beauty is, Hippias suggests that the Beautiful is the useful provided that it is for the good (HMJ 296d). Socrates notes that if the Beautiful were that which makes something good, (as he assumes that beautiful things are better than non-beautiful things), then how could it be that the good is that which makes something beautiful? Because “. . . the cause is not the cause of the cause,” (HMJ 297a) the Beautiful cannot be the good, nor the good the Beautiful.

There remains one final attempt to define Beauty by showing what it is not. Socrates and Hippias agree that “. . . the beautiful is that which is pleasing through hearing and sight.”¹⁹ (HMJ 298a, see also GOR 474d-e) One problem which arises from this definition, however, is that if Beauty is known through sight, it could not be known through hearing, and vice-versa, but that if the Beautiful were really just one thing, how could it be that it is sometimes known through one pleasure, but is imperceptible by the other? If Beauty were visual **and** aural pleasures, it must always be recognized by both senses simultaneously (HMJ 300a-b), but Socrates is only too quick to note that this is

¹⁸ Plato, *Hippias Major*, Vol. VI in Loeb Library (London: William Heinemann, Ltd., 1953).

¹⁹ Plato, *Hippias Major*, Vol. VI in Loeb Library (London: William Heinemann, Ltd., 1953).

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not the case: after all, a pleasant, beautiful sight is not noticed through hearing, nor can pleasing, beautiful sounds be known through vision.

I do not believe that Plato has given a satisfactory account of Beauty in *Hippias Major*. In his frustratingly peculiar way, he has once again not answered the question he raises in a dialogue written to address that particular issue, and he leaves his readers with the challenge of ferretting out from other dialogues signs of an answer to a question which he himself has raised. It is necessary, then, that we turn to other dialogues to find some positive signs of the Beautiful.

That the Beautiful is simply not just that which can readily be perceived as beautiful is further argued, for example, in *The Republic*. One may delight in beautiful objects, but would not have even the slightest sense of the Beautiful (REP 5.476b); one could mistake Beauty with ugliness (REP 5.479a); and most ordinary folk can never grasp what is Beauty for the sheer number and difference of beautiful things (REP 6.494e). The books of *The Republic* reinforce what was gleaned in *Hippias Major*, but we must still look elsewhere for signs to get an account of Beauty.

Philebus is a rich starting point. What is beautiful is characterized by the signs of measure and proportion (PHL 64e). Another sign of Beauty is that measure is conjoined with truth and proportion so as to make it the good (PHL 65a), and this idea is repeated in *The Seventh Letter*, wherein Beauty and good are linked with justice (EPI 7.342d). Finally, Socrates links signs of the Beautiful with wisdom (PHL 65e, HMJ 281a). The signs of Beauty are personified in the Great King on whose account everything is beautiful (EPI 2.312e) and who is also most beautiful (SOP 230e).²⁰ None of signs by itself is sufficient to account for Beauty, but perhaps given the right criterion, a truer picture of Beauty may emerge.

III

The Criterion

²⁰ Bernardete, *The Being of the Beautiful*.

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There is, then, from the other dialogues, a sense of what Beauty may be: the signs of measure and proportion signal its presence and it is linked with goodness and justice. A criterion is still lacking which would somehow unite and make sense of these signs. When Socrates and Hippias discuss the appropriate, the idea of Beauty slips away from them because they together erroneously maintain that the appropriate must not only make that which is beautiful to be beautiful, but it also must make it to appear beautiful (HMJ 294e). It has already been noted that if it had not been for Hippias' requirement for satisfying appearance, the appropriate might have answered the question "What is Beauty?" inasmuch as pots, gold, ivory, figwood, and the like were admitted to be beautiful.

There is, furthermore, something very curious at this point in the dialogue: the Beautiful apparently was present or somehow potentially knowable to both Socrates and Hippias, but it suddenly vanishes. No one suggests that the two men may have had any direct experience of the form of Beauty, but rather that perhaps they were very close to actually grasping what is the Beautiful. Consider the characters of Hippias and Socrates in this dialogue: Hippias is boastful, arrogant, and entirely overreaching, while Socrates himself is not always presented in the best light. He is sometimes vulgar (HMJ 288c), irreverent (HMJ 292e), and self-effacing (HMJ 286d, 304c). At the point when Socrates mentions that he thinks the Beautiful was just with them, however, both Socrates and Hippias temporarily have given up their pretensions and are examining the question in earnest. Here they not only discuss the appropriate, but they are acting appropriately in their acting together to answer a question. Beauty flees not only with the dismissal of the notion of the appropriate, but in the dramatic structure of the dialogue, its exit is marked by another boast from Hippias and more self-effacement from Socrates (HMJ 295a).

The question now remaining is that of the nature of the appropriate, specifically how it might bind together the qualities which have been noted to signal the presence of the Beautiful. The answer, I believe, is found in *Charmides* and lies in the untranslatable '*sophrosyne*'. Many have translated it

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as ‘temperance’, but it certainly means more than that. One commentator notes that it is a sort of excellence for human nature which gives the person inner proportion and harmony.²¹ I suggest that while it is indeed that criterion which generate inner harmony and excellence, it is also a necessary component of anything's being beautiful.

In this dialogue, we find Socrates asking if there were any “. . . remarkable for wisdom or beauty, or both,” (CHA 153d) and he is quickly introduced to Charmides who is “most beautiful” and “absolutely perfect.” (CHA 154d) Charmides is so breathtakingly beautiful, in fact, that Socrates is speechless, and only with effort can he reply to Charmides' question (CHA 156d-e). It is not like Socrates to be flabbergasted by a handsome young man, for a quite good looking would-be lover complains that Socrates really has only contempt for physical beauty (SYM 216d), and Socrates himself notes that if one is to be truly and irresistibly beautiful, he must also possess a noble soul (CHA 154d).²² Is it this nobility of soul that Socrates senses in Charmides which is what makes him such a paradigm of Beauty?

It is undeniable that the subject of *Charmides* is *sophrosyne*, and that *sophrosyne* is embodied in Charmides himself (CHA 157d, 158c-e, 175d). *Sophrosyne*, rendered as ‘temperance’ by many translators, is described here in terms of the qualities of quiet orderliness (CHA 159b), nobleness and goodness and modesty (CHA 160e), appropriateness (CHA 161b), being well-ordered (CHA 161a), doing the good (CHA 163e), self knowledge which entails humility (CHA 164d-e), or wisdom (CHA 175d-e); nevertheless, *sophrosyne* is “the noblest thing in the world.”²³ (CHA 175b) It is this quality which makes Charmides irresistible.

²¹ Plato, *The Collected Dialogues of Plato*, p. 99.

²² Plato, *Alcibiades I* and *Charmides*, Vol. VIII in Loeb Library (London: William Heinemann, Ltd., 1927).

²³ Plato, *Alcibiades I* and *Charmides*, Vol. VIII in Loeb Library (London: William Heinemann, Ltd., 1927).

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Beauty, too, is irresistible, and it is impossible for anyone not to be overwhelmed by it (PHS 254). Likewise, just as Socrates was taken aback by the presence of Charmides, a person who encounters Beauty will be overcome with awe (PHS 251a). Beauty is not only linked with *sophrosyne* by reactions to it, but also in its pure form as it and *sophrosyne* are together enthroned (PHS 254b).²⁴ The Beautiful and *sophrosyne* may not be identical, but they are inseparable, and it is *sophrosyne*'s well-ordering of the signs (e.g., nobility, goodness, humility, modesty) which indicate Beauty's presence that is a necessary criterion for a person's being beautiful. It is thus that a person *qua* person is appropriate, and if one might avoid all pretension and falsity, Beauty would alight and dwell with him/her just as it did with Socrates and Hippias in that brief moment in *Hippias Major* (HMJ 294e) or, indeed, as it does with Socrates himself, who though not physically beautiful²⁵ (THE 143e), is "extraordinarily beautiful," (SYM 218e) even when compared to those who do possess physical beauty (SYM 217a, ALC 104a), because he so manifests *sophrosyne*²⁶ (SYM 216d). It is *sophrosyne*, then, which makes the person whole, as it were, and brings together all the signs of Beauty in a well-ordered or appropriate unity.

One possible objection to seeking the criterion for Beauty in *sophrosyne* would be that this concept itself, insofar as it refers to the performance of one's "proper function," is inherently instrumentalist in nature. This may be true for us in this century, for at least in a nominalistic sense, "function" may be viewed as that which an object may fulfill in terms of contingent relations to its environment (or even of shifting human expectations). But the Platonic notion clearly refers to "function" (*ergon*) as an intrinsic rather than purely instrumental or extrinsic set of relations. Seen in this light, Plato's

²⁴ Plato. *Phaedrus*, in *Platonis Opera*, ed. J. Burnet, vol. II. (Oxford: Clarendon Press, 1901).

²⁵ Bernardete, *The Being of the Beautiful*.

²⁶ Plato, *Symposium*, trans. Tom Griffith (Berkeley: University of California Press, 1985).

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account of the Beautiful is not a version of the instrumental theory as characterized earlier.

Sophrosyne, though, is a human quality, and consequently does not give an account of what is the Beautiful for the nonhuman. Just as *sophrosyne* cannot be translated directly into English, I suggest that there may be some other idea for which we have no word that would be to nonhuman objects in the same way as *sophrosyne* is predicated of persons. Objects would then be beautiful or not based on their “*sophrosyne*-ness.” In this way, horses, pots, mathematical proofs, and artworks all could be beautiful. Any physical object or action, indeed anything that can be described, will be beautiful not only if it takes on the necessary form of Beauty; and not only if possesses the signs of the Beautiful such as goodness, usefulness, etc.; but only if these signs are linked together appropriately by *sophrosyne*. *Sophrosyne*, thus, is a necessary component of the Beautiful.

IV

Concluding Notes

There is something innate and yet external to a beautiful object. Its beauty is really there independently of a perceiver, and its being beautiful or not does not depend upon personal evaluations. Neither is its beauty found in any externally posited function, utility, or pleasure in or from the object. The Beauty Theory holds; the psychological and instrumental theories are discarded. This is the view that Plato urges, and I concur.

Plato correctly accepts a beauty theory in which the Beautiful is an external form, and it is from this form, that beautiful things can be beautiful. Though there are many signs of the Beautiful, none of them by themselves singularly or merely together can account for the Beautiful in itself. The signs which indicate Beauty's presence are not sufficient for an object to be beautiful except that they are appropriately well-ordered. This propriety, I have shown, can be likened to the idea of *sophrosyne* which is an innate quality of the person

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allowing for his or her functioning appropriately *qua* person. I maintain, therefore, that the question of how something is beautiful is not answered in *Hippias Major*, but in *Charmides*. *Sophrosyne* for people, and something like it for the nonhuman, is the uniting factor and a necessary criterion of the Beautiful.

Overall, Plato has done well in his account of the Beautiful. He has shown that his account can provide an objective standard, and that Beauty is neither “in the eye of the beholder” nor just “skin deep.” The Beautiful is not beautiful because of any externally posited function it has, whether beneficial, pleasant, or useful. The Beautiful is such that it possesses a special characteristic which combines well in it many good qualities (the signs of the Beautiful) in an appropriate manner. Plato's theory of the Beautiful is incomplete, though, because he never accounts for what *sophrosyne*-like quality is necessary for nonhuman objects to be beautiful. Except for the fact that he never describes or gives an account of this quality for horses, pots, and other nonhuman objects, I think Plato presents an accurate picture of what it is to be beautiful.

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