

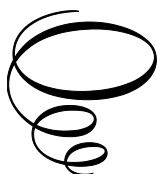
Method, Intuition, and
Meditation in Descartes'
*Meditations on First
Philosophy*

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By

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To the memory of my parents, Fay and David Tweyman ל"ו
They lived for their children

...I should never advise anyone to read it [the *Meditations*] excepting those who desire to meditate seriously with me, and who can detach their minds from affairs of sense, and deliver themselves entirely from every sort of prejudice. I know too well that such men exist in a very small number. But for those who, without caring to comprehend the order and connections of my reasonings, form their criticisms on detached portions arbitrarily selected, as is the custom with many, these, I say, will not obtain much profit from reading this Treatise (From Descartes' *Preface to the Reader*, M 40; CSM 11, 8).

...[M]y writing took the form of Meditations rather than that of Philosophical Disputations or the theorems and problems of a geometer; so that hence I might by this very fact testify that I had no dealings except with those who will not shrink from joining me in giving the matter attentive care and meditation. (From Descartes' *Replies to the Second set of Objections*, M 103; CSM 11, 112)

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INTRODUCTION

In the *Rules for the Direction of the Understanding* (the *Regulae*), Descartes develops a method of inquiry, which is modelled on the method utilized in Mathematics (Arithmetic and Geometry). As a result, commentators generally are of the opinion that it is this method which Descartes utilizes in the *Meditations*. Nowhere in the *Meditations* does Descartes explain the method he uses in this work. It is typically taken for granted that the method of the *Meditations* is the method of Mathematics, with commentators attempting to identify and analyze mathematical-type demonstrations in this work, e.g. in proving his existence as a thinking thing, and proving the existence of God in the third and fifth meditations.

In the *Preface to the Principles of Philosophy*, he refers to the subject concerned with discovering the first principles of human knowledge in the *Meditations* as ‘metaphysics’. Although he does not set out the method of the *Meditations* in the *Meditations* itself, Descartes does explain the method that he uses in the *Meditations* in his *Replies to the Second Set of Objections*. He calls this method ‘analysis’, and its primary function is to enable the mind to grasp the first principles of human knowledge, i.e. what must be known before anything else can be known. Given that these principles are first principles, they cannot be conclusions of deductive arguments (if they were, they would not be first); and further, in order to be first principles, they must be self-evident (if they depended on other premises, they would be dependent on these other premises to be known, and they would not be first).

Descartes urges throughout the *Meditations*, and in the *Replies to the Second Set of Objections*, when discussing the method he employs in the *Meditations*, that the difficulty metaphysics encounters in the search for the first principles of human knowledge stems from the fact that we are greatly influenced by the senses—we are affected by what our senses reveal to us, what we are taught by parents, teachers, and friends, what our imagination is able to conjure up, etc. But the first principles of human knowledge can only be grasped through our innate ideas—ideas which contain no empirical content, and which are given to us by God. The object of Descartes’ method in the *Meditations* is to remove all sensory prejudice, to bring the mind to a state of indifference regarding the solution to a metaphysical problem (this is the true starting point of metaphysics), and to

guide our attention to the innate idea(s), through which the first principles of human knowledge can be grasped.

As we move through the *Meditations*, we will learn that some metaphysical first principles are grasped through the faculty of intuition, e.g. the necessary connection between thought and existence in the *Cogito ergo Sum*. A common misconception in the literature on the *Meditations* is that Descartes holds that all metaphysical first principles are known through intuition. We will come to see that, although intuition is the cognitive faculty employed to grasp certain first principles, which involve grasping the necessary connection between two innate ideas which are necessarily connected, when he comes to know God in the third and fifth meditations, he insists that this knowledge is obtained through meditation / contemplation, not through intuition. We will learn that meditation has a contemplative / aesthetic component to it, which operates in selected instances, when he attempts to know God through a single innate idea-in the third meditation, the single innate idea is the idea of the self, which contains within it the idea of God; in the fifth meditation, the single innate idea is the idea of God.

My study of the *Meditations* covers the first five meditations. In particular, I seek to understand Descartes' method of 'analysis', and the role this method plays in discovering the metaphysical first principles of human knowledge. The method of 'analysis' only has application in his *Meditations*, and once these first principles are known, the method of 'analysis' has no further application. Descartes insists that this method is more certain than the method utilized in Geometry: we will examine why holds this position in the next chapter of this book.

Early in the *Meditations*, Descartes introduces the deceiving deity, who he regards as his creator. He is particularly concerned about the deceiving deity in regard to mathematics: God may have so created him that he will always err in his mathematical calculations, and he will not know that he is being deceived. Accordingly, in the third meditation, he poses the following challenge to himself: in order to remove the hyperbolic doubts which he has introduced, 'I must inquire whether there is a God as soon as the occasion presents itself; and if I find that there is a God, I must also inquire whether He may be a deceiver; for without a knowledge of these two truths, I do not see that I can ever be certain of anything'. It is in the third meditation that Descartes attempts to disprove the deceiving deity hypothesis, when he establishes that a veracious God created him.

In the second meditation, Descartes has been able to establish one truth, namely, the necessary connection between thought and existence, articulated in the dictum, *Cogito ergo Sum*. In the second paragraph of the third meditation, he reflects on this knowledge, and asks, what it is that

rendered him certain of this truth? He answers that it is the clarity and distinctness of the *Cogito ergo Sum*, which assures him of its truth. However, he is reluctant at this point to generalize from this truth and its clarity and distinctness, to holding that all clear and distinct conceptions must be true. The literature on the *Meditations* is generally agreed that the truth of all clear and distinct conceptions is established, once he establishes the existence of a veracious God as his creator in the third meditation. However, this runs counter to what Descartes tells us in the third and fifth paragraphs in the *Synopsis to the Meditations*: he insists that his proof that all clear and distinct ideas are true has been established in the fourth meditation. We will examine his proof in the fifth chapter of this book.

In the *Meditations*, Descartes is also concerned with deception, which is not brought about through a deceiving deity. In this regard, he introduces the evil genius hypothesis in the first meditation: "I shall then suppose [that] some evil genius not less powerful than deceitful, has employed his whole energies in deceiving me..." While there is no doubt in the *Meditations* at which points in his analysis he is dealing with the topic of God, the situation is very different in regard to the evil genius. Descartes does not refer to the evil genius beyond the second meditation, and at no time in his analysis, does he indicate at which point he has dealt with this hypothesis. In fact, I will show that the text supports two different interpretations of the evil genius, and I will establish how each is dealt with by Descartes.

In making my way through the *Meditations*, I have purposely avoided making critical comments on Descartes' philosophy, in order not to interrupt the flow of my interpretation of the text. In other words, my first order of business in this book is to attempt to understand Descartes' teachings in the *Meditations*. But, of course, this is not to say that critical comments should not be included. I decided that these comments are best placed after the exegetical or interpretive study has been completed. My critical comments appear in the Epilogue, where I have selected two topics for discussion: (1) Arnauld's charge that Descartes' reasoning in the third meditation regarding the existence of a veracious God and the truth of clear and distinct ideas is circular; and (2) evaluating how successful Descartes has been in the third meditation in proving that a veracious God is his creator, insofar as he is a thinking thing, through his claim that the idea of God is 'like the mark of the workman imprinted on his work; and it likewise not essential that the mark shall be something different from the work itself'.

In light of my interpretation of how Descartes gains knowledge of God through his method of 'analysis', I show that Descartes' reasoning is not circular. However, I do show that Descartes has not been successful in

establishing that he has been created by a God who cannot be a deceiver. As a result, we will see that the level of certainty that Descartes seeks in his pursuit of metaphysical first principles, through his method of 'analysis', cannot proceed beyond the second meditation.

Descartes' famous dictum, *Cogito ergo Sum* (I think, therefore, I am) does not appear anywhere in the *Meditations On First Philosophy*. Despite this, the literature generally refers to the *Cogito ergo Sum*, as though it does appear in the *Meditations*. I follow the literature on this point, except where it is inappropriate to do so, particularly in the context of Descartes' proofs of his existence in the second meditation. Further, the literature usually uses the term, the *Cogito*, as a shorthand reference to *Cogito ergo Sum*. I have done the same throughout this book.

In this book, I incorporate some previously published material, with permission, from articles which appeared in the *Southern Journal of Philosophy*: In Chapter 3, "Descartes' 'Demonstrations' of His Existence", *Southern Journal of Philosophy*, Volume 23, Number 1, Spring 1985, pp. 101-110; In Chapter 5, "Truth, No Doubt: Descartes' Proof That What He Perceives Clearly and Distinctly Must Be True". *Southern Journal of Philosophy*, Volume 19, Number 2, July 1981, pp. 237- 258; In Chapter 6, "Descartes' Knowledge of God in the Fifth Meditation", *Southern Journal of Philosophy*, Volume 26, Number 2, Summer 1988, pp. 263-275. I have also incorporated some previously published material in Chapter 4 from an article, which appeared in *Studia et Collectanea Cartesiana*: "Deus ex Cartesio", *Studia et Collectanea Cartesiana I*, 1979, pp. 167-182. So far as I have been able to determine, this journal is no longer publishing articles on Descartes' philosophy. I have also incorporated some previously published material in the Epilogue, from my article, "Descartes' Failure in the Third Meditation to Prove that God Created Descartes", selected for inclusion in *Aftershocks: Globalism and the Future of Democracy*. This volume contains selected papers presented at the International Society for the Study of European Ideas (ISSEI) XVI International Conference, The University of Zaragoza, Spain, July 2-5, 2019. The volume was published, March 2021.

I am indebted to Harry G. Frankfurt, in his book *Demons, Dreamers, and Madmen*, Bobbs-Merrill company, Inc. 1970, for making me realize that there is more to the first meditation than first meets the eye.

I would also like to acknowledge the assistance of Jordan Nusbaum, who helped with updating the bibliography, an earlier version of which appeared in my *In Focus* edition of the *Meditations On First Philosophy*.

All passages quoted from Descartes' *Meditations on First Philosophy* are taken from my edition of the *Meditations: René Descartes, Meditations On First Philosophy In Focus*, Edited and with an Introduction, by Stanley Tweyman, First published in 1993 by Routledge, London and New York. The translation of the *Meditations* in my *In Focus* edition, is by Elizabeth Haldane and G.R.T. Ross, *The Philosophical Works of Descartes*, in two volumes, Cambridge at the University Press, 1967. I have also included the corresponding references from *The Philosophical Writings of Descartes*, in two volumes, translated by John Cottingham, Robert Stoothoff, and Dugald Murdoch, Cambridge University Press, Cambridge, New York, New Rochelle, Melbourne, and Sydney, first published 1984, reprinted 1988. Quotations are cited as M, followed by the page number(s) in my *In Focus* edition; and by CSM, followed by the volume and page number(s), when providing the corresponding volume and page(s) in the Cottingham, Stoothoff, Murdoch edition. When quoting passages which are not included in my *In Focus* edition of the *Meditations*, but which are included in the Haldane and Ross edition, I cite the Haldane and Ross reference as HR, followed by the volume number, and the page number(s). The Cottingham, Stoothoff, Murdoch references remain, as I explained above.

This book is dedicated to my wife, Barbara; our daughter, Justine; our son-in-law, Tzvi; and our grandchildren, Kessem, Jonah, and Ethan.

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CHAPTER 1

THE METHOD OF GEOMETRY AND THE METHOD OF THE *MEDITATIONS*

Introduction

The goal of Descartes' *Meditations on First Philosophy* is to discover the first principles of human knowledge, that is, what must be known before anything else can be known. In the *Preface to the Principles of Philosophy* (HR I, 211; CSM II, 186), he refers to this area of inquiry as metaphysics. If we are to understand Descartes' *Meditations on First Philosophy*, it is important to understand his methodology in this work. In light of the fact that, throughout his writings, he refers to mathematics, and to the method of mathematics, as a model for learning, many commentators regard Descartes as utilizing the method of mathematics in the *Meditations*. At one time, I held this view, as well.

Part of the difficulty in understanding Descartes' method in the *Meditations* stems from the fact that nowhere in this work does he reveal the method that he is utilizing. He does employ hyperbolic doubt, especially in the first meditation; but this type of doubt, although part of his methodology in this work, cannot explain his method throughout the meditations. What changed my mind about Descartes' method in his *Meditations* is his explanation, in the *Replies to the Second Set of Objections*, of the method he utilizes in this work (he calls this method 'analysis'), and the contrast he draws between this method and the method of mathematics (which he calls 'synthesis'). Descartes urges in the *Replies to the Second Set of Objections* that the search for the first principles of human knowledge in the *Meditations* encounters difficulties which are never faced by the geometer: all difficulties in metaphysics originate through the influence of the senses, which prejudices the mind into believing that certain empirical ideas are the true metaphysical ideas, and which prevent us from focusing our attention on the true metaphysical innate ideas, e.g. of the self and of God, through which the first principles of metaphysics can be grasped.

In this chapter, I will examine Descartes' method of 'analysis', which will provide insight into how he proceeds in his search for the metaphysical first principles of human knowledge in his *Meditations*, and why he rejects 'synthesis' as the method for the search for metaphysical first principles.

Further, in a letter dated April 15, 1630, Descartes wrote to Marin Mersenne, informing him that he has discovered how to demonstrate metaphysical truths "in a way that is more evident than the demonstrations in Geometry". I will seek to understand this claim, in the context of his discussion of the methods of analysis and synthesis.

In a letter to Marin Mersenne, dated April 15, 1630, Descartes writes that he thinks he has discovered how to demonstrate metaphysical truths in "a way which is more evident than the demonstrations of geometry." When commenting on the nature and scope of the method Descartes develops in the *Regulae*, L.J. Beck writes:

"The object of Cartesian methodology is to extend the method used in the mathematical sciences [detailed in the *Regulae*] to all other branches of knowledge, including, of course, metaphysics and the other philosophical sciences."¹

Although this view is widely held among Descartes scholars, I will show that it is mistaken. E. M. Curley² also quotes the passage from Descartes' letter to Mersenne about demonstrating metaphysical truths, but Curley suggests that this passage reveals that Descartes abandoned, or at least came to attach less importance to, the method advocated in the *Regulae*. Curley writes:

I suggest that sometime around 1628 Descartes came to feel that pyrrhonian scepticism was a more dangerous enemy than scholasticism, and came to feel the force of sceptical arguments which cut against both his own position in the *Regulae* and that of the scholastics.³

I will show that Curley misrepresents Descartes' attitude toward the method he develops in the *Regulae*.

¹ L. J. Beck, *The Method of Descartes, A Study of the Regulae* (Oxford at the Clarendon Press, 1952), page 13

² E.M Curley, *Descartes Against the Sceptics*, Cambridge, Massachusetts: Harvard University Press, 1978.

³ Curley, pg. 37-38.

Descartes does not discuss the method he utilizes in the *Meditations* in the *Meditations* itself. In fact, the method of the *Meditations* is not set out in any of Descartes' works. Rather, he introduces and discusses the method of the *Meditations* in only one place, namely, in a portion of the *Replies to the Second Set of Objections* (M 101-104; CSM II, 110-113). In the present chapter, I will show that the method which Descartes utilizes in the *Meditations* is not the method he develops in the *Regulae*, and that this method has application only in his quest for the first principles of metaphysics in the *Meditations*. Once he grasps the self-evident first principles of metaphysics, the method utilized in the *Meditations* has no further application.

In the first and third meditations, Descartes questions the reliability of mathematics: in both meditations, his concern with mathematics stems from God's infinite power, and the fact that God might be a deceiver. Now, given that the *Regulae* accepts the certainty of mathematics, and that the whole of mathematics is subjected to doubt in the *Meditations*, it appears that Descartes has utilized a method in the *Meditations* different from the mathematical-type method developed in the *Regulae*. On this interpretation, when Descartes writes to Mersenne that he has discovered how to demonstrate metaphysical truths in a way which is more evident than the demonstrations of geometry, this is an indication that the method advocated in the *Regulae* is not the method that he is using in the *Meditations*.

The first edition of the *Principles of Philosophy* appeared in 1644, well after Descartes had worked on the *Regulae*, and completed the *Meditations* (first edition of the *Meditations*, published in Latin, in 1641). In the *Preface to the Principles of Philosophy* (HR I, 211; CSM I, 186), he recommends studying the basic logic of the *Regulae* before we apply ourselves to metaphysics, the subject matter of the *Meditations*. It is clear, therefore, that the logic developed in the *Regulae* has an important role to play in Descartes' overall philosophic scheme, and, it would appear that the importance of the *Regulae* is not diminished by the doubts raised about mathematics in the *Meditations*. Furthermore, since he does not intend to abandon the method of the *Regulae* when he utilizes hyperbolic doubt in the *Meditations*, we can conclude that his remark to Mersenne that he has discovered how to demonstrate metaphysical truths in a way which is more evident than the demonstrations of geometry is not directed against the teaching of the *Regulae*.

Since the reliability of mathematics is not established until he deals with the truth of the clear and distinct in the *Meditations*, the discussion in the *Regulae* of mathematics as the model for learning is, at most, provisional. And, the provisional character of mathematics is never

removed in the *Regulae*. Given that the reliability of mathematics is established in the *Meditations*, we should ask what a mastery of the *Regulae* provides, without the advantage of the teaching of the *Meditations*. That is, granting the provisional character of mathematics in the *Regulae*, and the method developed from mathematics in this work, we must know the epistemic status of any solution which has been arrived at through the method taught in the *Regulae*. In this regard, Descartes' comments on the atheist in the *Replies to the Second Set of Objections* are instructive:

That an atheist can know clearly that the three angles of a triangle are equal to two right angles, I do not deny, I merely affirm that, on the other hand, such knowledge on his part cannot constitute true science, because no knowledge that can be rendered doubtful should be called science. Since he is, as supposed, an atheist, he cannot be sure that he is not deceived in the things that seem most evident to him . . . and though perchance the doubt does not occur to him, nevertheless it may come up, if he examines the matter, or if another suggest it; he can never be made safe from it unless he first recognizes the existence of a God. (HR II, 39; CSM II, 101)

The atheist can believe that s/he knows, but without a knowledge of God, s/he cannot know that s/he knows (Descartes' expression on this is "such knowledge on his part cannot constitute true science"). The paradigm for knowledge in the *Regulae* is mathematics; for Descartes, the distinguishing features of such knowledge are its clarity and distinctness. In the fifth meditation, he notes the following of the clear and distinct in mathematics:

. . . the nature of my mind is such that I could not prevent myself from holding them to be true so long as I conceive them clearly; and I recollect that even when I was still strongly attached to the objects of sense, I counted as the most certain those truths which I conceived clearly as regards figures, numbers, and the other matters which pertain to arithmetic and geometry, and, in general, to pure and abstract mathematics. (M 81; CSM II, 45)

Without a knowledge of God, a solution reached by utilizing the method of the *Regulae* can yield, at most, the highest mode of psychological assurance of which we are capable. The conclusion will be irresistible, considering the evidence presented; nevertheless, nothing put forth in the *Regulae* can assure us that what we perceive clearly and distinctly is true. The *Regulae* makes it clear that the mathematician is satisfied with the state of mind and level of certainty found in mathematics. The provisional character of the method developed in the *Regulae* can only be removed when Descartes has successfully established that whatever is perceived clearly and distinctly is

true. And this, he tells us in the *Synopsis to the Meditations*, has been established in the fourth meditation:

. . . it is requisite that we may be assured that all things which we conceive clearly and distinctly are true in the very way in which we think them; and this could not be proved previously to the Fourth Meditation. (M 42; CSM II, 9)

In the fourth Meditation it is shown that all these things which we very clearly and distinctly perceive are true. . . (M 43; CSM II, 9)

In one passage in the *Regulae*, Descartes explains the role of the *Regulae* in regard to the pursuit of indubitable knowledge. It is a rather lengthy passage, but important enough for our purposes to be quoted extensively.

This method of ours resembles indeed those devices employed by the mechanical crafts, which do not need the aid of anything outside of them, but themselves supply the directions for making their own instruments. Thus if a man wished to practise any one of them, e.g. the craft of a smith, and were destitute of all instruments, he would be forced to use at first a hard stone or a rough lump of iron as an anvil, take a piece of rock in place of a hammer, make pieces of wood serve as tongs, and provide himself with other such tools as necessity required. Thus equipped, he would not then at once attempt to forge swords or helmets or any manufactured article of iron for others to use. He would first of all fashion, hammer, anvil, tongs, and the other tools useful for himself. This example teaches us that, since thus at the outset we have been able to discover some rough precepts, apparently the innate possession of the mind, rather than the product of technical skill, we should not forthwith attempt to settle the controversies of Philosophers, or solve the puzzles of the Mathematicians, by their help. We must first employ them for searching out with our utmost attention all the other things that are more urgently required in the investigation of truth. (HR 1, 25-26; CSM 1, 31)

From this passage, we learn that in the *Regulae*, mathematics is treated as the object of study, utilized to discover, and develop, the elements of the innate mathematical methodology which Descartes discovers in himself. No solutions to philosophical problems are attempted in this work. Rather, by making mathematics the object of study in the *Regulae*, he is seeking a full understanding of how best to direct his reason if he is to discover the truth. This explains why, in the *Preface to the Principles of Philosophy*, he urges that the *Regulae* should be studied before we undertake to study metaphysics in the *Mediations*. The passage where this is revealed in the

Preface to the Principles of Philosophy appears at the point where Descartes sets out the order which should be followed in our self-instruction:

[After forming for ourselves a code of conduct,] we should likewise study logic-not that of the Schools, because it properly speaking is only a dialectic which teaches how to make the things that we know understood by others-but the logic that best teaches us how best to direct our reason in order to discover those truths of which we are ignorant....Then when he has acquired a certain skill in discovering the truth in these questions, he should begin seriously to apply himself to the true philosophy, the first part of which is metaphysics, which contains the principles of knowledge, amongst which is the explanation of the principle attributes of God, of the immateriality of our souls, and of all the clear and simple notions which are in us. (HR I, 210-211; CSM I, 186)

We cannot study metaphysics without first understanding how to best direct our reason in the discovery of truth: hence, the need for studying the *Regulae* before studying the *Meditations*. But the method for discovering metaphysical truths is not the method utilized by the geometer.

Metaphysical truths for Descartes are first principles, or as he refers to them in the passage quoted above from the *Preface to the Principles of Philosophy*, “the principles of knowledge”. First principles cannot be conclusions of geometric-type demonstrations. In fact, the principles of knowledge, being first principles, cannot be conclusions of any argument. Therefore, a geometric or deductive-type demonstration is ruled out in the case of metaphysical first principles. According to the third meditation, geometric-type demonstrations will always be susceptible to doubt, until we know that God exists and is not a deceiver. On the other hand, as we will see in later chapters, the *Meditations* reveals that knowledge of indubitable metaphysical principles can be had-in particular, knowledge of the self as *res cogitans*, and knowledge of God-without the need for the divine guarantee. Accordingly, Descartes realizes that he must develop a method of establishing metaphysical truths, which is more certain than the method of demonstrating geometric truths: geometric-type demonstrations can be considered knowledge, only after the divine guarantee is achieved: metaphysics is possible, only if at least some metaphysical knowledge can be had without the divine guarantee.

The Similarities and Differences between Metaphysics and Geometry

At this stage, we are able to understand that, given the nature and importance of metaphysical knowledge for Descartes, it could never have

been his intention to apply the method of Geometry developed in the *Regulae* to the *Meditations*. Both metaphysics and geometry utilize first principles (or axioms in Geometry). Descartes' analysis of the similarities and differences between metaphysics and geometry in regard to their respective first principles is to be found in the *Replies to the Second Set of Objections* (M 101-104; CSM II, 110-113). He points out that the first principles of geometrical proofs “harmonize with the use of our senses, and are readily granted by all. Hence, no difficulty is involved in this case, except in the proper deduction of the consequences. But this may be performed by people of all sorts, even by the inattentive, if only they remember what has gone before...” (M 102; CSM II, 111). In other words, no special method is required in order to learn the first principles of geometry, because sensory prejudice is never an impediment to learning in geometry. Once we are presented with the geometric first principles and understand them, we will accept them as true. And once they are accepted as true, we are able to deduce the theorems which follow from them. He calls the method of deduction utilized in geometry, ‘synthesis’.

Metaphysics, on the other hand, lacks this advantage:

... [Nothing] in metaphysics causes more trouble than the making the perception of its primary notions clear and distinct. For though in their own nature they are as intelligible as, or even more intelligible than those geometricians study, yet being contradicted by the many preconceptions of our senses to which we have since our earliest years been accustomed, they cannot be perfectly apprehended except by those who give strenuous attention and study to them, and withdraw their minds as far as possible from matters corporeal. Hence if they alone were brought forward, it would be easy for anyone with a zeal for contradiction to deny them. (M 102-103; CSM II, 111)

To apprehend the first principles of metaphysics, a unique method is required, which Descartes, in the *Replies to the Second Set of Objections*, calls ‘analysis’.

Analysis shows the true way by which a thing was methodically discovered and derived, as it were effect from cause, so that, if the reader care to follow it and give sufficient attention to everything, he understands the matter no less perfectly and makes it as much his own as if he had himself discovered it. But it contains nothing to incite belief in an inattentive or hostile reader; for if the very least thing brought forward escapes his notice, the necessity of the conclusion is lost; and on many matters which, nevertheless, should be specially noted, it often scarcely touches, because they are clear to anyone who gives sufficient attention to them. (M 101-102; CSM II, 110)

Geometry, with its method of synthesis, does not encounter these problems:

Synthesis contrariwise employs an opposite procedure; one in which the search goes as it were from effect to cause (though often here the proof itself is from cause to effect to a greater extent than in the former case). It does indeed clearly demonstrate its conclusions, and it employs a long series of definitions, postulates, axioms, theorems and problems, so that if one of the conclusions that follow is denied, it may at once be shown to be contained in what has gone before. Thus the reader, however hostile and obstinate, is compelled to render his assent. Yet this method is not so satisfactory as the other and does not equally well content the eager learner, because it does not show the way in which the matter taught was discovered. (M 101-102; CSM II, 110-111)

Whereas obstinacy and hostility will not be impediments to grasping first principles in geometry (sensory prejudice is not an issue here); obstinacy and hostility will prevent the reader from grasping the first principles in metaphysics, given that the goal of the method of analysis is to guide the mind to the point where we are able, without the influence of sensory prejudice, to attend to the innate ideas, which form the basis of metaphysical first principles. In the penultimate paragraph in the first meditation, Descartes urges that the true starting-point in the quest for metaphysical first principles is indifference: “That is why I consider that I shall not be acting amiss, if, taking of set purpose a contrary belief, I allow myself to be deceived, and for a certain time pretend that all these opinions are entirely false and imaginary, until at last, having thus balanced my former prejudices with my latter [so that they cannot divert my opinions more to one side than the other], my judgment will no longer be dominated by bad usage or turned away from the right knowledge of the truth.” (M 49; CSM II, 15) A full discussion of how Descartes achieves indifference will be explained in the next chapter. At this point in our study, it is clear that there must be a genuine willingness on the part of the reader to be guided by the teachings of the *Meditations*, and that there must be a proper preparation of the mind culminating in indifference, in order to be able to grasp the innate ideas, which constitute the basis of the metaphysical first principles.

In Geometry, our understanding can often be assisted with diagrams and other empirical markings. But, in metaphysics, empirical ideas can never be the basis for knowledge, as empirical ideas never possess the content needed to form the basis of metaphysical knowledge. In the search for knowledge of metaphysical first principles, the reader must attempt to free her/himself of sensory prejudice, and to apprehend the very same innate ideas with which Descartes is dealing. However, this can be difficult, given the strong influence of sensory prejudice. Ideas of God, for

example, obtained from reading, from conversations with parents and/ or friends, and/or from one's own imagination, etc., will always be false ideas, and can never reveal the true nature of God. The ideas required in the pursuit of metaphysical first principles are the innate ideas which God has given to us.

...[N]othing in metaphysics causes more trouble than the making the perception of its primary notions clear and distinct. For, though in their own nature than are as intelligible as, or even more intelligible than those the geometricians study, yet being contradicted by the many preconceptions of our senses to which we have since our earliest years been accustomed, they cannot be perfectly apprehended except by those who give strenuous attention and study to them, and withdraw their minds as far as possible from matters corporeal. Hence if they alone were brought forward it would be easy for anyone with a zeal for contradiction to deny them. (M 102-103; CSM II, 111-112)

With the method of analysis, there is always an aspect of self-discovery, in which the reader is involved with the very same innate ideas with which Descartes is dealing: "Analysis shows the true way by which a thing was methodically discovered and derived...so that, if the reader care to follow it and give sufficient attention to everything, he understands the matter no less perfectly and makes it as much his own as if he had himself discovered it. (M 101; CSM II, 110)

It is this method—the method of analysis—to which Descartes is referring in the letter to Mersenne. Notice that in his comment to Mersenne, he says that he thinks he has discovered a way to demonstrate *metaphysical* truths in a manner which is more evident than the demonstrations of geometry. He is not saying that he has discovered a method for demonstrating *any* truth in a way which is more evident than geometry. It is in metaphysics that demonstrations are more evident than those in geometry, because, as we have seen, metaphysics must provide knowledge of first principles regarding the self and God, without the assistance of the divine guarantee, whereas in all other areas of knowing, including geometry, the divine guarantee will be required.

Descartes points out in the *Replies to the Second Set of Objection* that "I have used in my *Meditations* only analysis, which is the best and truest method of teaching." (M 102; CSM II, 111) In a second passage in the *Replies to the Second Set of Objections*, he writes: "...[M]y writing took the form of *Meditations* rather than that of Philosophical Disputations or the theorems and problems of a geometer; so that hence I might by this very fact testify that I had no dealings except with those who will not shrink from joining me in giving the matter attentive care and meditation" (M 103; CSM

II, 112). He tells us that synthesis “though it very suitably finds a place after analysis in the domain of geometry, cannot so conveniently be applied to these metaphysical matters we are discussing” (M 102; CSM II, 111), given that synthesis cannot be of assistance in eliminating sensory prejudice, nor direct the attention to the appropriate metaphysical ideas.

Analytic demonstrations are designed to guide the mind, so that all sensory prejudice preventing us from grasping the innate ideas involved in understanding metaphysical first principles will be removed, and the first principles themselves can be grasped by the mind. An analytic demonstration, therefore, is, as it were, a process of 'reasoning up' to first principles, the upward movement taking place as prejudice is removed, indifference is achieved, and our attention is focused on the pure or innate ideas which constitute the metaphysical first principle. Accordingly, when, in the case of an analytic demonstration, Descartes speaks about drawing conclusions or concluding a first principle (e.g., at M 51; CSM II, 17, he writes: “So that after having reflected well and carefully examined all things, we must come to the definite conclusion that this proposition: I am, I exist, is necessarily true each time that I pronounce it, or that I mentally conceive it”), he is not speaking of drawing a conclusion in a deductive argument. To draw a conclusion when employing analysis is tantamount to acknowledging that he is now able to grasp the truth of a metaphysical first principle.

It is not the case that whenever Descartes speaks of grasping a metaphysical first principle that he intends that this involves intuition⁴. Intuition typically involves two relata, which are necessarily connected, for example, thought and existence; $1+1=2$. As we will learn when we come to study the third and fifth meditations, when Descartes is concerned to gain knowledge of God, this knowledge is obtained by meditation, not by intuition, inasmuch as only one idea is involved (in the third meditation, his attention is on the idea he has of himself, which idea is able to provide knowledge of God as his creator; in the fifth meditation, attending to the idea of God reveals that necessary existence is not a predicate, but an essential feature or attribute of God). Mathematics involves two cognitive

⁴ In Rule III of the *Regulae*, Descartes provides an explanation of intuition: “By *intuition* I understand, not the fluctuating testimony of the senses, nor the misleading judgement that proceeds from the blundering constructions of imagination, but the conception which an unclouded and attentive mind gives us so readily and distinctly that we are wholly freed from doubt about that which we understand. Or, what comes to the same thing, *intuition* is the undoubting conception of an unclouded and attentive mind, and springs from the light of reason alone... Thus each individual can mentally have intuition of the fact that he exists, and that he thinks... (HR 1, 7; CSM 1, 14)

faculties-intuition and deduction. Metaphysics also involves two cognitive faculties-intuition and meditation. Meditation becomes particularly prominent, when Descartes is concerned with knowing God in the third and fifth meditations.

The Method of ‘Analysis’ in the *Meditations*

The value of our present discussion is that it shows, at least in a general way, the type of proof of metaphysical principles we should expect to encounter in the *Meditations*, and the type of proof of metaphysical principles which we should not expect. We should not expect deductive proofs of first principles; although we will encounter some deductive proofs when involved with the method of analysis in his quest for first principles. That is, the method of analysis can utilize deductive proofs, if these can assist in removing sensory prejudice, and direct the attention to the appropriate innate ideas, in the effort of apprehending a first principle.⁵ But, so far as the *Meditations* is concerned, the first principle itself will never be a conclusion of a deductive proof: it will always be known by intuition or meditation.

It is important to realize that the letter to Mersenne is in no way referring to the *Regulae*. Metaphysics utilizes the method of analysis. And it is this method of proof which is more evident than geometric demonstrations. Geometric demonstrations reveal the logic of the proof being presented, and show how one proposition follows from others. The concern in such proofs, therefore, is with what follows from what. Analysis, on the other hand, is not concerned to show what follows from what, but is designed to eliminate the influence of sensory prejudice, to bring the mind to a point of indifference, and to guide the reader’s attention to discover the innate ideas, through which metaphysical first principles are known. It is through analytic-type proofs that the reader is brought to understand that this conviction, especially regarding knowledge of the self as a thinking thing and knowledge of God, “is so strong that we have no reason to doubt concerning that of the truth of which we have presented ourselves, there is nothing more to enquire about; we have here all the certainty that can reasonably be desired ... We have assumed a conviction so strong that nothing can remove it, and this persuasion is clearly the same as perfect certitude.” (HR II, 41; CSM II, 103) This is what Descartes had in mind in the letter to Mersenne.

⁵ This will become evident when we discuss the third meditation.

Descartes urges in the *Preface to the Principles of Philosophy* that we should study the *Regulae* before undertaking a study of the *Meditations*, and we have learned that the concern in the *Meditations* with deception in mathematics does not in any sense refute or nullify the worth of the mathematical-type method developed in the *Regulae*. Just like the atheist who, without a knowledge of God, lacks 'true science,' so the philosopher will lack 'true science' if s/he solves problems using the method of the *Regulae*, before gaining a knowledge of God. The *Regulae* does not provide the method which Descartes uses in the *Meditations*. The value of studying the *Regulae* is that it teaches us about the nature of knowledge, about the cognitive faculties through which knowing is possible, and about how to proceed systematically in the pursuit of knowledge. The *Regulae* does not raise and address the sceptical objections introduced in the *Meditations*, and, therefore, the *Regulae* must await the proof in the *Meditations* of the indubitability of mathematics, and of the clear and distinct generally. A discussion of the intricacies of this investigation is set out in the chapters that follow.

In *Geometry*, the focus is on deductive proofs of theorems. In the *Meditations*, the discussions and proofs put forth are the means by which sensory prejudice is removed to the point of indifference, and the attention is directed to the relevant innate ideas, which form the basis of metaphysical first principles. The goal of the *Meditations* is to guide the reader to move beyond the written word and to attend to the metaphysical innate ideas, through which metaphysical knowledge can be obtained. The method of 'analysis' enables the latter; 'synthesis' enables the former, namely, the focus on deductive proofs of theorems.

Descartes points out in the *Replies to the Second Set of objections* that in geometry, no difficulty is involved in apprehending the relevant ideas, which provide the basis of geometric proofs. But, apprehending these geometric ideas, cannot provide geometric knowledge: the latter can only be obtained through the relevant geometric demonstrations. For example, focusing our attention on an isosceles triangle will not provide knowledge that the base angles of an isosceles triangle must be equal. This knowledge can only be established through deduction.

In metaphysics, on the other hand, the teachings of the *Meditations* can remove sensory prejudice, assist in achieving a state of indifference regarding solutions to metaphysical problems, and guide the attentive mind to the relevant metaphysical ideas. At this point, through intuition or meditation, the first principles of metaphysical knowledge can be grasped. The analytic method of the *Meditations* is not a formal rule-oriented method like the deductive method of geometry, or the Hypothetico-Deductive

Method of the empirical sciences. The method of analysis in metaphysics is Descartes' teachings in the *Meditations*.

Consequences of Our Study in This Chapter on the Relationship between the *Regulae* and the *Meditations*

A number of consequences follow from the view of the relationship between the *Regulae* and the *Meditations* detailed here, and developed in the chapters that follow.

First, in accordance with the account presented here, the *Meditations* performs a dual function-this work enables us to grasp the truth of all metaphysical first principles (what must be known before anything else can be known) as well as providing an analytic-type proof of the reliability of mathematics, once the truth of clear and distinct ideas is established in the fourth meditation. Since the *Regulae* is based on a mathematical model, Descartes can now be confident that when the method of the *Regulae* is utilized and leads to ideas (conclusions) which are clear and distinct, the conclusions can be accepted as true. Although we are instructed to study the *Regulae* before we study the *Meditations* (for the reasons set out earlier), it is only after we study the *Meditations* that the method of the *Regulae* can be used to arrive at 'true science'.

A second consequence which follows from our study is the exposure of a misinterpretation of Descartes' philosophy, which is virtually universal-a misinterpretation which Descartes has, in fact, helped to promulgate. In light of the emphasis on the method of mathematics in the *Regulae*, it is easy to conclude that Descartes regards all learning along the lines of a deductive system. Rule I certainly lends itself to such an interpretation. For example, he writes,

. . . there is nothing more prone to turn us aside from the correct way of seeking out truth than this directing of our inquiries, not towards their general end, but towards certain special investigations. (HR 1, 2; CSM 1, 9)

Or again:

Hence we must believe that all sciences are so inter-connected, that it is much easier to study them all together than to isolate one from all the others. If, therefore, anyone wishes to search out the truth of things in serious earnest, he ought not to select one special science; for all the sciences are conjoined to each other and interdependent. (HR 1, 2; CSM 1, 10)

It is tempting to hold that the interdependence and interconnectedness of which he speaks is logical in nature, as it is in a deductive or axiomatic system. However, at least insofar as the *Meditations* is related to the other branches of learning (physics, medicine, mechanics, and morals), the first principles of knowledge in the *Meditations* are not related logically to these other fields. It is rather that we must know the first principles of metaphysics before we can proceed in these other areas, and not that these first principles are premises in certain logical deductions. The connections between thought and existence, my existence and God's existence, etc., which are revealed in the *Meditations*, are not the first *premises* from which the physics begins.

CHAPTER 2

THE FIRST MEDITATION: BEGINNING THE QUEST FOR THE FIRST PRINCIPLES OF HUMAN KNOWLEDGE THROUGH THE SENSES

Introduction

In his *Meditations on First Philosophy*, Descartes sets out to discover the first principles of human knowledge, that is, what must be known before anything else can be known. In the *Preface to the Principles of Philosophy*, he refers to the subject concerned with the quest for these first principles as ‘metaphysics’ (HR I 211, CSM I, 186). This enterprise takes place in two phases. Granted that these first principles are derived either from the senses or from reason, he examines each of these faculties, in order to determine whether one faculty or the other can provide these first principles. The examination of the senses as possibly providing the first principles takes place in the first meditation. Once this effort fails, Descartes, in the subsequent meditations, attempts to establish that the true first principles of human knowledge are provided by reason. My efforts in this chapter will be to understand his quest for first principles through the senses, as developed in the first meditation.

Given that the principles he is seeking are *first* principles, which are self-evident, no proof is possible for them. A first principle cannot be the conclusion of an argument, for if it were, then the principle(s) upon which it depends would be first. In the case of the first principles which are established in the second and subsequent meditations, these principles are typically articulated by Descartes, e.g. the necessary connection between thought and existence in the second meditation, and he then attempts to guide us to the innate ideas through which we are able to understand that the first principle is true. This is carried out through the method of ‘analysis’, which he explains in the *Replies to the Second Set of Objections*. I have already elaborated on this method in the previous chapter.

The quest for first principles in the first meditation, although also utilizing the method of ‘analysis’, is carried out very differently from his search for first principles in subsequent meditations, where the focus is on reason. In subsequent meditations, Descartes knows the first principle that he is attempting to establish, and through the use of the method of analysis, guides us, through the elimination of sensory prejudice, to grasp the necessary connection between the relata involved in the first principle. But, in the first meditation, the putative first principles are not even mentioned. Furthermore, given that all of the first principles involved in the first meditation will be shown to be dubitable, it is clear that whatever relata are involved in a putative first principle, the method of analysis utilized in the first meditation cannot take the same form as it takes in subsequent meditations: Descartes’ task in the first meditation is not to establish that the relata are necessarily connected, but rather to establish that the connection of the relata involved in the putative first principles in the first meditation, having been shown to be dubitable, cannot be the foundation of truth. The first meditation will establish that the senses *cannot* be the source of the first principles of human knowledge, and this is very different from subsequent meditations, where he will establish that reason is the source of the first principles of human knowledge. The main function of the method of analysis in the first meditation is to rid the mind of sensory prejudice, to lead the mind to a state of indifference regarding the solution to a metaphysical topic, and to gain understanding that the senses cannot provide the first principles of metaphysics.

The General Upheaval of All His Former Opinions

Early in the first meditation, Descartes informs us that he will “seriously and freely address myself to the general upheaval of all my former opinions” (M 46; CSM II, 12). In the next paragraph, he elaborates on this, insisting that reason persuades him that he ought no less to withhold his assent “from matters which are not entirely certain and indubitable than from those which appear to me manifestly to be false”. In other words, he will treat as false all of his former beliefs, except those which are indubitable and certain. But he will not examine each of his beliefs, since this would be an endless undertaking. Rather, he tells us that he will examine the principles upon which his former beliefs are based:

And for that end it will not be requisite that I should examine each in particular...for owing to the fact that the destruction of the foundations of necessity brings with it the downfall of the rest of the edifice, I shall only

in the first place attack those principles upon which all my former opinions rested. (M 46; CSM II, 12)

This passage provides us with an important insight as to how he will deal with first principles in the first meditation. First principles are guides, regarding which of his beliefs should be accepted into consciousness as true, and which should be rejected. Now, when instances of beliefs accepted into consciousness through a putative first principle are shown to be dubitable and uncertain, then these beliefs will be regarded as false; the principle through which these beliefs are admitted into consciousness will be rejected; and all of the beliefs admitted into consciousness through this principle will also be rejected. Accordingly, he will begin by examining instances of beliefs countenanced by a putative first principle, with a view to determining whether these beliefs are dubitable and uncertain. Therefore, Descartes holds that, in his first meditation, he has developed a means for rejecting the first principles utilized in sense perception. The key features he will utilize are dubitability and uncertainty, and the doubt utilized is hyperbolic, inasmuch as all beliefs countenanced by a putative first principle will be rejected and treated as false, provided that any beliefs countenanced by this principle can be shown to be dubitable.

The logic of his method in the first meditation can now be understood. Descartes urges that beliefs which are dubitable and uncertain, and the first principles through which these beliefs are admitted into consciousness, are to be rejected. Therefore, dubitability and uncertainty are sufficient conditions for rejecting beliefs, and the first principles through which these beliefs were originally admitted into consciousness. Whereas Descartes regards all beliefs which are shown to be dubitable and uncertain to be false, at no point in the first meditation does he insist that indubitability and certainty are able to assure him that a belief or first principle is true. His investigation in the first meditation is confined to sensory beliefs which are dubitable and uncertain. The connection between indubitability and truth is examined by Descartes in *Meditations II* through *V*.

But why are dubitability and uncertainty adequate for regarding a belief to be false, but indubitability and certainty not adequate for holding a belief to be true? Dubitability and uncertainty are sufficient for rejecting beliefs and putative first principles. However, indubitability does not guarantee that the belief and first principle are true because, according to Descartes, a belief or first principle which is indubitable may yet be false, or, at least, suspected of being false: we will learn that this is a fundamental concern about mathematical claims—they appear to be indubitable, but can be suspected of being false. Descartes deals with mathematical claims later in the first meditation and in the third meditation. Dubitability is a sufficient

condition for regarding a belief as false, and, therefore, for rejecting a belief; indubitability is a necessary condition, not a sufficient condition, for regarding a belief as true. What more is needed in order to show that a belief or first principle is true will be examined throughout the remainder of this book. Through the employment of hyperbolic doubt in the first meditation, Descartes has the means to reject empirical beliefs and putative first principles; but he does not yet possess the means to accept a first principle as true.

The Attack on Those Principles Upon Which All His Former Beliefs Are Based

Although he informs us that he will begin the first meditation by attacking those principles upon which all his former opinions rested, no first principles are articulated in this meditation. Further, there is no text in Descartes' writings which explains this omission; so we are left to figure this out from other things which he says. I turn to this problem now.

It is clear that, although critically examining putative first principles which guide the senses is Descartes' aim at this point in the first meditation, it is also clear that the consideration of such principles, even if he were to know what these principles are, would not, in and of themselves, be able to instruct him as to whether the beliefs which rest upon these principles, and the principles themselves, should be accepted. Putative first principles must be tested for reliability, and Descartes correctly recognizes that only a critical assessment of beliefs countenanced by a particular principle can inform him of the reliability of the putative first principle. His attention, therefore, at least initially, must be on those beliefs which are countenanced by a putative first principle. Once again, if the beliefs countenanced by a putative first principle are shown to be dubitable and uncertain, then the principle which countenanced those beliefs will be treated as dubitable and uncertain, as will all beliefs which fall under this principle.

But how to grasp the principles which guide the senses? At each stage of his investigation in the first meditation, beliefs will be grouped according to a set of common features, for example, those dealing with perceptions of objects which appear to be very far away or hardly perceptible, or those dealing with perceptions of objects which appear to be parts of Descartes' body, or very close to him spatially. The principle in each case will articulate the common features which this group of perceptions shares. Once any of the beliefs admitted through a principle can be shown to be dubitable and uncertain, the principle will be rejected, as well as all beliefs accepted through this principle. His examination of the