

DESCARTES THEORY OF THE MIND IN THE MEDITATIONS

MASTER OF ARTS THESIS IN THE HISTORY OF PHILOSOPHY RESEARCH GROUP

FACULTY OF PHILOSOPHY

ERASMUS UNIVERSITEIT ROTTERDAM

BY

BARIŞ KENNEDY

BACHELOR OF ARTS (HACETTEPE, 2009)

COMPLETED FOR 18 ECTS ON JULY 31ST 2012

prof.dr. J.A. van RULER (supervisor)

dr. T. de MEY (adviser)

61,866 words (including footnotes)

TABLE OF CONTENTS

Table of Contents.....	1
List of Abbreviations.....	3
INTRODUCTION.....	4
CHAPTER 1 – THE STRUCTURE OF DOUBT IN DESCARTES’ <i>MEDITATIONS</i>	9
1.1 The “Building Block” View of the Meditations.....	11
CHAPTER 2 – SENSES AND THE ARGUMENT FROM DREAMS.....	17
2.1 Wilson’s Treatment of the Argument from Dreams.....	18
2.2 Reformulating the Argument from Dreams: Sense-Veracity.....	28
2.3 Some Further Considerations on Sense-Veracity.....	29
2.4 Madness, Dreams and the Senses.....	35
2.4.1 Refining Madness.....	38
2.5 Conclusion: Sense Perception in the Meditations.....	41
CHAPTER 3 – LIMITS OF THE IMAGINATION.....	44
3.1 The Wax and the Imagination – The Second Meditation.....	45
3.1.1 The Thinking Thing.....	45
3.1.2 The Mutable Object.....	48
3.1.3 The Same Wax.....	53
3.1.4 The Critique of the Imagination.....	55
3.2 The Essence of Corporeal Things – The Fifth Meditation.....	57
3.3 Imagination and the Senses in the Sixth Meditation.....	61
3.3.1 Frontiers of the Imagination.....	61
3.3.2 A Body Joined to the Mind.....	63
3.3.3 The Imagination as the Faculty of Daily Life.....	67
3.3.4 Faculties of the Mind.....	70
3.3.5 Laughable Doubts.....	72
3.4 Conclusion: The Imagination.....	75

CHAPTER 4 – THINGS THAT CANNOT BE DOUBTED: MATHEMATICS, THE EGO AND GOD.....	78
4.1 The Truths of Mathematics in the First Meditation.....	80
4.1.2 A priorist and a posteriorist construction of simples.....	82
4.1.3 Enter the Omnipotent Deceiver.....	84
4.2 Some Problems Regarding Clear and Distinct Perceptions, Propositions of Mathematics and Commentary.....	88
4.2.1 “Nothing in the First Meditation is Clear and Distinct”.....	88
4.2.2 The Naive Empiricist.....	92
4.2.3 The Intellectual and Sensory Simples.....	95
4.3 Me and the Wax – <i>Sum</i> and <i>Res Cogitans</i> in the Second Meditation.....	98
4.3.1 <i>Sum</i>	98
4.3.2 <i>Res Cogitans</i>	99
4.4 God and the World.....	101
4.4.1 The Metaphysics of the Meditations.....	104
4.4.2 Circles.....	106
4.4.3 Epistemological Optimism.....	108
 CHAPTER 5 – THE SCIENTIFIC CONFIGURATION OF THE FACULTIES.....	 111
5.1 Gaukroger’s Distinction between the Intellect and the Imagination.....	113
5.2 Descartes’ Understanding of Geometry as an Example of Alignment of Sciences to Faculties.....	119
5.3 Sense-Perception between Representation and Misrepresentation.....	123
 CONCLUSIONS REGARDING THE MIND, ITS FACULTIES AND EXISTENCE.....	 127
References.....	133

LIST OF ABBREVIATIONS

The following abbreviations are used in the footnotes and the references:

- AT Descartes, R. (1964-74). *Oeuvres de Descartes*. (Vols. I-XI). (C. Adam, P. Tannery, Eds.) Paris: Libraire Philosophique J. Vrin, cited by volume and page.
- CSM Descartes, R. (1984). *The Philosophical Writings of Descartes* (Vols. I-II). (J. Cottigham, R. Stoothooff, D. Murdoch, Trans.). Cambridge: CUP, cited by volume and page.
- CSMK Descartes, R. (1991). *The Philosophical Writings of Descartes. The Correspondence*. (J. Cottigham, R. Stoothooff, D. Murdoch, A. Kenny, Trans.). Cambridge: CUP, cited by volume and page.
- DDM Frankfurt, H. (1970). *Demons, Dreamers and Madmen*. Indianapolis: Bobbs-Merrill, cited by book and page.

INTRODUCTION

René Descartes (b.1596-d.1650) and his *Meditations on the First Philosophy* (1641) occupy a pivotal role in the history of philosophy. Descartes' celebrated system, establishing the existence of the self, of God and the external world, as well as the relations between the mind and the body has been considered the foundation of modern philosophy. The Cartesian system placed the knowing subject; the human being, in the centre of the universe, displacing the assumptions of previous ages. The antiquated Aristotelianism of the schools was placed under considerable strain through the *Meditations*. Descartes here provided a compelling defence of the scientific worldview. The *Meditations* made a compelling rationalistic case. It highlighted the role of the thought-experiment. It modernised scepticism. It influenced subsequent great philosophers.

Anyone who is remotely familiar with the history of modern philosophy will have heard at least some of these claims. But are they true, or even relevant?

What makes the *Meditations* more pivotal than Plato's *Republic* or Wittgenstein's *Philosophical Investigations*? Does Descartes successfully establish the existence of the self, God and the world? If so, did modern philosophy need such an initiation? Can this type of philosophy be considered 'modern' today? Did Descartes have anything more than a passing interest in man's cosmological position? Is anything that is human even considered in the *Meditations*? Does not the *Meditations* make extensive use of the terminology of the schools? Is not Cartesian science a doomed project? Are not rationalism, scepticism and thought-experiments quaint phrases to which one no longer attaches any theoretical significance? Were not the subsequent great philosophers such as Leibniz, Locke and Spinoza, as well as many of Descartes' contemporaries highly critical of the philosophy of the *Meditations*?

These are some of the contemporary questions which spring to mind, when one debates the merits of the *Meditations*. Clearly a lot has been said regarding Cartesian philosophy and little has been settled. Fittingly, one might say, even the status of the *Meditations* as a unique work of philosophy has not been spared doubt; can we not find the arguments for the existence of the self and of God in earlier thinkers?

This is not the controversy this thesis intends to take up. There is another type of debate over the *Meditations* to which this essay belongs by virtue of not being directly concerned with the historical significance of the *Meditations*. This debate regards the analysis of the argumentation, rather than the conclusions and consequences of Descartes' work.

It could be said that the analysis of the *Meditations* is informed by two major concerns regarding the work. The first is the ambitiousness of the *Meditations*. The second, related concern is its ambivalence.

The *Meditations* is nothing but ambitious; in it Descartes resolved to settle the metaphysical issues of his day. That he is not so clear or dependable about what exactly the metaphysical issues of the day were is only one factor which contributes to the ambivalence of the work. But the style of the *Meditations* betrays more of its ambitiousness than anything its author may have said about it; the *Meditations* is supposed to take us from the strongest conceivable form of doubt, to an improved but familiar confidence in reason.

So the *Meditations* is a complete *reductio ad absurdum* of scepticism; it will show that the strong sceptical position are self-refuting. In doing so, it will also prove God. Is it therefore also a refutation of atheism? But some certain knowledge, for example of the self, is supposed to be established before the proof of God; so knowledge is not completely dependent on God. Perhaps the proofs of God are just a distraction from the real scientific agenda of the *Meditations*?

The ambivalent ambitiousness of the *Meditations* has provided a wealth of readings of it, which have in turn contributed to the lack of consensus over what the work is supposed to achieve. What has never been doubted however is how ambitious the work is; and with good reason. Even at present, when philosophy has grown distant to such questions, one cannot but be excited at the prospect of a final answer to questions such as whether scepticism is tenable, whether certain knowledge is possible and whether God exists. The *Meditations* is still worth studying then, if only to better appreciate the impossibility of metaphysical solutions.

The question being squarely settled as the success of the major metaphysical questions of the *Meditations*, a consensus has become established in the English language literature to treat individually of certain arguments of the *Meditations*. The arguments, such as the argument from dreams, the proof of the self and the proofs of God are taken up individually, logically analysed and evaluated as to what they contribute to the metaphysical targets of the *Meditations*.

While this treatment of the *Meditations* has given us some outstanding analyses of the individual arguments; it has almost completely ignored other arguments in the *Meditations*. The main, consistent argument of the *Meditations*, which has more to do with providing a cogent and functional portrayal of the human capacity for knowledge than to argue certain general metaphysical questions has come to be ignored.

There might not have been a great need to criticise the building-block view of the *Meditations*, as I will call the tendency to read the work as consisting of a small set of major doubts and solutions, had this approach not contributed directly to the idea that the *Meditations* is a metaphysical work, aiming at the solution of the general problems of metaphysics. It is against such an unbalanced and textually unwarranted reading of the *Meditations* that I intend to argue against. I claim that the *Meditations* is an epistemologically informed work which is read more profitably as establishing a certain structure of the mind.

This new reading is more than capable of integrating the main interests of the building block views. Both the argument from dreams and the question of whether the doubts of the First Meditation are comprehensive are extensively dealt with in the thesis. The interpretation is not only relevant to the analyses of the arguments themselves, however. What emerges from a new consideration of the argument from dreams and of hyperbolic doubt is a renewed understanding of sense-perception and the intellect as faculties of the mind.

There is a third faculty of the mind expressly dealt with in the *Meditations*, which has not been treated adequately by the building block interpretations. This is the imagination. The analysis of the imagination as a faculty is perhaps the single most important aspect of this thesis. The imagination is pivotal for both major arguments to be found below. Its establishment shows what a major part of the *Meditations* has been ignored due to the reduction of the work to a few easily delimited and titled arguments. Furthermore, the imagination as a faculty functions with great explanatory power as part of the structure of the mind; it not only explains our common and often mistaken perception of the external world; but also the mechanism for self-preservation which Descartes' ascribes to the mind-body union.

The intellect, the imagination and sense-perception are the three faculties of the Cartesian mind. The Cartesian faculty, I argue is a function of the mind which has a set of proper objects which it can access alone. While the eternal truths, such as those of mathematics furnish the set of proper objects of the intellect, the mind-body union belongs to the imagination. The set of proper objects of sense-perception includes raw external sensation. The imagination is a peculiar faculty which infringes on the proper objects of the other two faculties. We owe our daily and intellectually inexplicable perception of the world to the involvement of the imagination, particularly with the objects of sense-perception.

For scientific purposes, which are very important for Descartes, the infringement of the imagination on the objects of the intellect must be prevented, in as much as it is possible. I claim that Descartes' geometrical method may be read as providing such a delimitation. This claim is important in that it

shows that rather than arbitrarily assigning objects to faculties and faculties to human functions, the structure as presented in the thesis is consistent with the Cartesian system at large. Even for scientific purposes, one needs to be aware of how the mind functions.

One important aspect of the Cartesian system which is not given as deep a treatment in this account as it has been in many others is God. I believe the structure of the mind as outlined here does not depend overtly on the proof of God's existence. I think that knowledge of this structure of the mind belongs to the small set of certainties, such as the existence of the self and as claimed below, the truths of mathematics, which can be established before the existence of God. The main argumentation for the establishment of the three faculties focuses on *Meditations* One and Two, whereas it is only in the Third Meditation that the first proof of God is offered. However, the structure of the mind is perfectly compatible with the existence of a non-deceiving deity; and it has the additional benefit of explaining why errors are nevertheless made by the human being despite the immense goodness of God.

The structure of the mind reading advanced here puts Descartes' *Meditations* in a rather unfamiliar but more agreeable light. We have before us a work of philosophy that is more internally constant and more straightforwardly in keeping with the broader intellectual pursuits of the author than the narrower building block views have made it seem. Framed by its theory of the mind, the doubts of the *Meditations* do not seem pointlessly strong. The theory of the mind escapes the common charge of circularity as it relies on truths established before God. The task of establishing something stable in the sciences now seems more promising now that the faculties relevant to the various sciences have been analysed.

More importantly the *Meditations* seems to have been freed considerably from certain constraints it was thought to be imposing or operating against. The question of whether it is a work of scepticism or dogmatism is less important now that a natural explanation for error has been provided. Whether it was written against the atheists or an atheistic work itself is a demonstrably tangential issue and is better resolved through historical, rather than logical analysis. Most fundamentally, the notorious Cartesian dualism between mind and matter, or the soul and the body, appears much less damning from the perspective of a structure of the mind reading.

While keeping Descartes' claim that the intellectual is the only essential part of the self intact, the examination of the thing which exists reveals that it most certainly contains faculties of the mind other than the intellect. These two other faculties function towards external corporeal existence. Therefore the claim is that although the self may be essentially intellectual, under the assumption that an external world exists, which is an assumption that is derived from faculties other than the intellect,

the mind has faculties which demonstrably belong to it. Far from being a strict division of the mental from the material, it is only the fact that the external world remains an assumption which keeps the argument from being circular. If the external world exists, it is in sense-perception and the imagination which are in turn in the external world, i.e. the human body.

I do not desire to carry the Cartesian enquiry to its very limits and to ascertain whether the view presented above is ultimately correct or not. The point is that it is not trivial. There is more to be found in the *Meditations* than the main arguments which meet the eye at the first reading and the simple schema which emerges when one first summarises the argument. There may be found in it not only more sophisticated grounding for modes of perception and existence, but a whole theory which rests on the interplay of these two categories. If the theory of the mind reading is true, Descartes is modern in a different sense than the building block views, or other views which have concentrated on the positions of the self, the world and God have taken him to be. The theory of the mind reading of the *Meditations* makes Descartes a precursor of the concentrated enquiry into human reason and more immediately connects him with the philosophical tradition of his many intellectual successors.

Structure of the Following Chapters

The following five chapters introduce the building block views, the three faculties and the connections between the theory of the mind reading and Cartesian science. Chapter 1 introduces a prototype building block view, relying on an article by Michael Williams. Chapter 2 takes up the issue of the argument from dreams and the faculty of sense-perception and makes great use of the analysis of the argument from dreams by Margaret D. Wilson. Chapter 3 concerns the imagination throughout the *Meditations*, with the most significant argument being the example of the wax in the Second Meditation. In Chapter 4 we come to the intellect, and indirectly to the scope of the doubts of the First Meditation. Taking up the discussion of First Meditation doubts and related concepts by Harry G. Frankfurt, I try to show that the First Meditation does not introduce universal doubt; in particular the propositions of mathematics remain certain. Chapter 5 concentrates on the connections between the faculties and Cartesian science, particularly geometry. I use an article by Stephen Gaukroger to demonstrate the non-trivial nature of this connection, and an analysis of Descartes' *Geométrie* by Henk Bos to suggest how the faculties of the mind may be rendered functional in scientific considerations. Finally, in concluding comments, the advantages of reading the *Meditations* as arguing for a particular structure of the mind and the consequent novelties in the Cartesian position are enumerated.

CHAPTER 1 - THE STRUCTURE OF DOUBT IN DESCARTES' *MEDITATIONS*

Not many philosophers begin their magnum opus with the determination to upset all of their received opinions. Many outline an opposite position to be attacked, but this is seldom presented as the initial position of the narrator himself. Indeed, many philosophical works are as far removed from the narrative form as possible.

That Descartes' *Meditations on the First Philosophy* violates this common pattern is one of the problems, aside from the analysis of the actual arguments, which has caused a great deal of interpretative controversy. What is the philosophical position of the meditator in the First Meditation? Which of the Cartesian concepts introduced later on can be ascribed to this meditator? Can the conclusions of the *Meditations* be used as a tool to understand the doubts which initiate the project or would such a reading be a betrayal of Descartes' methodology? Conversely, would it be naive to suppose that the doubts introduced are universal, or at least widely applicable to the problems of epistemology, rather than being Descartes' idiosyncratic inventions for advancing a metaphysical agenda?

As I shall argue below, such considerations colour the interpretation of the *Meditations* by many modern commentators, as well as characterising responses by Descartes' contemporaries. It must be stressed that these considerations are often far removed from the logical analyses of the arguments proposed by Descartes in the text of the *Meditations*.

Here lies the root of another problem. One could suppose that a philosophically critical treatment of Descartes' sceptical arguments, the argument from dreams for example, ought to have nothing to do with the formal structure of the *Meditations*. Yet, the argument from dreams, or any other argument for doubt, clearly is not an end in itself for Descartes. All grounds for doubt are supposed to have been removed at the end of the *Meditations*. Meanwhile the narrator and readers alike are supposed to have arrived at a different, improved metaphysical position. We have therefore to ask what has changed during the time we entertained the argument from dreams as sound –in this case almost throughout the entire *Meditations*, if one takes Descartes literally.¹ We cannot simply provide a theoretical treatment of the argument from dreams as a standalone conclusion, if we are to do Descartes any justice.

¹ Cf. CSM II 61, AT VII 89. It is only in the concluding remarks of the Sixth Meditation that the withdrawal from the argument from dreams takes place: "Accordingly, I should not have any fears about the falsity of what my senses tell me every day; on the contrary, the exaggerated doubts of the last few days should be dismissed as laughable. This applies especially to the principle reason for doubt, namely my inability to distinguish between being asleep and being awake."

Hence the questions in to the form of the work become important once more as a means of inquiry into Descartes' aims, the connections between his different philosophical positions and the identification of the premises and principles for each of the arguments.

This problem of the circularity of form and content has led to the rise of a broadly undeclared consensus among many Descartes scholars to treat the *Meditations* as a rigidly structured series of arguments. Such a view has the obvious advantage of mitigating the importance of form and allowing for the demarcated treatment of individual arguments. According to this view, Descartes introduces one doubt after another, each raising a greater sceptical challenge than the last, until one can posit nothing with certainty. Then, beginning with an infinitesimally small piece of certainty, that the ego exists, Descartes builds up his chain of certainty to include God and the external world. By the end, not only has the sceptical position been discredited through the negation of every doubt, but we have also gained valuable insight into the principles of our knowledge, which principles the sceptical position would have us doubt.

This very high view of the *Meditations* is ascribed to Descartes as his aim. Few modern commentators agree with its success. Some even view it as a doomed enterprise from the start. These commentators are however all united in taking up the criteria for judging the merits of the *Meditations* according to the stratified, symmetrical viewpoint briefly outlined above. I shall henceforth refer to this reading as the *building block view* of the *Meditations*. I choose this label because the underlying idea, associated with the imagery of building blocks is that Descartes takes down one edifice, piece by piece and uses the pieces to build a new, better one. What the critic is ultimately concerned with is whether the blocks were in the wrong place originally, whether they are in the right place once replaced by Descartes and whether they lend enough support to whatever will be placed on top of them.

I shall argue that the building block view imposes some very serious limitations on the *Meditations*, limitations which a study of the text and of the arguments does not always justify. Many of the arguments of the *Meditations* upon closer inspection reveal themselves to be more organically connected with each other and the whole work than they are portrayed by the building block readings. The treatment of the faculties of the mind in the *Meditations* forms a superstructure to which most, if not all major arguments in the work can refer.

I shall initially concentrate on the doubts of the *Meditations* and their treatment by building block readings. This choice is informed by many reasons, not the least of which is the special position attributed to the First Meditation in literature. Descartes is after all famous for beginning by throwing everything into doubt. In the context of the doubts of the First Meditation, it becomes very

clear to what a great extent the problems regarding the form of the *Meditations*, outlined above, are involved in various readings of the *Meditations*. The predominance of these considerations, in trying to account for certain arguments in the First Meditation, has resulted in many substantial points in the overall argument being ignored. The building block readings have led to an overemphasis on the plausibility or acceptability of the two principle arguments for doubt –dreams and the omnipotent deceiver- at the expense of showing what significant roles the terms of their formulation play in the *Meditations*.

It may be said that a new reading of the doubts of the *Meditations* would posit an attack on foundations that was much cherished by Descartes himself. The intention of such a new reading is not to posit something completely new but to show that there are certain hidden points in a thing so philosophically familiar as the Descartes' *Meditations* which become clearer upon more concentrated inspection. If this much is accomplished, one may claim to have provided a Cartesian reading of the *Meditations*.

1.1 The "Building Block" View of the *Meditations*

In his essay *Descartes and the Metaphysics of Doubt*, Michael Williams wrote:

Descartes' *Meditations* recounts a journey from pre-philosophical common sense to metaphysical enlightenment, each step of which is taken in response to an encounter with scepticism. The first encounter induces a provisional doubt, clearing Descartes' mind of prejudices which would blind him to new truths. This allows subsequent encounters to lead him to new certainties, by which the provisional doubt is gradually overcome, though not of course in a way that simply returns him to his initial position.²

Williams makes it clear that this is the strongest possible form for the *Meditations*: "It is essential to Descartes' project that the story be told this way."³ According to Williams, unless we can see Descartes' doubts as arising naturally, which term he employs in the essay to mean metaphysically non-committal, far from being a response of natural reasoning against scepticism, the *Meditations* is actually a work that introduces and strengthens a very specific type of modern scepticism. This, of course, cannot be taken to be Descartes' intention. Hence the *Meditations* is a spectacular failure in that it strengthens or broadens the sceptical position it is set to argue against. All this becomes clear, according to Williams, once we see through the "illusion of naturalness" surrounding the doubts: "I

² Williams, M. (1998). "Descartes and the Metaphysics of Doubt". In J. Cottingham (Ed.), *Descartes* (pp. 28-49). Oxford: OUP. p. 28

³ *Ibid.* p.28

think, however, that Descartes' doubts are much less natural, much less metaphysically non-committal, than they are made to seem. In this essay I want to explain how this is so, and how the illusion of naturalness is created."⁴

Williams' initial layout of what Descartes wants to accomplish in the *Meditations* and how it is supposed to be accomplished formally is a very good example of the building block view of the *Meditations*. The *Meditations* has to be read in a special way: there is something essential to the Cartesian project in the way the story is told. It rises or is supposed to rise from the ground upwards as an edifice. This reading gives us individual encounters with scepticism, leading eventually to "new truths" and "new certainties". Williams argues that Descartes provides us with no proper grounds to entertain such a reading of his work. Accordingly Descartes introduced some metaphysical points by fiat, but had to pretend that his doubts followed intuitively in order to cover his tracks. It is a failure on Descartes' part that he engaged in "metaphysical smuggling" which necessitates the cover story that is the building block view. If we refuse to humour Descartes (or perhaps subsequent commentators) and decline to maintain "the illusion of naturalness", then the entirety of the *Meditations*, its arguments and conclusions are transformed almost unrecognisably. A form of poetic justice is served when Williams observes in a concluding remark: "But, by a curious irony, metaphysical reflections connected with the very scientific advances that killed classical scepticism were in the form of giving rise to a new form of scepticism, in its way far more disturbing."⁵

I would argue that Williams came very close to suggesting that the building block view of the *Meditations* does not do Descartes' work enough justice, but failed to articulate this point because he uncritically chose to accept that a "natural" reading is essential to Descartes' project. "The First Meditation doubts must thus be 'natural', in the sense of metaphysically non-committal or at least non-controversial."⁶ This is due to two reasons, the first of which has to do with Descartes' aims, the second with his method. Regarding Descartes' aims:

The promise of a response to sceptical arguments will not be a point in favour of a system of philosophical ideas if those ideas help generate the problem in the first place, especially since the problems, once grasped, tend to be more compelling than any particular solutions.⁷

Unfortunately, Williams never goes into much detail regarding whether the sceptical problems generated in the *Meditations* are actually more compelling than any of the solutions offered to them. Notice the generality of problems and solutions. Williams implies that none of the sceptical

⁴ Ibid. p.29

⁵ Ibid. p.49

⁶ Ibid. p.28

⁷ Ibid. p.28

arguments raised in the First Meditation have been met with an equally plausible response. A symmetrical layout of the doubts and solutions, something which is characteristic of the building block view is implied here. This idea holds that for every doubt introduced in the *Meditations* there must also be provided, somewhere in the work, an analytical solution. It requires that every sceptical problem introduced in the work be dealt with overtly and on the same terms as the initial deployment. A case for which this does not hold is the argument from dreams, which in the Sixth Meditation is dismissed as laughable but not actually discussed or resolved, at least no further than the supposed negation of one of its initial premises. This is taken as an indication that Descartes has surrendered to the doubts he has raised, rather than for some reason chosen not to address them.⁸

Williams' second point on methodology, arguing for the "natural" reading is given as follows:

But, for Descartes, there is also a question of method. If, as surely is the case, the *Meditations* is meant to exemplify inquiry conducted according to Cartesian precepts, its argument must follow the order of reasons, at each stage depending only on considerations that have been explicitly avowed and validated. This means that metaphysics is precluded from playing a covert role in generating the initial sceptical problems.⁹

As has already been said, Williams thinks that Descartes' work fails badly on both these criteria. Its doubts are stronger than the solutions provided for them, some possibly remaining unsolved. Furthermore, by employing metaphysical terms and considerations in generating the initial doubts, Descartes' violates his own order of reasons. It must be observed that the second argument, regarding methodology, is closely conjoined with the first argument, regarding the aims of the *Meditations*. If the argument over methodology holds, on its own it hardly accomplishes much. One might simply ask why it is necessarily a criticism that Cartesian metaphysics should inform the entirety of the work, rather than a part of it. Why should a manageable metaphysics be precluded from playing a part in its own *début*? It would, as it were, amount to accusing a philosopher of being philosophical.¹⁰ Only if the first argument of the form that Descartes creates doubts which he cannot resolve holds, then Williams' attack on the *Meditations* becomes forceful. If both points are sound,

⁸ An alternative point of view might be presented as follows. If by the Sixth Meditation, the argument from dreams has become irrelevant, something in the preceding argument has established it does not matter in the context of human knowledge whether I can tell that I am dreaming or not, then Descartes may not be blamed for not resolving the sceptical argument from dreams. He may be criticised for not making its irrelevance clearer; but this has hardly the destructive effect on Descartes' chain of reasoning compared with the accusation that the argument from dreams remains unsolved as one puts down the *Meditations*. I try to provide such a perspective in Chapter 3, pp.58-60 below.

⁹ Williams, pp.28-29

¹⁰ This suggestion would of course be going against much of Descartes' own rhetoric regarding the natural order of reasoning in the *Meditations*, but surely the rhetoric over the *Meditations* ought not to be taken as the final expression of what the work is supposed to accomplish over the actual work itself.

Descartes' own metaphysics may then be seen as self-refuting. This type of metaphysics, raised to the position of methodology, creates sceptical problems which it cannot itself solve. This is clearly Williams' desired position.

Williams' two-pronged criticism of Descartes' arguments, and his point regarding how the *Meditations* essentially ought to be read, may be seen as a challenge to the building block view from the inside. If Williams' arguments hold, it becomes impossible on the basis of the building block view to regard Descartes' major work as forming a consistent set of arguments. The building block view will be turning a blind eye towards too much. If the commentator insists on treating of the doubts singularly and without accounting for their alleged metaphysical colouring, he is simply taking up a discussion of the sceptical arguments as general epistemological problems and not as an idiosyncratically essential part of Descartes' work. If the congenial commentator cannot account for every doubt with a possible resolution to be found within the *Meditations*, then he will be proving that Descartes' work, and his reading of Descartes' work fail to achieve anything resembling their expressed aims.

Now, as there are two parts to Williams' challenge to the building block view; there may also be two broad types of reply. We have seen that Williams' criticism depends on two points, namely that Descartes raises greater doubts than he can resolve and that his initial doubting position is metaphysically charged. To deny Williams' criticism, or at least to mitigate it considerably, one can reject either foot of the argument. One may claim that Descartes' doubts are not actually greater than the proposed resolutions or that his initial position is not metaphysically charged.

I have indicated above that the first charge (doubts being greater than their resolution) is the stronger argument within Williams' criticism. It is also the more promising discussion philosophically. However, existing literature on Descartes, when it attempts to elucidate or strengthen some of Descartes' arguments, tends to raise problems for the second, methodological objection by Williams. Margaret D. Wilson's treatment of the argument from dreams and Harry G. Frankfurt's treatment of concepts of mathematics in the First Meditation will be discussed as examples below. What these two arguments have in common is a desire to strengthen Descartes' position in the *Meditations* so that the doubting position becomes plausible or natural, though not necessarily obvious. This indirectly serves as a refutation of the charge of "metaphysical smuggling." If the argument from dreams is reformulated to be more comprehensive and more suggestible by experience and commonsense, a task Wilson has attempted, then it becomes more difficult to claim that it is a

methodological, metaphysical device of Descartes' invention.¹¹ In similar vein, Frankfurt has attempted to show that the entire undertaking of doubt in the First Meditation taken as a self-conscious methodology is completely innocuous, provided that clear and distinct perceptions alone are not doubted.

This is all supposing that the doubts and the resolutions of such doubts in the *Meditations* can be symmetrically strengthened. I contend, however, that this is not possible. Such confidence in the ability to revise the *Meditations* seems to stem from an adherence to the building block view and the resulting treatment of the *Meditations* as a piece of machinery with replaceable parts. It is as though if one had a larger block in lieu of this piece and a cube here instead of a rectangular block, the edifice would stand on firmer footing.

That is not to say that all revisions of the arguments of the *Meditations* are in themselves intellectually worthless or fallacious. It is simply that each new interpretation in keeping with the building block view brings renewed force to some of the arguments of the *Meditations* while forcing other aspects of the work to be ignored or to take a backseat. The result is that one would keep reproducing an accepted reading of the *Meditations* of which one can catch a glimpse between Williams' lines and one which is always open to the sort of criticism carried out by Williams. The force of Williams' argument is clear: if indeed the *Meditations* is an attempt at what versions of the building block view take it to be, then it is a failure. It may, however be possible to formulate a reading which places more emphasis on the organic and conceptual aspects of doubt, rather than the mechanisms of the argument from dreams and the omnipotent deceiver. This can be displayed, I believe through a reading of the *Meditations* with emphasis on the establishment of, and interplay between the faculties of the mind. The imagination as an aspect of the mind is I believe particularly important in this respect and has most often been ignored.

In attempting this, I would like to discuss the treatment of the argument from dreams by Wilson and the problem of mathematical concepts in the First Meditation by Frankfurt. There are a number of reasons for proceeding in this way. The first is that in the treatment of their respective problems,

¹¹ This line of reasoning, which suggests that through rereading and reinterpreting the various points of the *Meditations*, we could save these parts from the charge of "metaphysical smuggling" has its own problems. It may be that every sceptical argument in the First Meditation could be strengthened based on what it is supposed to achieve within the work and through which subsequent arguments it is supposed to be resolved. But this plays into Williams' other argument, that the doubts raised are stronger than any possible resolution in two ways. The first is that the work of elucidating the doubts themselves suggests Descartes' kept them intentionally vague and weak, perhaps to give himself some elbow room past the First Meditation. Secondly, the attempt to show that the newly elucidated doubt is indeed resolved through a subsequent argument in the *Meditations* (which may in turn need to be elucidated) leaves the commentator open to the same charge as that brought to Descartes: their arguments are informed by further metaphysical considerations.

Wilson and Frankfurt do address genuine concerns within the structure of the *Meditations* and display considerable insight. The second is that both arguments form an indirect refutation of the charge of “metaphysical smuggling”. Finally, both arguments create problems for a general reading of the *Meditations* that probably outweigh the value of the solution they propose for the First Meditation problematic that is under discussion. In demonstrating this, I hope to demonstrate the limitations of the building block view of the *Meditations*.

CHAPTER 2 – SENSES AND THE ARGUMENT FROM DREAMS

The argument from dreams is a favourite sceptical argument. The question of whether he was the first to employ it aside, Descartes' use of the argument from dreams is misleadingly brief and the discussion of it in secondary literature discouragingly voluminous and diverse. To seize the sole advantage offered by this difficult predicament, we will below make use of the brevity of the original to display the argument in full, before going on to introduce Margaret Wilson's interpretation.

In line with my general thesis regarding building block views, I will try to show that Wilson's interpretation tries to satisfy the requirements of symmetry and naturalness. In doing so, it tries to strengthen the argument from dreams so that doubts about the existence of entire corporeal nature emerge from it. However, Wilson also tries to work into her account Descartes' dismissal of the argument at the end of the *Meditations*.

While it will be argued below that such a strong form of doubt is indeed considered in the *Meditations* in the example of madness, this is incidental. The main objection to Wilson's account, which she herself had anticipated is that to suggest that the argument from dreams casts doubt on entire corporeal nature is to reject one of the premises of the argument. This premiss is that there should have been some veridical perception of the external world in the past.

Based on this objection, it is possible to distinguish between two types of veracity and partly satisfy Wilson's requirement that the argument from dreams cast doubt over sense experience in general. The great advantage of the new "sense-veracity" reading is that it avoids the problem of correlating veridical experience with waking experience, therefore avoiding the necessity of taking the difference between dreaming and waking experiences as a standard of veridical and non-veridical perception. I suggest that since one sometimes has perceptions under conditions in which the senses would not be expected to function quotidianly, any seemingly unproblematic sense perception may in fact be the data of improperly functioning sense-perception.

This new reading of the argument from dreams allows us to differentiate between sense-veracity and object-veracity and to attribute the former to the faculty of sense-perception. The idea of a sovereign faculty of sense-perception, the data of which may be opened to doubt according to the degree of propriety or optimality of the engagement of the senses with their objects is very much in keeping with the *Meditations* textually. It has additional benefits in that it allows for the separation of the faculty of sense-perception from the imagination and that it allows us to waive the requirements of the building block view. According to this reading Descartes does not need to reject the argument from dreams completely, he only needs to warn against the possibility of errant

sensations. In so far as there is no presumed standard of veracity other than the proper functioning of sense-perception, there is no risk of smuggling metaphysical assumptions into the initial doubts.

I shall now begin by giving an overview of the argument from dreams and Wilson's treatment of the argument from dreams.

2.1. Wilson's Treatment of the Argument from Dreams

The argument from dreams, one of the pillars of the sceptical arguments of the First Meditation and one that Descartes characterised in retrospect as the "principle reason for doubt"¹, appears early in the First Meditation. It follows the establishment that senses deceive, though this cannot be said of them under ideal conditions. Following the corollary on madness and directly building upon the rejection of the supposition that he is mad, Descartes introduces the problem posed by dreams:

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 even 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!²

The meditator catches himself short in his rejection of madness: does he not from time to time have the same experiences he imputes to the mad?³ If so, what is the source of this confidence in the opinion that he himself cannot be mad, at least when he dreams? The commonsensical answer is that he can of course tell when he is awake:

Yet at the moment my eyes are certainly wide awake when I look at this piece of paper; I shake my 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.⁴

However, if dreams can fool us into believing certain sensations to be veridical, why should they not be able to fool us into believing that we are awake: namely when I shake my head to ascertain that I am not asleep or stretch out my hand deliberately and know what I am doing? The only mark to distinguish a waking state from a dreaming state it seems is to be found in the content of experience, which is precisely what dream perceptions may have in common with waking perceptions. Once more the meditator observes there is no easy way out:

¹ CSM II 61, AT VII 89

² CSM II 13, AT VII 19

³ Who among other things firmly maintain they are "dressed in purple when they are naked". Cf. CSM II 13, AT VII 19

⁴ CSM II 13, AT VII 19.

Indeed! As if I did not remember other occasions when I have been tricked by exactly similar thoughts while asleep! As I think about this more carefully, I see plainly that there are never any sure signs by means of which being awake can be distinguished from being asleep. The result is that I begin to feel dazed, and this feeling only reinforces the notion that I may be asleep.⁵

This is the sceptical argument from dreams. It seems to be of the following form:

- i) In dreams I have non-veridical sense-perceptions.
- ii) There is no way to distinguish between dreaming and waking states.
- iii) I sometimes dream.
- iv) I do not know whether I am dreaming now (ii and iii).
- v) Therefore I do not know whether my current perceptions are veridical (i and iv).

Thus interpreted, what the argument from dreams seem to cast in doubt is that the content of my current sensory experience, even under ideal conditions, cannot be trusted. The point Wilson observes against other commentators such as Moore, Malcolm and Frankfurt is that the content of this experience is not limited to the direct object of perception under ideal conditions. Thus, according to Wilson, the dreaming argument goes further than proving the doubtfulness of the propositions such as 'upon examination from up close, the tower *is* square' or 'I am sitting by the fire (close enough that its presence is given to me by more than one sense)'. The dreaming argument is supposed to "[call into question] the existence of *all* 'composites' or ordinary physical objects – not just any particular one I happen to be 'viewing' at a given time."⁶

Wilson continues by attributing an aim for Descartes in proposing the argument from dreams:

The question Descartes wishes to raise is not whether I can know that this or that sense experience is veridical, but whether I can know with certainty that the senses afford us any truth at all (apart from the reality of simples.)⁷

⁵ CSM II 13, AT VII 19

⁶ Wilson, p.18. Here is a brief summary of Wilson's argument: 1) Wilson claims that Descartes intends doubt to be cast over entire corporeal nature rather than the perceptions of particular objects. 2) The idea of finding marks within perception to differentiate between dreaming and waking experience is nonsensical. 3) This denial of the inability to find marks within perception is withdrawn at the end of the Sixth Meditation. 4) However this retraction does not amount to a denial of the position 'I cannot be certain that I am not now dreaming'. An alternative explanation is therefore needed. 5) Since there are no marks by which to distinguish a past deceptive experience with a similar experience at the moment, I have reason to believe that my present experience may also be deceptive. Hence a single deceptive experience in the past is sufficient to cast doubt on all waking experiences. 6) In this light the question is not whether or not I am awake, but whether waking experiences are real. (Cf. Wilson pp.18-26)

⁷ Wilson, p.18.

Thus, if we were to follow Wilson, my formalisation of the argument above introduces too much with premiss (i) “In dreams I have non-veridical sense-perceptions”. However, based on the paragraph of the First Meditation considered above, it is hardly possible to include talk of composites into the argument. In attributing the intention of doubting the reality of all composites to Descartes, Wilson has in mind the beginning of the following paragraph:

Suppose, then, that I am dreaming, 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 and such a body at all.⁸

Yet what is clearly stated here is merely a supposition that applies to dream states and not to the whole of sensory perception. It reflects premiss (iii) “I sometimes dream.” There is no indication here on Descartes’ part that composites are not real in waking perception. The whole argument thus turns on the inability to distinguish between waking and dreaming states. In such a case, whenever I think any composite must be real, for example when I stretch out my hand deliberately, it will occur to me that I might be dreaming. Therefore I cannot know whether composites are real or my perceptions of them veridical.

Wilson considers the search for marks by which one can determine whether one is dreaming or not “a nonsensical quest.”⁹ In this she is perfectly in keeping with Descartes’ avowal that there are no such marks. This was given as premiss (ii) above: ‘there is no mark to distinguish between waking and dreaming states’. But there is a major problem according to Wilson. While it is “because he doesn’t ‘see’ any such marks in the First Meditation that he is said to conclude that he can’t know for certain that he isn’t dreaming”¹⁰, this position cannot be attributed to Descartes because it is not in line with his own conclusion at the end of the Sixth Meditation. As Wilson puts it: “as is by now well enough known, he comes to *retract* the denial at the end of the last (Sixth) Meditation. That is, he comes to affirm that there *are* certain marks to distinguish waking from dreaming.”¹¹

Hence it seems that Descartes is barred from using a premiss such as (ii) above: “There is no way to distinguish between dreaming and waking states” on pain of self contradiction. Wilson says: “If ‘marks to distinguish dreaming and waking’ mean ‘marks by which to *tell whether* one is dreaming’ Descartes’ whole approach is vulnerable to the objection of absurdity and incoherence.”¹² The

⁸ CSM II 13, AT VII 19

⁹ Wilson, p.19

¹⁰ Wilson, p.19

¹¹ Wilson, p.19. Emphases in the original.

¹² Wilson, p.20. Emphasis in the original.

absurdity and incoherence by extension apply to those critics who see the inability to find marks by which to tell whether one is dreaming as being central to the argument from dreams.

We now have before us two big objections raised against the standard interpretation of the argument from dreams. First, Wilson argues, the argument is not about veridical perception. This does away with premiss (i): “In dreams I have non-veridical sense-perceptions.” Secondly, due to Descartes’ subsequent manner of progress in the *Meditations*, we cannot base the argument on the grounds that one cannot find marks with which to tell whether one is awake or dreaming. This puts considerable need for elucidation on premiss (ii) “There is no way to distinguish between waking and dreaming states.” Wilson’s strategy will indeed be to refute (i) and based on this refutation to significantly alter (ii).

Before going on to look at Wilson’s proposed reading of the argument from dreams, we should pause and consider the relevance of what we have seen for the building block reading and William’s challenge in the formulation of the problem and the proposed solution. Note that there is an overt reliance in Wilson’s problematisation of the argument from dreams on Descartes’ proposed “solution” to the problem of dreams in the Sixth Meditation. Wilson is keen to maintain the symmetry. Assuming that the final comments on the Sixth Meditation are *a fortiori* replies to the argument from dreams, Wilson suggests: “There are, however, grounds for considering a different reading of both the initial argument and the reply of the Sixth Meditation.”¹³ This way what is being said in the First Meditation and at the end of the Sixth can be kept in balance. Moreover, through the shift Wilson suggests, the emphasis is drawn away from the question of veridical sensation to a doubt of corporeal things. The argument from dreams should therefore be read as a refutation of “pre-philosophical assumptions about veridical sense experience” of the form “There is no sharp qualitative difference between the cause and the content of our experiences.”¹⁴ Wilson’s elucidation of the argument from dreams is an analysis of the argument that is directed towards commonsense assumptions itself and is related to another part of the *Meditations* with which it has a clear textual resemblance. Through this analysis the argument will be rendered a more substantial block in the edifice than it had hitherto been; it will have become natural and symmetric.

As we have seen, Wilson wants to do away with two contentions. The first is the requirement of an inability to distinguish between dreaming and waking states through marks in experience. The second is the supposition that what is rendered doubtful by the argument from dreams is the veracity of the particular sensation of an object that is being perceived. It turns out that the two

¹³ Wilson, p.20

¹⁴ Wilson, p.26 Note the connotations of “naturalness” introduced by the term “pre-philosophical”.

points are interconnected. Wilson's main line of argument comes down to the following observation: "I see no marks that would justify construing waking experience of physical objects as veridical, when I construe dream experience of physical objects as deceptive."¹⁵ To paraphrase: why should one have so much confidence in the veridicality of one set of perceptions and the non-veridicality of another set of perceptions given that the two sets of perceptions seem to form arbitrarily? Hence the question would concern waking experience and dreaming experience in general and not, for example, whether I am now dreaming that I am holding this book in my hand. If dreaming experience in its entirety is non-veridical and if I hold any suspicion that I might be dreaming right now, then the fact that I seem to have perception of a certain object under ideal conditions seems irrelevant. From dreams I become aware that I attribute reality to certain perceptions, while this turns out not to be the case. On this finding I may reason that those perceptions which seem very much veridical can turn out to be false.¹⁶ I may then conclude that the reality of all composite objects is doubtful. Wilson puts her point thus:

Here the source of doubt is not located in the problem of knowing one is awake; it is rather expressed in the claim that I cannot say *why I should unquestioningly regard waking experience of physical objects as real and veridical, when there are no marks to distinguish it from the 'illusions of dreams.'*¹⁷

What has here been affected is a rather interesting twist on the argument from dreams. The standard of veridical perception entertained by the meditator up until this point was perception under ideal conditions. Perception under ideal conditions had been identified with veridical perception. Therefore, if the further condition of the senses engaging their objects (i.e. being awake) applies to one of the conditions, as it certainly applies to perception under ideal conditions, being awake must also be a condition of veridical perception. But once we observe that the same types of perceptions are to be found in dreams and waking experiences alike, we must be prepared to accept that perception under ideal conditions, hence veridical perception, is also possible in dreams. There is no clear cut distinction between dreaming and waking experiences which runs in parallel to the distinction between veridical and non-veridical perception.

¹⁵ Wilson, p.22

¹⁶ One function of the argument from dreams is of course to challenge the "feeling" that I am now correct in asserting my perception x.

¹⁷ Wilson, p.23

Now to claim that there is no epistemological difference between the dreaming and waking perceptions of *a* book is quite problematic.¹⁸ This claim may be made more plausible, if as Wilson intends, it is seen as applying to waking and dreaming experiences *in general* and not regarding the perceptions of a *particular* object. However, this is unfortunately not the case.

Suppose that we do not grant the point that since same types of perceptions seem to occur when awake as well as when asleep, ideal conditions and veridicality are satisfied in both cases. Since being awake is by definition opposed to dreaming, it is possible that senses are only engaged with their objects when awake; satisfying a condition for ideal perception. What would then one do with dreams which contain the same type of perceptions as obtained under ideal conditions, without satisfying a requirement for sense engagement obtaining?

These two conditions for veridical experience are then incompatible. Since it seems absurd that I should forgo the requirement of engagement of the senses with their object for veridical perception, it seems that the example of dreams seems to force me to forgo perception under ideal conditions. By this interpretation, the argument from dreams would prove that there are instances of content of perception under ideal circumstances obtaining without what seems a necessary condition for such perception. This is the classical interpretation of the argument from dreams according to which the reliability of perception under ideal conditions is cast in doubt. It is clear that this interpretation relies heavily on the content of perception under ideal circumstances: something is represented to the senses with no indication of any natural limitation of the latter. Recall that perception under ideal conditions occurs when one concentrates on *the* object of perception. From here it is a clear conclusion that the argument from dreams concerns the experience of a single object, such as that I am holding a book in my hands, rather than a doubt of corporeal things in general, as Wilson would have it. It shows that we cannot be certain of having a perception of any one object under ideal conditions.

This is not the end of the story however. In Wilson's defence, one might observe that there is a *non sequitur* in the resolution of the conundrum outlined above.¹⁹ Though we may consider the natural response to the incompatibility of engagement by the senses and the presence of (content of)

¹⁸ If this were the case we would speak of "the dreaming and waking perceptions of *the (same)* book". Here, strangely enough, the book can be identified through sense-perception, regardless of its physical presence or absence.

¹⁹ Formalised, the argument might be presented as follows. Where DA stands for the argument from dreams, PIC for perception under ideal conditions and SE for engagement by the senses:

- 1) Veridical perception obtains iff PIC and SE.
- 2) In DA the waking state PIC and SE.
- 3) In DA the dreaming state PIC and not SE.
- 4) Therefore in DA veridical perception obtains for the waking state and not for the dreaming state.

perception under ideal circumstances is to forgo the requirement of ideal conditions for veridical perception; dreaming is actually compatible with perception under ideal conditions. What it is not compatible with is the requirement that the senses be engaged with their object. Therefore, in any argument relying on a distinction between dreaming and waking states dropping the requirement of perception under ideal conditions, so as to preserve the supposedly more fundamental requirement that the senses be engaged with the object of sensation, seems arbitrary. This amounts to insisting that whenever perception under ideal conditions obtains, one is awake; which is precisely what the argument from dreams is supposed to counter. If anything, it should be the other way around and we should drop the requirement that the senses be engaged with the object. If perception under ideal conditions is to remain our standard for veridical perception we simply cannot differentiate between waking and dreaming experiences in terms of their veridicality. This is not because the object of my perception may not be as it appears to me, but because I can never be sure whether I am engaged in perception *per se*. Hence Wilson's conclusion that any perception (under ideal conditions) common to waking and dreaming states, such as those regarding physical objects, or anything that is *prima facie* open to engagement by the senses may prove deceptive, in the sense that they may not be sense-perceptions involving the faculty of sensation at all. If we stipulate there are objects that may only be perceived with the senses (which we do with corporeal objects), we may never be sure of their existence, because we do not have the guarantee that the senses are indeed engaged whenever they seem to be engaged.²⁰

What Wilson sees as the solution to the problem of dreams, provided at the end of the Sixth Meditation then fits nicely into this account. If one claims that there actually is a difference between the structure of perceptions in dreams and those of waking life, such that the latter "fits into the whole course of his life", then essentially one is providing a third criteria to differentiate between dreams and waking perceptions.²¹ The continuity is assured by the engagement of the senses with their object (so that necessary conditions for veridicality obtain) and not necessarily because every sense-perception has been acquired under ideal conditions.²² This argument will of course have

²⁰ In other words, we have bit the bullet and accepted that there can be dreaming and waking perceptions of the *same* book. Since the perception *in absentio* of this book is now a necessary condition for the truth of this proposition, entertaining doubts about the reality of the corporeal world and the stability of the epistemological rules which apply to it has become a much easier game.

²¹ Wilson, p.23

²² Indeed the idea seems to be that with the introduction of the standard of continuity the conditions under which sensory perception takes place would become a less than crucial variable. Consider Descartes' example of a man appearing suddenly before me in a dream. (cf. CSM II 61, AT VII 89-90) Wilson observes on this point "the joining together of waking actions is closely connected in Descartes' mind with the idea of spatio-temporal unity in what is observed." (Wilson p. 19) A continuous perception may be closer to or further away from ideal conditions, such as when one approaches the tower one is beholding, or moves away from it. The simple fact that "towers which appear round from a distance turn out to be square from close by" has not changed.

behind it the whole force of what has been said in the *Meditations* regarding sense-perception, clear and distinct perception and the like.

One could object to this account saying that unless one sees the distinction between waking and dream experience as that between veridical and delusive experiences, there remains no real distinction between waking and dreaming. Therefore we might always be dreaming, the view in the discussion Wilson ascribes to W. H. Walsh and rejects.²³ At first sight, there does not seem to be a reason to reject such a view however, since Descartes' sceptical argument turns on our inability to distinguish sleeping and waking states. This inability is captured by the supposition that we may always be dreaming. This is an objection Wilson has anticipated:

Surely, it will be argued, if I say 'of course I'm awake,' and then go on to say, 'but the objects of my experience, my beliefs about what is in front of me, might be no more real and true than the phantoms and illusions of dreams,' then I have simply taken back with one human hand what I have given with the other.²⁴

In responding to this problem Wilson argues that the argument from dreams does not cast into doubt our awareness of being awake in the sense that it proposes we might undergo the ordinary experience of waking up in the near future. The initial confusion between the waking and dreaming state and what it entails for perception is summarised by Wilson as follows:

The idea is not that in the ordinary course of things I may come to realize this is all a dream; it is rather that the ordinary way of coming to think one was dreaming may not reflect a genuine distinction between what is merely imagined or dreamed, and what is really perceived.²⁵

Here, Wilson is once more expounding on the point that whatever reason we may have to differentiate between dreams and waking states, this does not have a bearing on Descartes' argument from dreams. It is not the case that our inability to impute veridical sensations to waking

Therefore, the standard of perception under ideal conditions would no longer apply as unequivocally to differentiating between waking and dreaming states, once continuity is introduced in the Sixth Meditation and the degree of 'idealness' is taken to be a variable subsumed under continuity.

²³ Wilson, p.13

²⁴ Wilson, p.25

²⁵ Wilson, p.25. I take this passage to stand in support of my reading of Wilson's argument. There are it seems two problems with dreams. The first is the much discussed problem regarding the epistemic quality of dream images. "The ordinary way of coming to think one was dreaming" then is essentially the realisation I have been having sensations of objects which I think do not exist. The second problem, on which I think Wilson's account relies is that I should have any perceptions at all (regardless whether its object exists or not) without the accustomed use of the senses or sense organs (while asleep). How can I be sure that any object which is available to me through the senses can be perceived by me at all, if I cannot be sure whether I am using my senses? Hence it is the *perception simpliciter* of all composite objects and not the *veridical perception* of an individual (composite) object that is at stake.

states instead of dreaming states will suddenly come to an end, as the ordinary dreaming experience comes to an end when one is startled awake. The point is that being awake simply does not guarantee veridical sensations, even if one can be absolutely certain that one is awake. It is not requisite to posit that we might always be dreaming.

There is a second, similar objection that Wilson has anticipated, the force of which she does not quite manage to mitigate as much as the first one. The objection runs that the argument from dreams necessitates a distinction between waking and dreaming states on grounds of veridicality. Since the argument from dreams begins with the premiss that I have in the past observed *certain* experiences to be deceptive, it is requisite that *certain others* have been found veridical. Such a standpoint is necessary for the truth of the premiss. To go on to conclude that all my experiences may have been deceptive simply runs counter to the premiss that certain experiences were deceptive (because certain others were not). We therefore have an argument in which the conclusion “all of my perceptions may have been defective” contradicts a hidden premiss “some of my experiences were veridical or indubitable”. Wilson puts the problem in the following terms:

I have in the past come to believe that certain experiences, namely dreaming experiences, are delusive, *in contrast to waking experiences which I took to be veridical*. In other words, the supposition that dreaming experiences are delusive is still correlative to the supposition that waking experiences are veridical – even though we are not now claiming to *know* that these experiences are delusory, these veridical.²⁶

In fact, the conclusion of Wilson’s own argument is that we cannot differentiate between dreaming and waking states, let alone label one as veridical and other as delusory. Hence insofar as there is a suspicion that dreaming perceptions may be deceptive, there is a suspicion that any experience may be deceptive. This conclusion is rejected if some experiences, namely waking experiences were labelled as veridical; which is requisite if dream experiences are to be deceptive.

This objection is so strong, however, it threatens to completely destroy the argument from dreams if it is of the form Wilson is suggesting. Not only does it seem possible to differentiate between dreaming and waking states, the distinction is actually over grounds of veridicality. We can differentiate between being awake and dreaming because if the former is the case, I have veridical experiences, if the latter is true I have deceptive experiences.²⁷ Therefore if the argument from dreams is to have any force as a sceptical argument, it must be so construed that there are no other ways in which one can differentiate between dreaming and waking states (in terms of content). This

²⁶ Wilson, p.26

²⁷ Speaking in purely logical terms. In terms of perception content, such an attempt at characterisation would be “nonsensical”, as Wilson puts it.

is delivered in the standard argument as the lack of marks with which to tell whether one has a waking or dream perception. The lack of marks to distinguish the two states is therefore the centrepiece of the argument, despite Wilson's attempts to remove it from its pivotal position.

It is unfortunate that having raised this objection to her own interpretation, Wilson cuts off the argument, claiming that "it doesn't really matter for Descartes' purposes what the ultimate resolution of the 'bounds of sense' issue may be."²⁸ We are told that the First Meditation does not provide arguments for final philosophical positions but only as such that contribute to the aim of raising doubts. That so much philosophical attention has been given to these arguments is a testament that they do manage to raise doubts. Finally we are told that Descartes' rejection of the certainty of sense-perception is not based on the argument from dreams, but on the concept of clear and distinct perception which cannot be met by sense-perception.

I find it strange that Wilson would offer us such a strong revision of the argument from dreams only to withdraw from it at the first strong objection she anticipated. Her revision is so novel as to actually make one of the seeming premises of the argument, that there is no way to distinguish between dreaming and waking states, the conclusion. From this conclusion she derives what she attributes to be Descartes' intended final conclusion from the argument from dreams:

But if I have reason to suppose that my waking experience may be deceptive (thoroughly delusory), I have reason to doubt the existence of physical objects (for at the present we are supposing this experience to be the best foundation for our belief in physical objects).²⁹

I think that Williams' objection to the idea that the argument from dreams is supposed to cast doubt on specific, allegedly veridical experiences is justified. I also agree that the argument from dreams is supposed to cast doubt on composites or at least the concept of the composite as a means of organising knowledge. Trying to work around the described objection to Wilson's account might be worthwhile in terms of coming to understand whether the argument from dreams will lend itself to the conclusions regarding particular veridical experiences and composites.

²⁸ Wilson, p.26

²⁹ Wilson, p.23: Just before she gives us the formal analysis of the argument of which the quoted passage is the final section, Wilson writes: "the argument can now be generalized to reach the actual final conclusion Descartes wants". (Cf. Wilson, p.22)

2.2 Reformulating the Argument from Dreams: Sense-Veracity

Before asking what went wrong, let us briefly take inventory. Wilson objected to the widespread account of the argument from dreams. This account sees dreams as casting doubt on specific, supposedly veridical perceptions (under ideal circumstances) due to the inability at that specific moment to find a mark to prove that I am not dreaming. On the contrary, according to Wilson, the dreaming argument casts doubt on knowledge of composites (physical objects) in general because dreaming experience shows me that the content of perception under ideal conditions can be replicated without there being actual perception (by the sense organs). Hence if perception under ideal conditions remains our standard for veridical perception (and at this point there is no reason to suppose it should not) I can never be sure that my perception of physical objects in general will correspond to an actual external object. The world may not be anything like what we perceive it to be.

To this reasoning came Wilson's own objection that this argument is parasitic upon the correlation between waking experiences and the veridical, dreaming experiences and the deceptive. There is no problem with an inability to distinguish between waking and dreaming states unless one is less favoured than the other. Yet without the assumption that dreams are non-veridical, the conclusion that dreaming and waking states cannot be differentiated does not lead to the desired further conclusion that this bodes ill for our knowledge of the physical world. If conversely, the assumption is introduced, then the conclusion of the argument (we cannot differentiate between waking and dreaming states) is in stark contradiction with one of the premises (in dreams I have been deceived – as opposed to when awake). It seems that despite the alternative interpretation, the essential problem remains.

Should we then concede that the distinction between dreaming and waking states is an indispensable part of the argument from dreams? Recall that this will mean accepting the unavailability of marks to distinguish between individual perceptions within these states; which might raise a problem in the light of Descartes' denial of this point at the end of the Sixth Meditation. In that case we would have to accept that there is no symmetry between the argument from dreams and its resolution in the Meditations, and perhaps that this is one of those doubts that are stronger than their resolution.

It seems there is indeed no way around placing a premiss of the form "in dreams x" in the formulation of the argument from dreams, where x is the opposite of what is taken to be the case when awake. However, based on what has emerged during the foregoing discussion of Wilson's treatment of the argument from dreams, an alternative formulation may be proposed. Notice that premiss (i') below is of the form "in dreams x", but x here is not "I have non-veridical perceptions"

but “my senses (sense organs) are not engaged with their objects”. The rest is the same as the initial formulation I gave for the argument from dreams, with the exception of conclusion (v’) which has changed to reflect the difference between premises (i) and (i’).

i’) In dreams my senses (sense organs) are not engaged with their objects.

ii’) There is no way (no marks by which) to tell whether I am dreaming or not.

iii’) I sometimes dream.

iv’) I do not know whether I am dreaming now (for ii’ and iii’).

v’) I do not know whether my senses are engaged with their objects now. (i’ and iv’).

I think this reformulation has more than cosmetic merit. For one the premiss (i’) is a good replacement for (i): “in dreams I have non-veridical experiences”. Now as noted above in footnote 25, the problem posed by dreams may be approached in one of two ways: the first is that in dreams I have perceptions of objects which I think do not exist, while the second is that I have perceptions while my senses do not engage their objects in the usual way. Both of these can be taken for “non-veridical experience” where a correspondence between the operation of the relevant faculty and its object is supposed. Whereas most commentators have supposed that “non-veridical experience” cashes out uniformly as “perception of an object of dubious existence” it could very well be taken to mean “dubious operation of the faculty of sensation”, where sense-perception is at stake. The advantage of reading non-veridical experience as “dubious operation of the faculty of sensation” is that it is noncommittal towards the existence of its object. It implies that a relationship has not obtained between the faculty of sensation and its object, due to the dubious operation of the faculty. It would need additional proof that the object itself is existent and amenable to sensation. In this sense it is both more radical, more direct and I shall argue more in keeping with a wider array of Descartes’ arguments and suppositions to cash out “in dreams I have non-veridical perceptions” as “through the dubious operation of the faculty of sensation” rather than assuming this implies “I have sensation of objects which are of dubious existence.”³⁰

It should be stressed that this reading of non-veridical perception, while not necessarily casting doubt on the existence of objects of sensations is actually compatible with the doubts over the reality of objects. If veridical perception, somehow attained with apperception is the guarantee that its object is real, then the supposition that perception might not be taking place at all is *a fortiori*

³⁰ One of the problems with Wilson’s account is that while it attempts to do away with considerations of veridicality regarding a singular perception, in trying to formulate a broader doubt based on waking and dreaming states themselves Wilson still relies heavily on the standard of veridical sensation regarding the reality of objects. The discussion is full of the term “veridical”. I do not see how considerations of singular objects can be discarded in favour of “all composites” unless one clearly separates one’s self from an allegiance to veridicality understood solely as “the existence of the object of sensation.”

reason that the reality of objects cannot be introduced to the discussion at this point. Hence it would be no objection to point out that since Descartes examines particular composites, universal composites, simple universals and the sciences with respect to their reality, he must define non-veridical perception as (active) sensory perception which does not have an object. The point comes down to saying that there may be more than one way a perceived sensory image can fail to be veridical, that the object as perceived is non-existent or the sense organs are not actively engaged.

I think this reading of the argument from dreams is promising in that it places the argument from dreams at the very centre of many of the issues in the *Meditations*. These shall be considered below. However, as I have already pointed out, this reading has one major drawback, namely, it relies on a premiss which Descartes seems to withhold from the argument at the end of the *Meditations*.³¹ We have already seen that reconciliation between what is said in the First and the Sixth Meditation regarding differentiating marks was one of Wilson's main concerns in trying to come up with a new reading of the dreaming argument.

I think Wilson's position regarding the doubts about composites and the world revealed to us by the senses can be salvaged in the general scheme of things. However, regarding Descartes' insistence that dreams can be differentiated from waking life at the end of the Sixth Meditation, I think we have to bite the bullet. The question of course is which bullet to bite. Should one disregard the mark of continuity provided in the Sixth Meditation and accept Michael Williams' point that some doubts of the *Meditations* are stronger than any of the resolutions proposed? Or should we accept Margaret Wilson's point that in the case of an inability to account for the Sixth Meditation's "mark" in the context of the argument from dreams, the argument from dreams becomes unavailable, as a premiss has been withdrawn?

As I have indicated before, I propose we bite a different bullet and stop reading the *Meditations* as a list of frequently asked questions and answers, from which we expect clear cut and unequivocal answers to every initial problem.

Of course it is Descartes who introduces his problematic mark for distinguishing dreaming from being awake as a main reason for doubt that upon further inspection seems laughable.³² Likewise Descartes himself introduced the analogy of the edifice and of the foundations, the insistence that his doubts were utter at the end of the First Meditation, completely dispelled at the end of the Sixth Meditation and that the experience in between had been one of constantly increasing knowledge.

³¹ It suffers from exactly the same objection with which Wilson charged the standard accounts of Moore, Malcolm and Frankfurt. This is not at all surprising, as it retains the form of the standard argument.

³² Cf. CSM II 61, AT VII 89

Yet, questions regarding the relationship between the author and the work and arguments over Descartes' sincerity aside, I think many aspects of the *Meditations* can be significantly reread in a way that does away with the building block interpretation. This new form of reading could provide answers to questions such as the status of the argument from dreams within the *Meditations*, while also bringing out the details and philosophical significance of some of the minor arguments. If the new reading falls contrary to some of the wording of the *Meditations*, it might still be closer to its spirit.

I shall claim that the argument from dreams is so construed and posited in the *Meditations*, that by the end, when Descartes proposes a mark to distinguish waking from dreaming, it has become irrelevant. Descartes' confidence in being able to tell whether he is dreaming or awake results from the fact that the argument from dreams has been completely exhausted by the epistemological theorising of the *Meditations*.

My alternative reading links up closely with the substitution, introduced above, of "non-veridical experience" with the "engagement of senses or sense organs with their objects." If the proper reading of Descartes' notion of veridicality has to do with the question of how to relate the experience of specific sensations to their proper objects, the question whether or not I may be sure that any faculty is operating suitably becomes central to the new reading, a reading which highlights the question of whether I may be at all sure of the proper functioning of my faculties.

2.3 Some Further Considerations on Sense-Veracity

I would now like to go on to examine support offered in the *Meditations* to the view of deception through dreams in the specific sense of non-engagement by the senses outlined above. As we shall see, there is ample textual support for this view throughout the work. It is another intention of this section to show that this is not a one way relationship. The reading of the argument from dreams as casting doubt on sense-perception through the suggestion that the senses may not be engaging their objects itself lends clarity to certain arguments of the *Meditations*. This much should be expected as the argument from dreams is itself not a conclusion but a preliminary consideration in aid of the conclusions to be derived later in the book.

Before we go on to examine individual arguments in detail I would like to propose a distinction between veridicality in the sense discussed by commentators such as Wilson as well as the sources she criticised and veridicality in the sense I have proposed as being dependent on the engagement of the senses. I shall call the former object-veracity and the latter sense-veracity. This is as much in the

interests of brevity and clarity as it is in proposing an alternative reading of Descartes' critique of sense-perception.

Wilson and her sources Moore, Malcolm and Frankfurt adhere to a conception of veridicality according to which if the necessary conditions for veridicality hold, the physical object will be represented to the senses as it is. This implies that any describable property of the object would apply inseparably to the object. Such properties all being given to the senses, as being embodied distinctly in their object, veridical perception would obtain. This view of veridicality also necessitates some guarantee that no extra-sensory conditions, such as dreaming, would apply to the totality of my perception so that I could not doubt the reality of the object. This approach I call *object-veracity* in that if the necessary conditions apply, the senses are receptive to a physical object which presents the truth about itself, as it were. It is, as we have seen in discussing Wilson, the extra-sensory nature of the guarantee (no marks in perception by which to distinguish sleeping from waking states) which has caused problems for the first set of commentators, because Descartes expressly withdraws this condition at the end of the Sixth Meditation. The same problem also came to haunt Wilson's account, in that removing the search for sensory guarantees seemed also to do away with the very distinction between dreaming and waking.

I have tried to continue Wilson's analysis in a way which mitigates the requirement of an extra-sensory guarantee for veridical perception so that the content of perception would not always be open to the charge of bearing no marks to distinguish between dreaming and waking states. To this end I have proposed an extra-sensory guarantee that does not rely on the content of perception. This is the stipulation that the senses should be engaged with their perceived object in that a relationship between the senses or the sense organs and the physical object(s) under consideration holds in actuality. This requires that the object be present to active senses or sense organs. I have suggested that the argument from dreams is read more profitably when seen to be raising doubts about this sort of veridicality which will from now be called *sense-veracity* to imply that the active senses are seeking the truth, as it were.³³

³³ In the *Fifth Set of Objections and Replies*, Gassendi concedes this very reading to Descartes: "Admittedly, you may be deceived when, although the eye is not in use, you seem to have sense-perception of something that cannot in fact be perceived without the eye." (CSM II 183, AT VII 262) Gassendi goes on to suggest that since this sort of deception is not something that can be experienced all the time, since one must have at some point seen something with the eye, it does not work as a sceptical argument. In his reply, Descartes does not object to this form of the argument, but to Gassendi's inference from it: "To prove that I should not suspect the trustworthiness of the senses, you say that even if, when the eye is not in use, I have seemed to have sense-perception of things that cannot in fact be perceived without the eye, this kind of falsity is not something I have experienced all the time." (CSM II 245, AT VII 354) He goes on to state that unlike what Gassendi holds, being deceived sometimes is sufficient reason for doubt since the whole point is that we do not know we are

There is a glaring objection to making such a distinction. It could be said that if one has a veridical perception of a physical object, the given perception, whenever it is veridical, will be one and the same. Hence one cannot talk about types of veridicality. It would be absurd to say at different times 'now I have object-veracity' and 'now I have sense-veracity'. If the distinction introduced above is valid, it merely denotes two separate conditions for veridicality. Hence one would properly say 'now that I have object-veracity *and* sense-veracity I have a veridical perception of object(s) x'. Therefore, if Descartes' purpose is to introduce doubts about the veridicality of our perceptions (under ideal conditions) doubting any one of the conditions will be sufficient.

The short answer to such an objection would be that it is not a problem for our present purposes. Since it is admitted that there can be no logical preference between two types of veracity as conditions of veridicality, the objection does not rule out giving textual support for the contention that Descartes is concerned with sense-veracity rather than object veracity. This applies to the argument from dreams, as well as to the rest of the *Meditations* where the discussion turns on the supposed inability to have veridical perception of corporeal things.

There might of course be a general objection regarding the oddity of suggesting two types of veracity which when they come together make for veridical perception. This is suggested in the first part of the objection raised above. If we consider the veridical perception of a certain object to be universal, then how can we decide which of the conditions for veridicality has obtained and which has failed when we suspect veridicality has not obtained in a given perception? All we know is that there is some deviation from what was expected. How can one say, without marks by which to tell from the content of experience whether the senses are engaged or not or whether the object is real or not? How does one decide which type of veracity has failed to obtain in non-trivial cases?

One cannot. However, there are reasons other than textual support offered by the *Meditations* that for purposes of Cartesian doubt we should choose sense-veracity not obtaining rather than object-veracity not obtaining. The first, already mentioned reason is that it is a more radical form of doubt to suggest sense-veracity might not obtain at all, than to suggest that object-veracity might not obtain at all. Sense-veracity is a condition of object-veracity, in that if the senses are not engaged in their object, would it matter whether the object is real or describes its own properties adequately?

mistaken when we are mistaken. This shows that a consideration of sense-veracity as I have labelled it was acceptable for Descartes, provided that proper use of "rational argument" is made in deriving further conclusions.

This basically amounts to the rather banal suggestion if I cannot look I cannot see.³⁴ In the context of the First Meditation, this sort of appeal to commonsense seems to be a positive sign.

Secondly, in approaching particular sensations, the idea that sense-veracity might not obtain is more measured than the idea that object-veracity might not obtain. To say that object-veracity does not obtain in a given perception is essentially suggesting the object is not real or does not give a veridical description of its properties.³⁵ Leaving aside the seeming circularity of the argument, it is easy to see that this idea is more metaphysically charged than the suggestion that it is not really my senses perceiving the given object, hence I should not expect it to abide by the standards of sense-perception I may hold. To the objection that it is unreasonable to suggest there might be given objects of sensory perception without sensation obtaining, I might reply that it is equally strange to hold that non-veridical perceptions of objects should obtain under circumstances in which veridical perception is expected. Both hypotheses violate the expectations of commonsense equally. Given that withdrawing sense-veracity proposes an explanation for the sensation not being veridical, whereas withdrawing object-veracity assumes this to be the case, a sense-veracity argument might even be more appealing to commonsense expectations.

A third, arguably more speculative reason for why we might hold sense-engagement as a more primary condition of veridicality than object-engagement is that it entails some positive benefits, that is benefits not accruing to doubt. There is a very limited group of objects of sensation for which the object-veracity argument cannot account, even under a guarantee of being able to differentiate between dreaming and waking perceptions. Take the example of the rainbow. The rainbow might have been among Descartes' first examples of the senses deceiving, a member of the set of objects

³⁴ Yet, if there is no object to be seen, would it matter that I see, or my eyes work? Hence is object-veracity conversely not a condition of sense-veracity? This charge can of course be countered by introducing the physical relationship between eyesight and the corporeal object seen. There are good grounds to think that since both the objects and the faculty of sense-perception appertain to bodies, this would be Descartes reply. But a stronger refusal would be that it is fallacious to apply the criterion of veridicality, when we are stipulating that there is nothing to be sensed. In any case, sense-veracity holds when engagement obtains between the senses and their objects. The presence of an object is assumed if veridicality is to obtain. I shall try to show below in discussing madness however that this object is a very abstract supposition and resists commonsense characterisation.

³⁵ In the *Fourth Set of Objections and Replies*, Descartes does maintain an interesting distinction between his view of sensation of corporeal objects and those of "many philosophers": "So bread or wine, for example, are perceived by the senses only insofar as the surface of the bread or wine is in contact with our sense organs, either immediately, or via the air or other bodies, as I maintain, or, as many philosophers hold, by the intervention of 'intentional forms'". (CSM II 174, AT VII 249) Given the thesis that senses represent not the objects themselves but "representational species" to the mind, object-veracity might be an appropriate criterion. It is noteworthy Descartes distances himself from such views and instead accounts for the senses' operation on their objects through direct or indirect contact with the sense organs.

which cannot be perceived under ideal conditions.³⁶ This point is granted. However, it should equally be granted that it is possible to have a dream perception of a rainbow. Unless some sort of sense engagement is presumed in the waking perception of a rainbow, there are no grounds through which to distinguish a dreamt rainbow from a rainbow seen in waking life. In fact, given the sudden and unexpected appearance of the phenomenon, the rainbow seems to upset Descartes' own mark to distinguish between waking and dreaming experiences in the Sixth Meditation.³⁷ Unless an explanation of why we see rainbows when awake is provided, which can only come by way of (peculiar) engagement of the senses with an object and toward how we *seem* to see the rainbow, the idea of being able to distinguish between waking and sleeping perceptions and applying the label of veridicality to the former becomes compromised. In other words, the correlation between waking perceptions and veridicality is better maintained through sense-veracity since in the example of the rainbow we have a situation for which object-veracity cannot account. We always seem to see the rainbow, but when awake the misperception comes through the senses.³⁸

These are the *a priori* grounds I would like to suggest for distinguishing and choosing between sense-veracity and object-veracity. Now that the distinction has been made and hopefully clarified, I would like to turn to the study of the text of the *Meditations* to show the presence and application of sense-veracity in Descartes' arguments. In later chapters, I will take sense-veracity to be the guiding principle of sensation in Descartes, so that under conditions one can be sure of sense-veracity obtaining, data provided by the senses will be assumed to be as reliable as that faculty can provide. Before leaving the First Meditation however, I would like to turn to the example of madness which offers a very good example of the distinction between types of veracity.

2.4 Madness, Dreams and the Senses

I would like to suggest that the often overlooked example of madness in the First Meditation frames the argument from dreams in a manner that makes treating of the argument from dreams in terms of sense-veracity a more desirable option. I will claim that madness is not an auxiliary argument, but

³⁶ Earlier, in *Optics* (published in 1637, four years before the *Meditations*) Descartes had given the rainbow as an example for the production of colour through the diverse movement of the optic nerves. (Cf. CSM I 168 AT VI 131-132) The anomaly of the rainbow lies, in Descartes' own words in "the frequent appearance of colours in transparent bodies." In *Meteorology* chapter eight is devoted to the rainbow.

³⁷ Cf. CSM II 61-62, AT VII 89-90

³⁸ The rainbow is a very particular example, though any *trompe l'oeil* might serve in its stead. The point is certain perceptions which suggest the existence of a physical object may be accounted for differently in dreams and in waking life. Since difference in explanation is based on the working of the senses in the case of waking sensations and on the imagination in dreams, a search for wakeful veridicality has to take account of the engagement of the senses or sense organs with their object .

what is taken up and what is dismissed in the discussion serves towards structuring the argument from dreams. Let us take a look at the example of madness. First, the set up, introducing the appeal to perception under ideal conditions:

Yet, although the senses occasionally deceive us with respect to objects which are very small or in the distance, there are many beliefs about which doubt is quite impossible, even though they are derived from the senses – for example, that I am here, sitting by the fire, wearing a winter dressing-gown, holding this piece of paper in my hand, and so on. Again, how could it be denied that these hands or this whole body are mine?³⁹

Then, Descartes notes, some people are actually incapable of or unwilling to assent to such seeming commonplaces offered by perception under ideal conditions:

Unless perhaps I were to liken myself to madmen, whose brains are so damaged by the persistent vapours of melancholia that they firmly maintain they are kings when they are paupers, or say they are dressed in purple when they are naked, or that their heads are made of earthenware, or that they are pumpkins, or made of glass. But such people are insane, and I would be thought equally mad if I took anything from them as a model for myself.⁴⁰

The meditator admits there are such people but denies he is one of them. This denial, however, seems a bit hasty. Hence dreams are introduced:

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 even more improbable ones.⁴¹

It is I think somewhat impetuous to suggest that Descartes has dismissed outright the possibility he is mad. This is generally what commentators have assumed. On the contrary, the meditator is clearly sarcastic: “a brilliant piece of reasoning” is the comment he makes in the face of his own dismissal of madness.

Harry Frankfurt, in *Demons, Dreamers and Madmen* has observed that some sort of parity obtains between madness and dreams. On the passage introducing dreams quoted above, Frankfurt writes:

His point is clearly that dreaming is a non-pathological equivalent of madness. Descartes recognises that it is not appropriate for him to attack the testimony of the senses with the

³⁹ CSM II 12-13, AT VII 18

⁴⁰ CSM II 13, AT VII 19

⁴¹ CSM II 13, AT VII 19

suggestion that he may be abnormal. So he considers an analogue of madness that involves no abnormality.⁴²

Frankfurt's point rests for support on Descartes' methodological intentions; Descartes is not engaged in the task of establishing something certain in the sciences come any subject; he wants to see if this is possible under ideal conditions, which necessitate the supposition of a normal observer. Hence the meditator is justified in not entertaining the discussion of madness any further.⁴³

It seems to me somewhat presumptuous to suppose one is not mad, given the testimony that some people are mad. Notice that Descartes is not trying to argue his way out of madness; there is no claim to the effect that uncertainty exists over the testimonies of perception given by other people. Hence, madness exists. Under the circumstances, why not suppose that I may also be mad, that those perceptions which seem very natural to me may actually be completely out of keeping with the perceptions of another person?

The easy way out of the problem has already been suggested by Frankfurt: if I cannot know whether I am mad or not, the sensible thing to do with regard to the task at hand, whether the inquiry into certain knowledge is possible, is to assume that I am not insane.

Yet this explanation raises a number of issues in suggesting that the example of madness may be swept under the carpet. It is not simply that a form of doubt will have been left unresolved in the *Meditations*, though this is of course a major criticism from a building block viewpoint. Notice that the supposition of madness poses problems for the same group of objects, such as the rainbow, that form accidental perceptions. What hope is there of providing an explanation for the occurrence of the rainbow, if there is a lingering suspicion that none of my sense-perceptions may be connected with the external world and hence every perception is purely accidental? Secondly, the example of madness, unless it is rejected openly, threatens to undermine perception under ideal conditions as a standard of proper sensory perception. These two points, which actually do have some merit and function within the *Meditations* are completely overlooked if we agree that the supposition of madness is and can simply be dismissed.

In appealing to dreaming as "a non-pathological equivalent of madness", Frankfurt seems to imply that since some of the perceptions which characterise insanity apply to everyone, regardless of their constitution, the argument has become more generalised. Hence a conclusion might be drawn that

⁴² Frankfurt, H.G., *Demons, Dreamers and Madmen*, Bobbs-Merrill Company, Indianapolis, 1970. p.40

⁴³ *Ibid.* p.38

madness is an unnecessary supposition since I do not need to think I am insane in order to doubt sense-perceptions under ideal conditions.

But there seems to be an error in drawing this conclusion regarding the relationship between the two arguments. The first is that the introduction of the argument from dreams overtly supposes a distinction between dreaming and waking states in terms of veridicality.⁴⁴ There is no reason to suppose that such a distinction also applies to insanity. The question whether insanity is also a temporal state or not remains open. This poses the second problem that the relationship between the arguments regarding madness and dreams obtains as a one way relationship: while the consideration of madness, if resolved, would also seem to offer a solution to the argument from dreams, this does not seem to run in the other direction.

Recall that Wilson had claimed that the argument from dreams is supposed to cast doubt on our confidence of the veridicality of waking perceptions. The supposition of madness then serves this very purpose. If we were to suppose that one could err in sensation under ideal conditions and that there is no identifiable state or object of perception which could account for this error, then I have no reason to suppose that any of my perceptions, whatever I might know about their circumstances, may be veridical.

Dreams taken as perceptions are then not the equivalent of madness. If I can ever be sure I am awake, the argument from dreams has no force. While the same would be true of madness if I had any possibility of assuring myself of my sanity, there do not seem to be any marks at all promising such certainty. Supposing I may be mad, as Frankfurt has correctly observed, essentially puts an end to any epistemological inquiry.

But then how is the supposition of madness refined to the argument from dreams? Is this move valid and successful? Furthermore, given that the argument from dreams is more precisely outlined than the supposition of madness; what are the crucial differences between the two? What further conclusions might be drawn from this about the argument from dreams?

2.4.1 Refining Madness

Textually, one cannot make a strong claim that madness has been rejected. Descartes is concerned that taking the mad as a model would lead to him being “thought equally mad”. However, he is

⁴⁴ Wilson had noted this point, which caused a major problem for her account of dreams.

clearly sarcastic at this refusal to consider madness: “What a brilliant conclusion” is the exclamation that follows.

Descartes’ wording is very interesting when he claims “But such people are insane, and I would be thought equally mad if I took anything from the mad a model for myself.” Madness as a category has essentially to do with differences between people and one is considered mad by others. Presumably, at the extreme, anyone would have a reason to consider someone else who reports perceptions about a given object not available to her as mad. If someone were to tell me he was a pumpkin, something so out of keeping with my perception of him as a man, I would consider him mad; just as he would consider me mad for telling him he was a man, if he genuinely held he were a pumpkin. Notice that both considerations stem from the perception of the same corporeal object (the man or the pumpkin) to which something completely unrelated is applied.

This consideration of the interpersonal object is expressly withdrawn with the introduction of dreams. I would not suppose anything interpersonal to feature in a dream. Hence the standard of madness does not apply to dreams, whatever improbable perception I might have.

Something deeper runs in this formulation. If I regularly have perceptions that are private, in that their content cannot be referred to another person’s perception and given that there is no consensus over the perception of any external objects, why should I hold onto the view that some people are mad, as opposed to everyone being mad? This categorisation of the sane and the insane does not survive analysis, if I take it to rely on concurrence of perceptions of external objects. There is no reason to suppose that some people have a veridical perception of the external world while others do not. This is because, given the data, the assumption that there are external objects which are inter-subjectively accessible is unwarranted.

Now if dreaming constitutes temporary insanity and if waking and sleeping states are radically different so that one perceives as though one is a different subject in each, the implications are quite worthy of methodological doubt. This would mean that there is simply nothing to ensure correspondence between the content of my dreams and the content of my waking perceptions. Even though I may be convinced of these familiar things in dreams, such things that I often have waking perceptions of as sitting by the fire, there exist no grounds over which to claim that I have had the same perception I would have had awake.⁴⁵ The problem with dreams is therefore not having similar perceptions to those of the insane, but the reduction of familiar perceptions to incorrigible

⁴⁵ Cf. CSM II 13, AT VII 19

subjectivity. The point is that while I may have had the impression of sitting by the fire, how this compares with the actual perception of such a state of affairs is not possible to know.

It is clear that this lays waste to any attempt at determining object-veracity. To suggest that the problem caused by dreams is the seeming veridical perception of objects which are not present before the subject is to miss the point completely. Under the supposition that there are no stable perceptions of external objects, every individual perception of an object that is thought to be external to the self is suspect in whether it corresponds to the previous sensation of it; given that I do not know whether I have been dreaming or awake at these instances. This is an irresolvable problem.⁴⁶

If we consider sense-veracity, on the other hand, we see that any assurance that the senses are engaged with their object, wherever it may come from, promises to solve the riddle. If I have a guarantee that my sensation of a corporeal object is connected with previous sensations of it, so that I must not have dreamt in between, then I might assume that I am dealing with an external object, though of course not that I sense it to be as it is. This is the idea Descartes introduces at the end of the Sixth Meditation for individual perceptions and the doubt engendered by dreams.

Hence the discussion of madness introduces a doubt regarding the stability of our perceptions. Even if sensation under ideal conditions is possible, it is not enough as a guarantee of veridical perception. In doing so, the consideration of madness expressly withdraws the idea of intersubjective external objects. Once the commonsense confidence in this aspect of the world is withdrawn, the argument from dreams is used to suggest that this assumption of constancy of external perceptions is an essential epistemic problem and not an issue regarding individual psychological differences.

Thus refined, the consideration of madness becomes a pillar of the argument from dreams. Any psychological explanation for dreams that may undermine the argument, such as that dreams might be an amalgamation of previous sensations and hence refer to something existent and capable of being perceived by the senses is cut off, because from now on no instance of sensation can be confidently connected with or referred to another in terms of the being or qualities of its object. In this sense, every sensation is possibly unique and original, something which bars sense-perception from providing adequate knowledge of the external world.

⁴⁶ Note that the problem becomes acute when we consider that corporeal objects are mutable. In such a case, trying to correspond the sensed qualities of a corporeal object that has undergone change would lead to even greater doubts regarding the external existence of the object. See Section 3.1.2 below for the discussion of mutability in the example of the wax.

We should note that this reading of the example of madness is very close to Wilson's reading of the argument from dreams. What is cast in doubt is the confidence in the senses, even if they should be engaged with their object under ideal conditions. There is no reason to suppose that the external world might be anything like the perceptions we have of it. The crucial point against Wilson's account however, is that this much is established before the argument from dreams.

We have already seen that taken in terms of object-veridicality, any attempt to introduce a comprehensive doubt of the external world into the argument from dreams fails because of the supposition that waking experiences are somehow veridical and dreaming experiences somehow delusory. Though the doubt raised by the argument from dreams, regarding sense-veracity or the engagement of the senses with their object may be mitigated, it is now clear that the problems to do with object-veracity are ingrained in the argument from dreams and are introduced before it. Without the idea that our sense-perception of the external world is doubtful as to what its content represents, the argument from dreams is not such a problem. If we had a completely uniform run of experiences, so that one was never aware of having at least two different states of perception in the form of dreaming and waking sensations, the problem of the content of our sensory experience, that is object veracity, would still remain. What would be missing however is the further idea that sometimes sense experience comes from unlikely sources, such as when the senses are not engaged with their object. It is this observation that ultimately renders the senses untrustworthy in the First Meditation, through the argument from dreams. And yet at the same time it suggests that sense-perception may have proper objects which it can engage, offering a way out of hyperbolic doubt if we can be sure of the proper functioning of the faculty.

2.5 Conclusion: The Senses in the Meditations

As we have seen, the sceptical argument against the senses in the First Meditation, the discussion of madness combined with the argument from dreams, is built on the consistency implied by sense-veracity and not the object-veracity or the truth value of propositions based on sense experience. There is simply no way to know whether the senses give me a perception of the world that corresponds to what is actually the case. The point will be further elaborated in the Second Meditation, when Descartes argues that the knowledge of corporeal objects is better afforded by the intellect and not the senses or the imagination. Given such a position, to suggest that sense-perception may in any way correspond to the nature of the external world would be to make a category error.

We should however pause to ask what Descartes hopes to gain from such a critique of the senses. If he considers sense-perception to be by its nature incapable of conveying useful information about the world, is not the entire assault sense-perception knocking down a straw man? Why does Descartes not simply observe, as Thomas Hobbes did in the *Third Set of Objections and Replies*, “the images we have when we are awake and having sensations are not accidents that inhere in external objects, and are no proof that such external objects exists at all”?⁴⁷

I think one of the three reasons Descartes offers to Hobbes in response furnishes part of the explanation. First, responds Descartes, he wanted the reader to be able to distinguish between corporal objects and objects of the intellect; secondly he wanted to reply to these problems later in the *Meditations*. Third, he wanted “to show the firmness of the truths which I propound later on, in the light of the fact that they cannot be shaken by these metaphysical doubts.”⁴⁸

I think this points to a characteristic of the argument of the *Meditations*, namely that it was not written to introduce certain doubts, but rather despite these doubts. Descartes does not so much invent new ways of doubting as reformulate certain suppositions to make them more conducive to the examination of ‘real’ existence. In this case, once the dust has settled, what does remain at the end of the *Meditations* is that we do have sense-perceptions, some of which we may verify with the help of other faculties. Making this supposition is no more unreasonable than supposing the argument from dreams holds.

This having been said, trying to correct or ascertain every sense-perception is not only humanly impossible, but also unnecessary for the pursuit of knowledge through the intellect. The assault on the senses is then a good example of using the intellect to produce certain doubts, which upon further examination become unnecessary to completely resolve, since they are merely metaphysical doubts which cannot shake certain more important epistemological foundations of the constitution of the faculties of the mind, the method of arriving at certain knowledge and certain knowledge of the objects of the intellect.

In this light, all one can say of the senses is that under proper use, they will correspond to an object, and this correspondence, perhaps along with the goodness of God, is the only proof available to us that these external objects might exist. If one thoroughly carries out an investigation to establish that in a given experience, sense data is consistent and continuous and thereby the senses are engaged

⁴⁷ CSM II 121, AT VII 171. As far as Hobbes is concerned, all of this is ancient material observed since the time of Plato and hardly befits the ingenuity Descartes displays elsewhere.

⁴⁸ CSM II 121, AT VII 172

with their object, there is no further inquiry possible into the objects of the senses or knowledge gained through sensation.

It shall be shown below that the senses, compared to the imagination, do not actually bear the brunt of Descartes' critique of the structure of human knowledge. It may be because the senses, having as their object immediate and instantaneous perception of corporeal objects are the least suggestive of the faculties in causing erroneous judgments. Only the metaphysical mistake of assuming that the senses access the external world *per se* makes them a potential cause of error. The metaphysical error needs to be taken up on its own terms. The consideration of madness and the argument from dreams serve such a purpose in undermining our confidence in accessing the external world immediately. This however, is a rebuke of judgment, which will soon be seen as more than capable of following the fancies of the imagination, than it is a rejection of sense-perception.

CHAPTER 3 – LIMITS OF THE IMAGINATION

In this chapter I would like to turn to the treatment of the imagination, corporeal objects and the senses, in other words all that does not pertain purely to the intellect in the *Meditations*, beyond the First Meditation. My motives for doing so include clarifying further what has already been said about sense-veracity and showing that the final withdrawal from the argument from dreams is less of a problem than some previous literature has made it out to be. I also wish to establish and elucidate the distinction between the intellect and the imagination. I will claim that this is the guiding dualism of the *Meditations*, rather than the possible contenders such as body and the soul, certainty versus doubt, confused ideas as opposed to clear and distinct ideas or the ego set against God, or the ego along with God against the world.

In the Second Meditation, the critique of the imagination comes in the guise of the example of the wax. Accordingly, the treatment of this example will form the first section of this chapter. Descartes' claim to have "curbed in" the imagination poses further questions for our understanding of corporeal objects, to find answers for which we need to turn to the Fifth Meditation, where the discussion turns to the essence of corporeal objects. This will form the content of the second section. Finally, in section three we will turn to the Sixth Meditation for Descartes' final say on the imagination, the senses and sense data. I shall claim that the separation of the imagination and the intellect in the Sixth Meditation, already hinted at in the previous meditations, is one of the more important conclusions of the *Meditations*. It will also be suggested that the sceptical problems raised over the senses are in essence not to be solved, but mitigated. The basic example will be the "solution" to the argument from dreams.

The present chapter is not intended to give a general evaluation of Descartes' theory of the world of phenomena, but rather to show the delimitation of the faculties of the mind which is the theme that underlies much of the *Meditations*. A fundamental distinction turns on the reality of objects of various faculties which, it will be claimed, marks the difference between the scientific approach of the *Meditations* and the cognitive behaviour of everyday life. This not only concerns sense-perception, but also the distinction between the intellect and the imagination. In concluding remarks, an account of the characteristics of doubt over the objects of the imagination will be given to lay the ground for eventual comparison with the formulation of doubt over the objects of the intellect.

3. 1. The Wax and the Imagination – The Second Meditation

3.1.1 The Thinking Thing

As we are now concerned with the latter part of the Second Meditation, we should note that one of the most momentous arguments in the book has come to pass and the *sum res cogitans* has been established. Descartes is no longer toiling in the darkness of the problems he has raised, but seems to have found his Archimedean point of support in the *sum* argument.¹

Having proved with certainty that something exists, Descartes asks himself what this thing is. Since for the first time in the *Meditations* something that cannot be doubted has come up, the discussion also for the first time takes the form of object analysis. What can be said about this ego? In Descartes' own words: "But what then am I? A thing that thinks. What is that? A thing that doubts, understands, affirms, denies, is willing, is unwilling, and also imagines and has sensory perceptions."²

Before picking over this "considerable list", we should look at Descartes' own explanation of it in the following chapter:

This is a considerable list if everything on it belongs to me. But does it? Is it not one and the same 'I' who is now doubting almost everything, who nonetheless understands some things, who affirms that this one thing is true, denies everything else, desires to know more, is unwilling to be deceived, imagines many things even involuntarily, and is aware of many things which apparently come from the senses?³

Prima facie, one can find examples for each aspect of the thinking thing given in the previous list. There are two important points to note in this passage. The first is that it is impossible to include affirmation before the establishment of the *sum* because the ego "affirms that this one thing [i.e. the fact that it itself exists] is true". Therefore affirmation here has the connotation of absolute certainty, as opposed to denial, which would apply even due to the smallest reason, in the manner of Cartesian doubt ("denies everything else").⁴ This point is of importance in giving an indication of the type of knowledge attainable by the intellect with its claims to certainty. It is the first indication that the ego and its structure is the subject of certain knowledge.

¹ I will not here take up the debate over the merits of the *sum res cogitans* argument. I assume it is valid in proving that there must be something, that this something thinks and that it can be denoted "I" or the "ego". As an indubitable opinion, I engage in a brief discussion of the *sum res cogitans* below Section 4.3.

² CSM II 19, AT VII 28

³ CSM II 19, AT VII 28

⁴ Indeed, this entire list could not have been given before the *sum*, without the resolution of the doubt over whether anything exists. For enumeration of course is a form of affirmation.

The second point of significance is the qualification of the imagination with “even involuntarily” and of sense data as “apparently” coming from the senses. The second point about the senses had already been established in the First Meditation: I perceive some things which I take to be perceived through the senses. It is the involuntary working of the imagination that is the novel introduction. Descartes had mentioned in the First Meditation the tendency of his habitual opinions to come back, despite his wishes.⁵ However, there is nothing in the First Meditation to suggest that this is due to the imagination. The question is what Descartes has in mind when he suggests that the imagination can work without volition.⁶ Dreams or even the supposition of madness might be the obvious examples. But it seems there is more to this point regarding the imagination. Continuing from where we left off:

Are not all these things just as true as the fact that I exist, even if I am asleep all the time and even if he who created me is doing all he can to deceive me? Which of all these activities is distinct from my thinking? Which of them can be said to be separate from myself? The fact that it is I who am doubting and understanding and willing is so evident that I see no way of making it any clearer. But it is also the case that the ‘I’ who imagines is the same ‘I’. For even if, as I have supposed, none of the objects of the imagination are real, the power of imagination is something which really exists and is part of my thinking.⁷

Here we see that Descartes is concerned with the problem of certainty introduced in attributing affirmation to the ego. The objects of the imagination may not be real. It does not take away from the fact that the faculty of imagination is real. *Nothing* which is dubious can be a part of the ego. But it cannot be doubted that I imagine things, even more so if “none of the objects of the imagination are real”. Hence I affirm, that is to say I am certain, that I have the faculty of imagination.

Descartes at this point refers to a supposition he made earlier, presumably as part of hyperbolic doubt, that “none of the objects of the imagination are real”. What are the objects of the imagination? Though this is the first time this term ‘imagination’ has been so used, there is no clarification of its reference. Corporeal objects, insofar as they are to be doubted through the argument from dreams probably fall under this term. Yet is it such a matter of fact that whatever is doubted through the argument from dreams, directed essentially at sense data, can apply equally well to the imagination? This line of reasoning is not helped by Descartes’ insistence to keep the senses separate from the imagination, and applying the argument from dreams to the senses only:

⁵ Cf. CSM II 15, AT VII 22

⁶ The point of course serves as a distinction between volition and the imagination as aspects of thinking.

⁷ CSM II 19, AT VII 28-29

Lastly, it is also the same 'I' who has sensory perceptions, or is aware of bodily things as it were through the senses. For example, I am now seeing light, hearing a noise, feeling heat. But I am asleep, so all this is false. Yet I certainly *seem* to see, to hear and to be warmed. This cannot be false; what is called 'having a sensory perception' is strictly just this, and in this restricted sense of the term it is simply thinking.⁸

The arguments regarding the imagination and sense-perception seem to be of similar form; though no certainty exists over their contents, the faculties must exist and belong to the ego's thinking. There is however, one significant difference in the wording of the two arguments which may shed light on the difference between the two faculties: whereas the objects of the imagination may not be "real", sense-perception may be "false".⁹ Hence, perhaps the imagination is that faculty which attributes reality to the objects of the senses. 'Attributing reality' may here be read as supposing that the content of sensory perception be the case in the external world. I had in the previous chapter labelled such a requirement object-veracity. So the imagination, as opposed to the senses which came under criticism through the argument from dreams, is perhaps the 'faculty' of object-veracity.

Alternatively one might say that the imagination serves as the 'reality principle' of the ego, once the ego is aware that it can also produce ideas adventitiously. The intellect is indifferent to the existence in reality of its object as anything more than objects. We have also seen that sense-perception does not regard existence if operating in terms of sense-veracity and as we shall see it does not distinguish between separate objects. Hence the question of attributing reality falls to the imagination.

Now the falsity of the proposition "sense perception occurs while asleep" is easily reconcilable with the notion of sense-veracity I have discussed in Chapter 2. The quoted passage above amounts to saying that I seem to be having sensory perceptions when my senses are not engaged, hence sense-veracity does not obtain. In similar vein, the sentence "For even if, as I have supposed, none of the objects of the imagination are real, the power of imagination is something which really exists and is part of my thinking" may be taken as stating that object veracity may not be obtaining. Once this distinction is established, we may say that the objects of the imagination include the objects of sensation, so long as the supposition that both are causes of error and doubt is maintained.¹⁰ The object that is amenable to being engaged by the senses may also be attributed reality by the

⁸ CSM II 19, AT VII 29

⁹ The Latin original of 1642 reads "nulla prorsus res imaginata vera sit" and "Falsa haec sunt, dormio enim" for the quoted sentences. In the light of the argument in Chapter 1 over object-veracity and sense-veracity, I read the suggestion the objects of sense-perception being false as not being given to sense-perception at all, i.e. sense-veracity not obtaining because the senses are not engaged. These objects are then imagined, as happens in dreams. The objects of the imagination being "not real", I take literally; that there is no object to which this perception corresponds.

¹⁰ Recall the discussion of bi-conditionality of object and sense veracity. Cf. pp. 33-34 above.

imagination and conversely anything that is attributed reality by the imagination is a possible object of sense-perception.¹¹ The imagination is therefore limited to the corporeal world. Nowhere is the intertwining of the imagination and the senses more apparent than in the consideration of the human body.

3.1.2 The Mutable Object

Descartes now voices that familiar concern of his: he cannot shake the impression that things he knows to be uncertain nevertheless seem to him to be evident and well known. Compared to the hard to ditch accepted opinions of the First Meditation, the Second Meditation introduces a more specific concern to do with the imagination:

From all this I am beginning to have a rather better understanding of what I am. But it still appears –and I cannot stop thinking this- that the corporeal things of which images are formed in my thought, and which the senses investigate, are known with much more distinctness than this puzzling ‘I’ which cannot be pictured in the imagination. And yet it is surely surprising that I should have a more distinct grasp of things which I realise are doubtful, unknown and foreign to me, than I have of that which is true and known – my own self.¹²

There are three things to note about the passage. First, the issue of knowledge of corporeal things and their comparison with the knowledge of the ego turns not on certainty, which has already been attributed to the knowledge of the existence of the ego and of the faculties of the mind and denied to opinions regarding corporeal objects, but on distinctness. Secondly, the imagination cannot picture the ego.¹³ The third is the apparent problematic: how could it *seem* that one has a more distinct grasp of things that are doubtful as opposed to things that are known to be true?

This last question, given the fact that the imagination is unable to picture the ego but can picture corporeal objects may be posed as ‘how can it *seem* that the imagination offers more distinct knowledge than the intellect?’ Of course, Descartes will deny that the imagination offers more distinct knowledge than the intellect through the example of the wax. This being the case, perhaps

¹¹ This *does* mean dragons and the Pegasus etc. are possible objects of sense-perception, along with anything else that might be a part of the contingent corporeal world.

¹² CSM II 20, AT VII 29

¹³ These two points had already been made before the section under discussion. Cf. CSM II 19, AT VII 28: “Yet now I know for certain both that I exist and at the same time that all such images, and in general, everything relating to the nature of the body, could be mere dreams <and chimeras>. Once this point has been grasped, to say ‘I will use my imagination to get to know more distinctly what I am’ would seem to be as silly as saying ‘I am now awake, and see some truth; but since my vision is not yet clear enough, I will deliberately fall asleep so that my dreams may provide a truer and clearer representation.’”

we may dismiss the meditator's suspicion as mere rhetoric, a device to introduce this very categorisation.

Unless some light is shed on the concept of 'distinctness' however, we may assume the argument is begging the question. The passage introducing the example of the wax, as well as the suspicion of distinct knowledge of corporeal objects and the problem regarding the ego has already been quoted above. Now, the example of the wax ends with the following assertion:

So let us proceed, and consider on which occasion my perception of the nature of the wax was more perfect and evident. Was it when I first looked at it, and believed I knew it by my external senses, or at least by what they call the 'common' sense – that is, the power of imagination? Or is my knowledge more perfect now, after a more careful investigation of the nature of the wax and of the means by which it is known? Any doubt on this issue would clearly be foolish: for what distinctness was there in my earlier perception? Was there anything in it which an animal could not possess? But when I distinguish the wax from its outward forms – take the clothes off, as it were, and consider it naked – then although my judgment may still contain errors, at least my perception now requires a human mind.¹⁴

Given that a "human mind" seems to be separated from the perception of an animal through the possession of the intellect, the *petitio principii* is clear: in trying to resolve whether the imagination offers more distinct perception than the intellect, the presence of the intellect with its peculiar perception of the wax is given as the reason that the intellect perceives more distinctly.

There is, however, just as much danger in taking the beginning and the end of the argument to the exclusion of the actual reasoning that goes on in between as there is in supposing that the imagination and the intellect are conceived in outright opposition to one another. Notice that Descartes contrasts his first look at the wax with a later position by which some consideration had been given to the "nature of the wax and the means by which it is known". There is no reason to suppose that these are not complementary but must be in opposition. Hence distinctness of knowledge may be viewed as the grounds over which the most knowledge can be gained about a given object, which would naturally be greater with the use of more faculties capable of providing information about the said object.¹⁵ If we take such a definition of distinction, then the example of the wax is saved of the charge of begging the question.

¹⁴ CSM II 21-22, AT VII 32

¹⁵ I use the word 'knowledge' in the broadest possible sense here, to mean the sum of everything that can be said about an object. Not every member of this set is necessarily true.

This conception of distinct knowledge also has the merit of answering our previous question regarding the apparent greater distinctness of knowledge of corporeal objects provided by the imagination compared to the knowledge of the certain ego. Descartes' point seems to be that sensory, or imaginary knowledge of corporeal objects is the commonly held standard of distinct, that is to say quantifiably high, knowledge: this is the accepted way through which most knowledge about any given object may be attained. Hence the introduction of the wax:

Let us consider the things which people commonly think they understand the most distinctly of all; that is, the bodies which we touch and see. I do not mean bodies in general - for general perceptions are apt to be more confused – but one particular body. Let us take, for example, this piece of wax.¹⁶

Notice there is a dialectical premiss here, another example of which will shortly follow: people commonly think they understand visible and tangible bodies most distinctly. After having given us a description of the sensible qualities of the wax, Descartes goes on to note that these are prone to change. Placed by the fire, all of the previously enumerated sensible qualities of the wax are altered. Using a second dialectical premiss, that no one would deny the altered object is the same piece of wax, Descartes concludes:

But does the same wax remain? It must be admitted that it does; no one denies it, no one thinks otherwise. So what was in the wax which I understood with such distinctness? Evidently none of the features which I arrived at by means of the senses; for whatever came under taste, smell, sight, touch or hearing has now altered – yet the wax remains.¹⁷

The whole of the argument against the senses being the best grounds for distinct knowledge of the wax rests on the attribution of mutability to the wax. The supposition is that despite the piece of wax being the same piece of wax, this would not be apparent to sense-perception, given that all of its data have changed.

The imagination, however, is capable of perceiving change, we now learn. After having suggested that the wax may not have been known through any of its changeable qualities given to the senses, Descartes takes a look at it using his imagination:

But what exactly is it that I am now imagining? Let us concentrate, take away everything that does not belong to the wax, and see what is left: merely something extended, flexible and changeable. But what is meant here by 'flexible' and 'changeable'? Is it what I picture in my

¹⁶ CSM II 20, AT VII 30

¹⁷ CSM II 20, AT VII 30 The use of the dialectical premises here is a good example of H. Frankfurt's point that the *Meditations* displays how "commonsense leads to difficulties it cannot resolve." cf. DDM 49

imagination; that this piece of wax is capable of changing from a round shape to a square shape, or from a square shape to a triangular shape?¹⁸

Can the imagination really picture an object changing shape and if it can, in what way is this different from observing the same change through the senses? With regard to the senses, Descartes seems to have a conception along the following lines: since, during a given instant of sense-perception, the transforming object must be of state x and in the next instance of perception it must be in state x1, no change has been perceived by the senses, just two separate states of the object. If conversely change has been perceived as something distinct from states x and x1, neither x nor x1 could be perceived at the same time as the process of change.¹⁹

Even if such is the case, it gives us little to go on regarding the ability of the imagination to picture a *limited* range of change. It might be suggested that there is some connection between the imagination and memory.²⁰ This much has to be maintained if object-veracity is to obtain with regard to the changing object, that is, if there is an object corresponding to what is perceived by the imagination that is undergoing change. This follows from the idea that the imagination perceives change in the series of sensations which do not convey change to sense-perception. Yet, again we have not really made much headway into establishing the imagination's capacity to picture limited change, considering the following distinction drawn between it and the intellect:

Not at all; for I can grasp that the wax is capable of countless changes of this kind, yet I am unable to run through this immeasurable number of changes in my imagination, from which it follows

¹⁸ CSM II 20, AT VII 30-31

¹⁹ Perhaps this idea might be speculatively extended through an analogy with motion pictures. Though we know that we are essentially looking at a series of still images replacing one another rapidly on the screen, we picture in our imagination the movement of objects. This is similar to the sceptical arguments developed by Zeno of Elea against the possibility of movement.

²⁰ There is surprisingly scant reference to the memory in the *Meditations*. In the beginning of the Second Meditation we are told that the meditator will assume "memory tells [him] lies". (Cf. CSM II 16, AT VII 24) Though doubt over memory was not made explicit in the First Meditation, perhaps there was no need as the doubts raised there concerned the initial acquisition of knowledge. In any case memory can only lie, through confabulation; an involuntary working of the imagination. In the Fourth Meditation interestingly enough, the ego's faculties of the "memory and the imagination" are compared to those of God. (Cf. CSM II 40, AT VII 57) Here memory is for the first time granted the title of faculty and it is interesting for the present purposes of maintaining its connection with the imagination that they are mentioned together. Finally, at the end of the Sixth Meditation, memory is of course one of the judges to be referred to, along with the senses and the intellect, in establishing that one is not dreaming. (Cf. CSM II 62, AT VII 90) There is no treatment of the memory similar to that of sense-perception, the imagination, or the intellect. Hence I do not include it among the faculties of the mind. This is not because an argument cannot be made that the memory is not a *bona fide* faculty of the mind, but because neither such an argument, nor the necessity of providing one can be found in the *Meditations*.

that it is not the faculty of imagination that gives me my grasp of the wax as flexible and changeable.²¹

Clearly, there is no requirement of the reality of the observed change here; in fact the imagination is limited because it cannot run through all *possible* transformations. The question remains; how can the imagination be capable of picturing *some* change? The emphasis of the question, however, has now shifted to the existential quantifier.

One has the feeling that there is a problem of description at work in the limited ability of the imagination. Notice the essentially vague descriptions of shapes: “from a round shape to a square shape or from a square shape to a triangular shape.” It is not that the imagination can only picture squares, circles and triangles, but must refer similarities to them if it is to give any description. The imagination is therefore *imprecise*.

It is not initially clear why the imprecision of the imagination should matter or why this defect should render it incapable of giving us a “grasp of the wax as flexible and changeable.” When one voluntarily imagines something, one is not laying any claims to having done so to the most minute detail after all. However, the most prominent qualities would probably be found in the description of this object of the imagination. Hence, if when stripped naked, flexibility, changeability and extension are what remain of the wax, I would probably not be imagining an object of utmost rigidity which covers no space when I imagine a piece of wax. Is this not after all Descartes’ rhetorical motive in choosing to exemplify his point with wax, a household item most notable for its quality of transforming rapidly?

The force of the argument therefore relies on Descartes’ attribution of an understanding of the qualities of flexibility, changeability and extension to the intellect. This is established by the argument that all possible forms of the wax cannot be covered by the imprecise imagination. Hence “I would not be making a correct judgment about the nature of the wax unless I believed it capable of being extended in many more different ways than I can ever encompass in my imagination.”²² Descartes goes on to conclude that the nature of this piece of wax “is perceived by the mind alone” in the next sentence.²³ There seems to be a hidden premiss in the argument, something along the lines of (i) below:

²¹ CSM II 20-21, AT VII 31

²² CSM II 21, AT VII 31

²³ Perhaps the point is the imagination cannot perceive the nature of the wax *at once*, as opposed to the intellect’s immediate grasp of ‘extension’. Yet given that the imagination is capable of perceiving limited amount of change, this is not likely. Presumably, for a given piece of wax, the imagination is to run through its possible transformations, from circular to rectangular for example. How could one simultaneously imagine the counterpart transformation from rectangular to circular? This particular transformation is just as much a

i) A faculty grasps the nature of a mutable object through being capable of perceiving the entire range of its different transformations (a) *per se* or (b) subsumed under a concept.

The rest of the reasoning then runs along the following lines:

ii) The imagination cannot perceive the entire range of different transformations of the wax.

iii) The imagination cannot perceive concepts/subsume under concepts.

iv) The imagination cannot grasp the nature of the wax.

The remarkable aspect of this argument is not so much (iii) on its own, which may be granted if we agree with Descartes that the imagination has to do with corporeal objects. The seeming equal function of disjunct (i-a) and (i-b) or the corresponding premises (ii) and (iii), in the sense that if either held for the imagination, we would say of it that the imagination had a distinct perception of the wax, is more interesting. It means that there is no argument from essence in the example of the wax: if we could without any great hindrance access the totality of accidents of the piece of wax (through the imagination) we would have had just as distinct an understanding of the nature of it as we would through the concepts of the intellect. But because it seems we do not have such access through the imagination, at least not of every state distinctly, we must resort to the only other option remaining open to us, that is, subsuming these accidents under a concept of the intellect. It should however be borne in mind that the intellect is just as incapable of running through the totality of accidents, though it recognises its limits through the subsuming concept. We shall have more to say on this matter in discussing the essence of material things in the Fifth Meditation.

3.1.3 The Same Wax

Having established that the piece of wax is perceived by the mind alone, Descartes launches into one of the more puzzling explanations in the *Meditations*:

But what is this wax which is perceived by the mind alone? It is of course the same wax which I see, which I touch, which I picture in my imagination, in short the same wax which I thought it to be from the start. And yet, here is the point, the perception I have of it is a case not of vision, or touch or imagination – nor has it ever been, despite previous appearances – but of purely mental

member of the set of possible changes as its counterpart from which it is distinct. What we are here asking of the imagination cannot even be expected of the concentrated intellect, I would argue. I would therefore claim the problem of the 'scope' of the imagination is to do with its imprecision, that is the limited membership of the set of imaginary perceptions of change, rather than its lack of immediate grasp.

scrutiny: and this can be imperfect and confused, as it was before, or clear and distinct as it is now, depending on how clearly I concentrate on what the wax consists in.²⁴

It has already been mentioned that perception through the mind and imagination, as well as sensation of the wax should not be taken as opposites, but as complementary ideas of the piece of wax. This passage seems to stand in support of this view. For having perceived the wax through the mind, Descartes is not laying aside the fact that the same piece of wax is also an object of the imagination and the senses. Having arrived at the conclusion that we have better knowledge of the wax through a faculty that is not pre-philosophically supposed to be at work in the perception of corporeal objects, that is the intellect, we should not go on to conclude that the object itself is now something different. Quite on the contrary, the object retains its identity; it is “the same wax which I thought it to be from the start”. What the meditator has come to realise is that “despite previous appearances” full knowledge of the wax is attainable with the use of the mind alone. To put it differently, we have now understood that there is nothing essential in the wax that is accessible by the senses or the imagination that is not accessible by the intellect.

The perception of the wax being a case of “pure mental scrutiny” which can be imperfect and confused or clear and distinct seems to suggest that the mind can rely on data it receives from the senses and the imagination in perceiving objects. “Previous appearances” had suggested that the wax was known through the senses or the imagination. Concentrating on the shortcomings of these sources of knowledge has revealed that the wax is more properly known, that is known in a way that can account for all of its possible accidents as a body, through the concepts of the intellect. Again we should note that the critique of the imagination plays a constructive role here; it is only because the imagination is limited and imprecise that the wax can be said to be more clearly and distinctly known through the intellect. The conclusion is not derived through a normative evaluation which ranks the intellect as superior to the imagination and intellectual objects above ‘base’ corporeal objects.

There is an obvious problem in Descartes’ account of the wax being known most clearly and distinctly solely through the intellect. If I consider the wax to be an extended, changeable and flexible body, and call this the most perfect degree of knowledge attainable regarding the wax, am I really considering the wax or just any corporeal body? How can one talk about distinct knowledge of objects, if one’s intellectual perception of all corporeal objects is basically the same set of qualities?

This is of course the great problem of the Cartesian mechanistic worldview. We have seen that Descartes does not completely do away with the senses and the imagination, but denies clarity and

²⁴ CSM II 21, AT VII 31

distinction to any knowledge to be gained through these faculties. We shall come back to this point when we come to consider corporeal objects in the Fifth and the Sixth Meditations. It can hardly be commented on further at this point, since the example of the wax, as Descartes reminds us once the discussion of it is complete, has essentially to do with the knowledge of the ego and nothing else. This means that it is the faculties of the ego and not the structure of the corporeal world that is under discussion at this point. Now I would like to return to the distinction between the imagination and the intellect.

3.1.4. The Critique of the Imagination

We have already seen that the imagination is a *bona fide* faculty of the ego. That it can act involuntarily has also been mentioned. It has hopefully been established that it is not the type of data the imagination supplies, but the imprecision with which it supplies it that makes it inherently unsuitable in the pursuit of clear and distinct knowledge of objects.

All of this makes the imagination a rather poor faculty for the thinking thing. The only redeeming quality of the imagination seems to lie in the fact that it is capable of perceiving a limited amount of change, as opposed to the senses which would not be capable of such a function. I have suggested that the imagination's ability to perceive change ought to relate it to the memory. It is the limited nature of its perception of change and of the different forms of objects that renders the imagination imprecise.

I have also suggested above that the faculty of imagination may have a close connection with object-veracity. I argued that the imagination could be said to contain sensory data once the distinction between sense-veracity and object veracity was established. This would allow for proper functioning of the senses, as evaluated through the criterion through sense-veracity and nevertheless an improper functioning of the imagination, due to object-veracity not obtaining. The rainbow was given as an example of such a case. Such a position would allow us to account for the deception of memory, which could only come through the involuntary workings of the imagination.²⁵

A point of support for establishing a connection between the imagination and object-veracity is given in the Second Meditation. In concluding the example, Descartes asks on which occasion his perception of the wax was more perfect: "Was it when I first looked at it, and believed I knew it by my external senses, or at least by what they call the 'common' sense – that is the power of

²⁵ Any recollection requires the belief that the object or state of affairs confirms or at one point confirmed to the idea recollected. This clearly makes use of object-veracity and the imagination.

imagination?"²⁶ If "common sense" is here taken to mean the faculty which incorporates data from different senses to suggest a particular state of affairs regarding an object, it must attribute reality to its object. For what other grounds can one posit in giving a description of the "same piece of wax" through data gathered by the individual senses such as sight, taste, touch and hearing? There would be no reason to suppose that I could see something which is capable of making a noise or being tangible, or *vice versa*, because none of the senses would by themselves inform another. Hence the supposition that data may be gathered from one object through the different senses must suppose there something exists for the cause of sense data to inhere in or be otherwise attached.²⁷

Hence, the imagination should be viewed as a faculty which, because of its connection to corporeal objects, demands object-veracity; that those objects should exist correspondently to its perception, whereas due to its other limitations, such as acting involuntarily and its imprecision cannot at all times attain object-veracity. Imprecision is an especially damning limitation on the imagination in its orientation towards object-veracity for it forms a constant cause for doubt. If the imagination cannot encompass all possible transformations of the wax; does this not lead to an infinite regress in which however accurately the changes in the extension of the wax are described, a more accurate description is still possible? Hence, although one can be aware of change through the faculty of imagination, one has to admit that the process of change is not in any way represented through the imagination with object-veracity, as a point for point representation of what is actually the case in the external world.²⁸

All this makes the imagination the singularly most objectionable faculty of the ego. Recall that the imagination had to be "curbed in" because of the vividness, the seeming distinctness, of its data. It was an obstacle in the way of the pure functioning of the intellect. I want to claim that in the *Meditations*, the imagination is the mechanism and the reason for Descartes' dim view of the pre-philosophical state of knowledge. In this sense the *Meditations* may be seen as a critique of the imagination. The use of the imagination must be limited as far as possible if certainty is to be established in human knowledge. The culmination of this line of thought is given in The Sixth Meditation, an account of which will be given below.

²⁶ CSM II 21-22, AT VII 32

²⁷ Descartes makes a pretty similar argument in the Sixth Meditation when he suggests that the existence of material objects is suggested by the power of imagination. cf. CSM II 50, AT VII 71

²⁸ Contrast this point with Gaukroger's account treated of in Chapter 5 below; where the imagination is taken to be faculty which determines the content of the "abstract intellect".

3.2 The Essence of Corporeal Things – The Fifth Meditation

The short first part of the Fifth Meditation, dealing with the essence of corporeal things rather than the ontological argument for the existence of God is introduced as an inquiry into “whether any certainty can be achieved regarding material things”, which is “the most pressing task” for escaping the doubts raised a “few days ago”.²⁹ Note that it is not the existence of material things that is at stake here, but whether anything certain can be said regarding them, without presupposing existence. This last question will be answered in the Sixth Meditation.

Given that the issue of existence of material objects has not been settled, we may be sceptical of the task of trying to find out whether anything certain can be said regarding them. However, there are two factors at work here, both introduced earlier in the *Meditations* which allow Descartes to launch this somewhat unusual enquiry. The first is the idea introduced in the First Meditation that some sciences may not be concerned with the existence of their objects and the second is the role given to the imagination discussed above.

Regarding the first point, Descartes had written in the First Meditation, following the enumeration of the class of simples, such as extension, which apply to corporeal nature in general:

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.³⁰

Hence Descartes says in the Fifth Meditation that before considering whether corporeal things can exist externally to the ego (i.e. before the task of the Sixth Meditation), “I must consider the ideas of these things, insofar as they exist in my thought, to see which of them are distinct and which confused.”³¹

Descartes had already left room for talk of certainty over objects of ambiguous reality.³² It is more significant for our present purposes how he goes about this task. Notice that in concentrating on the ideas of things which exist in thought, Descartes will try “to see which of them are distinct and which

²⁹ CSM II 44, AT VII 63

³⁰ CSM II 14, AT VII 20

³¹ CSM II 44, AT VII 63

³² According to a straightforward reading, having proved the existence of a non-deceiving God in the Third Meditation, Descartes now feels free to talk about simples as indubitable. I shall argue in the next chapter that the existence of certain types of simples had not actually been doubted. Either way, talk regarding the subject matter of mathematics seems warranted at this point.

confused.” The focus of attention on distinctness is immediately reminiscent of the example of the wax in the Second Meditation, in which certain ideas were also contrasted with regard to their distinction.

It is at this point that the imagination once more makes its appearance. Now, given the acceptance that the object in question might not actually exist in nature, it seems that the use of the imagination cannot lead to error. So Descartes writes:

Quantity, for example, or ‘continuous’ quantity as the philosophers commonly call it, I distinctly imagine. That is, I distinctly imagine the extension of the quantity (or rather the thing which is quantified) in length, breadth and depth. I also enumerate various parts of the thing, and to these parts assign various sizes, shapes, positions and local motions; and to the motions I assign various durations.³³

But is Descartes really allowed to make use of the imagination here, given what was said in the Second Meditation and the upcoming delimitation of the imagination to the mind-body composite in the Sixth Meditation? On the one hand, the generality of the ‘extended thing’ might allow for such a move. This might be read as ‘any corporeal object I could conceive of would be extended in length breadth and depth. It might also have parts which are of various shapes, positions, sizes and are locally mobile.’ On the other hand it is this very generality that is part of the problem. Could one really imagine something distinctly without knowing what it is? This question leads us directly back to what was labelled the problem of Cartesian mechanistic worldview above, on page 54.

I think in the context of this passage, we should see the parts and their various qualities as modes of three-dimensionality. Hence a corporeal object with its length, breadth and depth could within these bounds have parts which are of a certain position and disposition. The fact that the imagination can be employed to picture instances of this might be a testament to the fact that there could be an infinite number of such configurations, all of which I would be unable to picture in my imagination; but some I may. Since the reality of the object is not in issue, this does not pose a problem for my understanding of the object, as it would if I were to behold actual corporeal object through the imagination. Since extension and its modes are already established to be perceived through the intellect, there is nothing barring imagining any one instant of them under the supposition of indifference to the existence of the object to which they are to pertain. There *could* be such an object. The imagination is imprecise when it beholds reality, but when it is oblivious to reality precision is not an issue.

³³ CSM II 44, AT VII 63

Descartes is quick to remind us that this is all general, in abstract as it were. For when it comes to particular features to do with the objects of mathematics, talk of distinction is replaced with that of truth and talk of the imagination is replaced with attention and perception, and therefore the intellect:

Not only are all these things very well known and transparent to me when regarded in this general way, but in addition there are countless additional features regarding shape, number, motion and so on, which I perceive when I give them my attention. And the truth of these matters is so open and in such harmony with my nature, that on first discovering them it seems I am not learning something new as remembering what I knew before; or it seems like noticing for the first time things which were long present within me although I had never turned my mental gaze on them before.³⁴

This Platonic passage forms the second premiss of the desired argument for certainty regarding corporeal objects. The first was the stipulated ability to imagine corporeal objects and their distinct parts. Now comes the conclusion; noting that the ego has many ideas of things which might not be external to it, and yet cannot be called nothing, Descartes exemplifies his argument for the reality of mathematical properties and by extension the objects they pertain to with the triangle:

When, for example, I imagine a triangle, even if perhaps no such figure exists, or has anywhere existed, anywhere outside of my thought, there is still a determinate nature, or essence, or form of the triangle which is immutable and eternal, and not invented by me or dependent on my mind. This is clear from the fact that various properties can be demonstrated of the triangle, for example that its three angles equal two right angles, that its greatest side subtends its greatest angle, and the like; and since these properties are the ones which I now recognise, whether I want to or not, even if I never thought of them at all when I previously imagined the triangle, it follows that they cannot have been invented by me.³⁵

So the imagination is once again out of its depth. For although one might imagine a triangle, or any other geometrical shape, one essentially constructs an object with certain immutable features accessible only through the intellect. Only once these figures and their properties have been elaborated on by the intellect can one claim clear and distinct knowledge of them.

³⁴ CSM II 44, AT VII 63-64. In this paragraph, 'particular features' probably stand for geometrical definitions and theories of shapes and the like, since the next paragraph will give examples of such for the triangle.

³⁵ CSM II 44-45, AT VII 64

There is of course a further twist once it is established that shapes and other objects of mathematics have real properties which can be used to define them.³⁶ Given such a clear and distinct perception of the intellect, it becomes unnecessary to use the imagination in thinking about such shapes. Hence, even if this is the only instance in which the imagination may have hit upon an object that corresponds to its perception of it, as the properties of the object are accessible only to the intellect; these objects are properly speaking objects of the intellect and not of the imagination. That is to say, the essence of corporeal things, or at least “the whole of corporeal nature which is the subject of pure mathematics”³⁷ is known through the intellect.

I have mentioned above, on page 54, that the criticism of the imagination is not based on the essence of objects in the Second Meditation. Here, however, we are given an express argument against the imagination based on essences. The point I introduced, that the imagination is incapable of accessing concepts is very clear from the passage quoted above, when Descartes observes that the properties of the triangle were not given to him when he imagined the triangle. Now assume, given what has already been said of the imagination’s attribution of reality to its object and the infinite regress of the imagination, that in imagining a triangle one does make use of the newly established ‘intellectual’ properties of the triangle. Hence we do not bring before our mind just a planar shape enclosed by three straight lines but all the various properties that obtain between the sides and the angles. Even if this were all accessible by the imagination there still remain contingent qualities, such as the extension of the triangle, i.e. the lengths of the sides, for which no intellectual concept can be found other than the understanding that the triangle may be extended in more ways than I can encompass in my imagination. Therefore it is not possible to say that once the intellect has laid down the essential features of a corporeal object, the imagination can have just as adequate an understanding of it. The intellect renders the imagination redundant as far as certain knowledge of the extended external world is concerned. We shall however see that the imagination is of vital importance to the union of body and mind.

This conclusion neatly mirrors the distinction introduced in the First Meditation. Recall that after the argument from dreams, Descartes had introduced the notion that although composites such as heads and hands and other things might be imaginary, the simples from which they were composed

³⁶ In *Descartes*, John Cottingham makes pretty much the same point: “the fundamental criterion in the Fifth Meditation for X’s having a true nature is that properties can logically be demonstrated to hold of X.” (Cottingham, p.63)

³⁷ CSM II 49, AT VII 71

of, extension and its modes must be real. From this followed the conclusion regarding sciences and the reality of their subject matter quoted above.³⁸

Hence the Fifth Meditation as a critique of the imagination is complementary to the Second Meditation. There Descartes had argued that clear and distinct knowledge of even corporeal bodies would have to depend on the functioning of the intellect and its concepts. In the Fifth Meditation we have seen that this applies not solely to corporeal objects which may be the object of the senses, but also those which are never the object of the senses, insofar as they have identifiable permanent features.

By this point we might ask ourselves what the purpose of the imagination may be as a faculty of the ego, other than bearing some theoretical burden in Descartes' construal of objects of the intellect in the Second and the Fifth Meditation. This question will be answered in the Sixth Meditation, where it will actually be the initial orientation of the argument.

3.3 Imagination and the Senses in the Sixth Meditation

In the Sixth Meditation, Descartes sets himself the task of proving the existence of corporeal objects and distinguishing between the mind and the body. The Sixth Meditation is just as much concerned with accounting for the errors resulting from the union of mind and body as in laying out concluding remarks regarding "the doubts of the past few days". We are however given the final judgment on the imagination, as a faculty of the union of mind and body. We are nevertheless given the final say on the argument from dreams, which as we saw in Chapter 1 played an important role in evaluating sense-perception. I shall now take up these two points under separate headings.

3.3.1 Frontiers of the Imagination

In the opening paragraph of the Sixth Meditation Descartes writes:

The conclusion that material things exist is also suggested by the faculty of imagination, which I am aware of using when I turn my mind to material things. For when I give more attentive consideration to what imagination is, it seems to be nothing else but the application of the cognitive faculty to a body which is intimately present to it, and which therefore exists.³⁹

³⁸ Cf. CSM II 14, AT VII 20

³⁹ CSM II 50, AT VII 71-72

This passage is of course guaranteed by the supposition of a non-deceiving God, argued for in the Third Meditation and once more established a page ago at the end of the Fifth Meditation. The conclusion that corporeal bodies exist is derived from the following premises: 1) that a faculty should entail non-existent objects would be deception (on the part of my cause) 2) God is my cause 3) God is no deceiver 4) the functioning of the imagination entails the presence of corporeal bodies.

An interesting point in this passage is the claim that one (who has examined such things) is aware of using the faculty of imagination when the mind turns to material things. Notice that the existence of material things is yet to be proved; hence the function attributed to the imagination here is in keeping with the arguments of the Second and the Fifth Meditation. What is novel is the supposition that the imagination is the “application of the cognitive faculty to a body which is *intimately* present to it, which must there exist” if there is to be any function of the imagination at all. This intimate body, it will soon become clear is the (human) body with which the mind is conjoined.

Descartes gives a rather complicated argument for how from the power of imagination follows that the mind has a conjoined body. This is his line of reasoning: (1) The imprecision of the imagination compared to the intellect is once more established. (2) It is argued that even if it can take up certain ‘external’ objects of pure mathematics with precision, the imagination requires “a peculiar effort of the mind”.⁴⁰ (3) This requirement of peculiar effort distinguishes it from pure understanding which requires no such effort. (4) The imagination does not belong to the essence of the mind, for the ego’s identity would not have been different had it lacked the imagination. (5) The imagination must therefore depend on something distinct from the ego. (6) This might be a body joined to the mind so that the mind can contemplate it, through the imagination, “whenever it pleases”, that is without the ‘peculiar effort’ introduced in (2). 7) This body would then allow the ego to imagine corporeal things.⁴¹ We are given as a sub-conclusion:

So the difference between this mode of thinking [i.e. the imagination] and pure understanding may simply be this: when the mind understands, it in some way turns towards itself and inspects one of the ideas which are within it; but when it imagines, it turns towards the body and looks at something in the body which conforms to an idea understood by the mind or perceived by the senses.⁴²

Descartes immediately notes that all of this is probable and not supposed to offer definitive proof. The argument itself is rather suspect and depends overtly on the contemplation of external

⁴⁰ CSM II 51, AT VII 73

⁴¹ Cf. CSM II 50-51, AT VII 72-73

⁴² CSM II 51, AT VII 73. Note the deployment of the imagination on one side and that of the mind as well as the senses on the other.

disconnected bodies by the imagination being accompanied by a ‘peculiar effort’, while this requirement is withdrawn for the imagination’s contemplation of the body joined to the mind. Below is the relevant passage where the “peculiar effort of the mind” is first brought up:

But suppose I am dealing with a pentagon: I can of course understand the figure of a pentagon, just as I can the figure of a chiliagon, without the help of the imagination, but I can also imagine a pentagon, by applying my mind’s eye to its five sides and the area contained within them. And in doing this I notice quite clearly that imagination requires a peculiar effort of the mind which is not required for understanding; this additional effort of mind clearly shows the difference between imagination and pure understanding.⁴³

The idea seems to be that while the mind immediately understands the pentagon as a planar figure bound by five sides, the imagination, if tasked with a precise portrayal of the figure, will have to construct it out of these elements. An alternative interpretation would be that, given that before the quoted passage the meditator was imagining a chiliagon, the understanding can pass from the concept of a chiliagon to that of a pentagon without effort, whereas the imagination has to picture anew.⁴⁴

Textually the use of ‘the peculiar effort of the mind’, instead of saying, for example, ‘the peculiar effort of the imagination’ might imply that the use of the imagination in addition to the understanding requires a “peculiar effort”. This might be the most satisfactory explanation, given that there is no reason to suppose that the understanding does not require any effort at all, it simply does not require this *peculiar* effort of the mind when it is engaged independently of the imagination, tasked as it is with precision. The effort might be peculiar because the understanding, which as it were gets there first though not necessarily immediately, has to give instructions to the imagination on how to construe its object.⁴⁵

3.3.2 A Body Joined to the Mind

In this light, “if there does exist some body to which the mind is so joined that it can apply itself to contemplate it, as it were, whenever it pleases”⁴⁶ we might have something which requires no “peculiar effort of the mind”. This special body is then either perceived equally well by the intellect

⁴³ CSM II 50-51, AT VII 72-73

⁴⁴ Cf. CSM II 50, AT VII 72

⁴⁵ I have previously indicated that so long as they are not approached mathematically, the intellect is also limited in its contemplation of specific instances of extension. See above pp. 52-54, footnote 23.

⁴⁶ CSM II 51, AT VII 73

and the imagination, or it is perceived solely by the imagination, thereby there being no feeling of “peculiar effort” resulting from a contrast with the pure intellect.

Yet, how to move from this supposition to the conclusion “then it may possibly be this very body that enables me to imagine corporeal things”?⁴⁷ We have already granted that the imagination might have privileged access to this body closely joined to the mind, and insofar as the imagination is not essential to the mind, it may actually depend on the body. However, it seems difficult to understand how, other than being the ‘cause’ of it, the body can allow the imagination to function and to turn “towards the body and [look] at something in the body which conforms to an idea understood by the mind or perceived by the senses”.

Is Descartes here suggesting that the imagination, in picturing other bodies takes the body joined to the mind as a model for them, without the involvement of the intellect? On the one hand, the idea is so preposterous that it borders on sophistry. On the other hand, this notion might be able to explain why the use of the imagination in judgment leads to much derided errors, such as attributing personal identity to a human body and sensible characteristics to corporeal objects. Given that the imagination looks for “something in the body which conforms to an idea understood by the mind or perceived by the senses”, it might cause the erroneous judgement that I am one with the body by imagining the thinking thing (the ego as understood by the mind) as somehow being contained in the body (which is supposed by the mind to be joined to it). It might also cause a similar erroneous judgement in picturing heat to inhere in the (sensed) flame, just as it is sensed by the joined body. In both cases the imagination is attributing to both sides of the relation a quality which the intellect would properly attribute to only one side, as it does not observe the proper boundaries between the joined body, the mind and other bodies.

I would contend that this is in line with Cartesian thinking. However, to suggest this one should at least try to come up with an explanation of why the novel relationship between the body and the imagination has to be the case. Descartes suggests that this is the best possible explanation:

I can, as I say, easily understand that this is how the imagination comes about, if the body exists; and since there is no other equally suitable way of explaining imagination that comes to mind, I can make a probable conjecture that the body exists.⁴⁸

This transcendental argument of the form 1) for a, b; 2) a; 3) therefore b will be used again later in the Sixth Meditation.⁴⁹ It will be argued that since the senses give us a strong impression of corporeal

⁴⁷ CSM II 51, AT VII 73

⁴⁸ CSM II 51, AT VII 73

objects, and God is no deceiver, corporeal objects must exist, though not necessarily exactly as the ego senses them.⁵⁰ The merit of this form of argument is debatable. However, I am here more concerned with the mechanism which allows the imagination to picture corporeal objects by looking for something in the body joined to the mind which “conforms to an idea understood by the mind or [is] perceived by the senses.”

It is unfortunate that Descartes does not elaborate on the subject at all after this point. Textually we have nothing that will be of use in elucidating the working of the imagination. We are left with the notion that the imagination is not essential to the mind, hence must have its source in the body joined to the mind. Since the imagination does not belong to the intellectual substance, it must somehow work partially through the body. It therefore looks for something in that body which conforms to what the mind or the senses may have perceived.

It has been suggested to me that Descartes might here be understood as suggesting that the imagination is searching for something in the body which literally corresponds to an idea of the mind.⁵¹ The corresponding corporeal aspect might be a partial physical action, or ‘local motion’ in the brain, for example. Thus the imagination is constantly ‘racking the brain’ to find what corresponds in it to the ideas of the intellect. This approach has force in that it seems to be able to explain a number of points Descartes is concerned with.

The idea of the imagination racking the brain by definition contains the conclusion of Descartes’ transcendental argument that the presence of the imagination as a non-essential part of the mind suggests that corporeal things ought to exist. If the imagination indeed operates through the brain in a way the intellect does not, by virtue of this fact both its non-essential relation to the ego and the transcendental support for the idea that corporeal things exist is accounted for.

This conception also suggests that the imagination looks for a corresponding corporeal part for the numerous ideas of the intellect, thus making explanatory use of the divisibility of the body attached to the mind. And although one cannot expect there to be a particular local motion which corresponds precisely and exclusively to each idea of the intellect; this imprecision is very much in keeping with what Descartes has to say about the imagination in general and for pain and similar bodily sensations and appetites in the Sixth Meditation in particular. Descartes will claim that although pain is felt in one part of the body, the sensation may have originally been caused by any

⁴⁹ The term ‘transcendental’ is meant to evoke Kant, who admired the “transcendental idealism” of Descartes’ philosophy in the First Edition of the *Critique of Pure Reason*, though his enthusiasm had waned by the time of the Second Edition and the section removed. Cf. Kant A367-369

⁵⁰ Cf. CSM II 55, AT VII 80

⁵¹ I thank Professor van Ruler for suggesting this point.

part that is intermediary between the sensed part of the body and the brain. The imagination's imprecision therefore applies forcefully to the body if they are connected in the manner under consideration.

The problem with the model of the imagination 'racking the brain' is that if the body is taken to be the active cause of the imagination, rather than its transcendental cause then we must accept the upshot that it is not so much the imagination as a distinct category from the body that produces its images through the contemplation of the body, but that the images are directly furnished by the body or its motions. This might not appear very controversial, unless we were supposing the imagination to be a distinct agential subject. However, the view that the body is directly the cause of the functioning of a faculty, rather than the presence of its objects appears too strong to attribute to Descartes, who in the Second Meditation wrote: "I now know that even bodies are not strictly perceived by the senses or the faculty of the imagination but by the intellect alone(...)"⁵² If, conversely, we suggest that the intellect furnishes at least a part of the imagination so that it can contemplate the body distinct from it as a faculty, the already introduced distinction between the internal and external orientation of the mind seems to lose power.

The issue of how the imagination functions with regard to the body might be sidetracked, however, provided that we accept the ego enjoys a peculiar relationship with the body joined to it, whatever the contribution of the body is to the actual functioning of the intellect. The two qualities of this special relationship between a particular body and the mind come to the fore; the first being the immediacy of this body that can be thought of at will, without the peculiar effort of the mind. The second is the unity of this body joined to the mind, this body can be singled out among any other, should other bodies exist.

Observe that neither immediacy nor unity of the body (or any body) can be accounted for by the pure intellect. Insofar as I am a thinking thing, which I know myself to be clearly and distinctly, I realise that there is nothing essential which connects me with any corporeal thing. Even if by some accident such a connection obtains, as is claimed to be the case, there is still no purely intellectual explanation I may provide that will account for the peculiar ease with which I can contemplate this body, except the suggestion that it is immediately and intimately connected with the imagination.

Regarding the unity of the body, the fact that the mind cannot account for it is even clearer. For it will soon be argued that every body is divisible by the intellect.⁵³ It is therefore strange that the

⁵² CSM II 22, AT VII 34

⁵³ Cf. CSM II 59, AT VII 86

“whole mind seems to be united to the whole body.”⁵⁴ But equally strange is the supposition that there may be bodies distinct from the body joined to the mind, which are nevertheless identifiable as a unit among others, such as the piece of wax.

There is no intellectual grounding for immediacy and unity of perception of bodies in the *Meditations* other than the suggestion that the imagination, through looking at something that conforms to the joined body may perceive things as such. However, it is obvious that these two predicates are an integral part of a commonsense-perception of the world, such as when one says, in the ordinary manner of speaking “we see the wax itself, if it is there before us”, as mentioned in the Second Meditation.⁵⁵ That is to say; the wax itself, as a unit distinct from other corporeal things and before us, given to us immediately.

Now of course just as the imagination furnishes the ordinary, non-philosophical perception of the world, as well as the ordinary use of words, so it furnishes the many errors of attribution that Descartes repeatedly warns us against in the *Meditations*. Supposing myself to be a body, supposing sensible qualities are inherent in objects, supposing I have immediate access to corporeal objects are all errors of this type and have already been exemplified.⁵⁶

3.3.3 The Imagination as the Faculty of Daily Life

I have above listed all the main points made regarding the imagination in the *Meditations*. It has by now emerged that the imagination is a distinct cognitive faculty from the senses and the intellect. It has also become clear that as a faculty, the imagination does not have its own set of objects in the purely corporeal or intellectual world but in treating of them is parasitic upon the proper objects of the intellect and the senses.⁵⁷

⁵⁴ CSM II 59, AT VII 86. I have already suggested that the imagination ‘racking the brain’ approach may be able to provide an explanation, at least in terms of the functioning of the intellect, for the indivisible mind being joined to the whole divisible body.

⁵⁵ CSM II 21, AT VII 31-32. Descartes’ point, of course, is that we *judge* the wax to be present to our senses through its sensed qualities. But whereas at that point in the Second Meditation he was employing his intellect to ‘look’ at the wax, we are here concerned with the workings of the imagination.

⁵⁶ Descartes discusses the matter at length in the Sixth Meditation. Cf. CSM II 56-57, AT VII 80-83.

⁵⁷ This point has been a running theme. However, we had said that the imagination seems superior to the senses in that it could perceive a limited amount of change. I suggested that this was a result of its use of the memory, so that the imagination is also parasitic on the memory. Consider the following passage from the Sixth Meditation: “But besides that corporeal nature which the subject of pure mathematics, there is much else that I habitually imagine, such as colours, sounds, tastes, pain and so on – though not so distinctly. Now I perceive these things much better by means of the senses, which is how, with the assistance of the memory, they appear to have reached the imagination.” (CSM II 51, AT VII 74)

To formalise Descartes' critique of the imagination we may say: 1) the imagination does not have a proper set of objects in the external or the intellectual world, 2) it functions through a misappropriation of the objects of sense-perception and the intellect, 3) this it does by supposing there to be something essential in what is sensed and by attributing enumerable reality to what is intellectually perceived. Through this manner of operating, the unchecked imagination turns over to the field of sense-perception what is actually the mandate of the intellect to examine, and assumes what is known by the intellect to be its own inference. The imagination is an essential part of ill-considered judgments. The philosopher's job is to of course show how this comes about and then to try and avoid the machinations of the imagination while pursuing knowledge.

And yet, according to Descartes, the imagination is a faculty of knowledge with its proper object lying in the union of the mind and the body. We have already seen that Descartes uses the imagination synonymously with the common sense; the faculty which brings together data from the individual senses. We have also seen that in the beginning of the Sixth Meditation, Descartes sees it as a condition for the functioning of the imagination that the ego should possess a body. Now the idea that a particular inner sensation could lead to certain forms of behaviour, that "a tugging in the stomach" should make me perceive hunger, is introduced in the Sixth Meditation as something that cannot be explained through the customary confidence in the senses:

I was not able to give any explanation of all this, except that nature taught me so. For there is absolutely no connection (at least that I can understand) between the tugging sensation and the decision to take food, or between the sensation of something causing pain and the mental apprehension of distress that arises from that sensation. These and other judgments that I made concerning sensory objects, I was apparently taught to make by nature; for I had already made up my mind that this was how things were, before working out any arguments to prove it.⁵⁸

It is clear from this passage that, for example, hunger cannot be explained by the intellect and is only ever partially given to the senses. There can be no sensation of the causal relationship between the tugging of the stomach and the desire to intake food. One of the chief strengths of the 'racking the brain' model of the imagination is that it can account for the connection between sensations such as those of the appetites. In fact the reason why Descartes assumes he was "taught by nature" the response to his inner sensations is because he already responded well enough to them before having any need for an argument to prove them.

This argument for the working of the faculty of the imagination is provided in the Sixth Meditation. Before examining it we should note another aspect of the passage just quoted. Note that in the

⁵⁸ CSM II 53, AT VII 76

following sentence, Descartes is not talking about his former, pre-philosophical self: “[t]here is absolutely no connection (at least that I can understand) between the tugging sensation and the decision to take food.” We should not expect Descartes to give us an argument for why various apprehensions and behaviour follow from various sensations. What he will instead provide is that how there actually could be any such form of perception at all, regardless of the actual constituents of the appetite or emotion.⁵⁹

The key term in the relevant discussion is ‘nature’ which, Descartes goes on to tell us, can be understood in two ways. It can either be understood as God and the totality of things created by him, which in the usage ‘my nature’ implies the totality of things bestowed on me by God. In this sense there must be some truth in what one is taught by nature.⁶⁰ But when used in the phrase ‘being taught by nature’ it specifically applies to the combination of mind and body. This is something less than the “totality of things bestowed upon me by God”, for it does not include purely intellectual knowledge, such as logical propositions, given by natural light, nor does it involve purely corporeal characteristics, such as “the tendency to move in a downwards direction.” What then remains for nature in the limited sense to teach is an indication of benefit and harm to the combination of mind and body:

My nature, then, in this limited sense, does indeed teach me to avoid what induces a feeling of pain and to seek out what induces feelings of pleasure, and so on. But it does not appear to teach us to draw any conclusions from these sensory perceptions about things located outside us without waiting until the intellect has examined the matter. For knowledge of the truth about such things seems to belong to the mind alone, not to the combination of mind and body.⁶¹

When one crosses this line, one begins to attribute heat to the flame and emptiness to space which does not stimulate the senses and falls into other such familiar errors, though there is no clear argument why such would be the case. Hence:

For the proper purpose of sensory perceptions given me by nature is simply to inform the mind of what is beneficial or harmful to the composite of which the mind is a part; and to this extent they are sufficiently distinct and clear. But I misuse them by treating them as reliable touchstones

⁵⁹ Considered in terms of essence none of these, along with the imagination and the sense-perception pertain to the ego of course. But even if we admit the existence of corporeal things and of sensation, the appetites and emotions still pose a problem. This is in no little part due to the fact that they may be misleading, and incapable of being corrected by the intellect unlike errors of the external senses.

⁶⁰ “Indeed, there is no doubt that everything I am taught by nature contains some truth. If nature is considered in its general aspect, then I understand from the term nothing but God himself, or the ordered system of created things established by God. And by my own nature in particular, I understand nothing other than the totality of things bestowed on me by God.” (CSM II 56, AT VII 80)

⁶¹ CSM II 57, AT VII 82-83

for immediate judgments about the essential nature of the bodies outside us; yet this is an area where they provide only very obscure information.⁶²

This passage makes two points clear: the first is that the perceptions of the composite of mind and body, which I take to be received through the imagination, have their proper, indeed vital use; and insofar as they are limited to this function; they are distinct and clear. The use of the qualification 'distinct and clear', the touchstone of certainty, implies that there is no other faculty which could have served this purpose better. This is an interestingly pragmatist slant on the concept of clear and distinct perception. The second point, already made above regards how the imagination infringes on the domain of the senses proper and of the intellect by leading to "immediate judgments about the essential nature of the bodies outside us", that is those bodies which are not a part of the composite of body and mind. This attribution of the effects of a body on the composite to the body itself is, it should be remembered, relevant to the imagination's propensity to attribute reality to any object it takes up. Immediacy rules out the prospect of a considered judgment.

3.3.4 Faculties of the Mind

So much for the attributions of the imagination to external objects, over which there is still confidence that it is impossible "of there being any falsity in my opinions which cannot be corrected by some other faculty supplied by God".⁶³ There is however a type of judgment, based on internal sensations which cannot be saved from error, at least some of the time, given even the Cartesian withdrawal of assent. This is a very significant example in portraying Descartes' understanding of faculties.

The example given in the Sixth Meditation is the desire for drink of a dropsy patient, a condition which would be exacerbated by drinking. If the God given faculty of the combination of mind and body is supposed to prevent the composite from harm, and its data on this is sufficiently clear and distinct, how can it be reconciled with the goodness of God that the composite should be deceived?

⁶² CSM II 57-58, AT VII 83. Note that we are still engaged with 'nature' in the particular sense of the composite of mind and body. Hence the sensory perceptions given by nature are pain and pleasure. Error lies in ascribing the types of pain and pleasure to the object, such as heat as felt to a flame. Therefore 'sensory perceptions' as used in this sentence are not data from the senses regarding all creation, which would be 'nature in general'.

⁶³ CSM II 55-56, AT VII 80. Of course, correction in this sense does not necessarily imply replacing a false proposition with a true proposition of the same order. Sometimes, as above, the case is simply of noting that a certain faculty may not be suitable or adequate to form grounds for a given type of judgment, and in the spirit of Cartesian doubt, withdrawing assent from that class of judgments.

We learn that what is at stake here is a “true error of nature”, nature taken as the composite of mind and body, the object of the imagination.⁶⁴

Descartes’ argument, to put it very summarily, is that since the mind is posited to receive one impression from the body, but since the body is divisible and variable and might give rise to the cause of that impression through more means than one, such errors might occur as the dryness of the throat leading to desire for drink for a dropsy sufferer.⁶⁵ But in general it is preferable for the dryness of the throat to indicate thirst, “because the most useful thing for us to know about the whole business is that we need drink in order to stay healthy”.⁶⁶ Therefore, this type of misleading knowledge may be reconciled with the goodness of God.

Descartes admits that the composite of mind and body will mislead from time to time. In fact, with the premiss that most of the time the internal senses report what is beneficial for the composite of mind and body he seems to have worked himself into a corner. For if this is the case, there can be no avoiding error on these matters even through the Cartesian withdrawal of assent; here the greater probability weighs on the side of erring with each suspension of judgment.⁶⁷

I would like to suggest that the avowal of the possibly misleading structure of internal sensations offered by nature and the working of the imagination in the appetites is due to the enquiry into the imagination having reached its final frontier. There is simply no methodology, involving the use of other faculties that can correct the deception, *as it occurs*. This is not to say that opinions formed on these grounds cannot be checked through observation with the now available knowledge that the composite of body and mind can be deceived internally. Regarding the inner sensation at its time of occurrence, however, we have to bite the bullet and accept that it is uncertain.

What is interesting is that to this final frontier of the imagination, where its data are unavoidably absolute, there correspond similar frontiers for the faculties of the senses and of the intellect. Though one might doubt whether a given sensation through touch or sight arises out of something which necessarily imparts the said sensation, or whether the conditions necessary for this sensation are in place, one cannot doubt as a mode of thought the content of the sensation that occurs. As for the intellect, anything it can clearly and distinctly understand, such as the *sum*, or the objects of pure mathematics and concepts such as extension, is beyond the suspension of judgment. However, if one

⁶⁴ CSM II 59, AT VII 85

⁶⁵ i.e. Dropsy causes the dryness of the throat which is mistaken for an ordinary desire for drink.

⁶⁶ CSM II 61, AT VII 88. Recall that there is no identifiable reasonable ground why a dryness of the throat should lead to thirst, though it is good and due to God that it does.

⁶⁷ Of course, we should note that since this is the type of knowledge that has to do with the conduct of life, it was expressly kept out of the scope of Cartesian enquiry at the onset, in the First Meditation. (cf. CSM II 15, AT VII 22) Hence, one would not apply Cartesian doubt to it.

were indeed being deceived regarding the content of sensations and the ideas of the intellect, there would be no promise of correcting such judgments through the use of another faculty. This is because there is no overlap between these proper objects of the faculties: the set of proper objects of any one faculty does not overlap with any other.

Hence in Cartesian terms a faculty of the mind may be defined as an aspect of the mind which treats of a set of objects to which it uniquely has access. There are therefore three faculties; the senses, the imagination and the intellect. Willing, memory, judgment and other functions of the mind are always related to one of the faculties. *Philosophical error* results when one of the functions of the mind treats of the unique objects of one faculty through another.⁶⁸

The critique of the imagination that runs through the *Meditations* I think in this sense offers us an analysis of the concept and configuration of the faculties of the mind as well as the possibility of error this structure contains. Before concluding, it remains to be seen how the argument from dreams can be mitigated and how the different faculties be used for this purpose in conjunction.

3.3.5 Laughable Doubts

The final paragraph of the *Meditations* consists of the mitigation of the argument from dreams. I have used the term ‘mitigation’ before, to distinguish it from rejection, or retraction; the term used by Margaret Wilson⁶⁹. Descartes does not reject the argument from dreams at the end of the Sixth Meditation as invalid or unsound. Neither does he offer a universal remedy for the supposition that I may be dreaming. And while Wilson correctly claims that Descartes offers a way out of the question whether I may have dreamt of a given experience or not, the paragraph in question does not amount to “[retracting] the denial” that there are no such marks in general, but only a prescription for determining whether a certain singular experience may have been dreamt. This course of action is a “meticulous check” of individual experiences, for which we often do not have time “in this human life”.⁷⁰ Any attempt at generalising this check, and offering a mark of the form “when x I am not dreaming” is bound to lead to the same difficulties that are raised by the argument from dreams in the first place.

⁶⁸ Such an error would be, for example, if I came to doubt being genuinely thirsty; knowing through the intellect that the dryness of my throat does not always correspond to genuine thirst, but the symptom of an illness. Other examples, of the imagination being taken up instead of another faculty are littered throughout the *Meditations* of course; most of which have been treated above.

⁶⁹ See Chapter 2, above.

⁷⁰ CSM II 62, AT VII 90

Descartes starts by noting that his senses report the truth more often than not in matters to do with the wellbeing of the body. More than one sense can investigate the same object, previous investigations and courses of events are available through the memory and the intellect now has a complete grasp of the causes of error, including philosophical error just discussed.

Accordingly, I should not have any further fears about the falsity of what my senses tell me every day; on the contrary, the exaggerated doubts of the past few days should be dismissed as laughable. This applies especially to the principle reason for doubt, namely my inability to distinguish between being asleep and being awake.⁷¹

While this cooperation of the faculties seems to imply that what was said above regarding the exclusive sets of objects of the faculties is false, we should note that the problem of distinguishing whether a singular experience was a dream or not is not a philosophical problem for Descartes at this point, in the sense that it does not concern the unique set of objects of any one faculty. One cannot establish mathematical certainty in this matter. Although dreams may be an example of the involuntary workings of the imagination, something which has been claimed, the question of the difference between individual waking and dreaming moments cannot be settled on by any one faculty.⁷² To use it as a basis of doubt might even be to commit a philosophical error. Descartes' proposed remedy does not come through the intellect, the imagination or sense-perception, but through the memory.

For now I notice that there is a vast difference between the two, in that dreams are never linked by memory with all the other actions of life as waking experiences are. If, while I am awake, anyone were to suddenly appear to me and then disappear immediately, as happens in sleep, so that I could not see where he had come from or where he had gone to, it would not be unreasonable for me to judge that he was a ghost, or a vision created in my brain, rather than a real man.⁷³

Descartes' proposal is clearly out of place. Not only does he assume being awake when this is the question, his implicit trust in the memory, which links different sense-perceptions and may yield before the imagination is also suspicious. All this amounts to saying is that if I were to sense a corporeal object acting contrary to the rules of extension which govern it, I should not believe my sensation to be veridical. While no harm can come of such a principle, it will not do us much good in resolving the problem of dreams either.

⁷¹ CSM II 61, AT VII 89

⁷² Cf. p. 39 above.

⁷³ CSM II 61-62, AT VII 89-90.

But what exactly is the problem posed by dreams by this point in the *Meditations*? It has already been established that it is the faculty of the imagination, not sense-perception or the intellect, which attributes reality to external objects. As long as one can keep it in check, and does not start looking for suddenly vaporising men in the bushes, there can be no objection from the fact that we have dream sensations which seem to conflict with the perceptions of the intellect. All that remains for the critic to say is that we might have perfectly lifelike dreams. But since the imagination is responsible for the attribution of reality in waking life as well, while the senses and the intellect also function uniformly, what epistemological harm is done by perfectly lifelike dreams, so much so that they are connected in the memory? Even if this were the case all the time, so that one could never distinguish epistemologically between being awake and dream sensations, what has been laid down as the objects of the faculties and their functioning would remain valid, as long as what we are assuming holds and there never is any deviation from what the intellect knows regarding corporeal nature. This assumption also goes to take much of the force out of the argument from dreams, leaving it only the transition from one state to another, the very moment of starting dreaming or waking up, as a potential cause for doubt. Would this, under the circumstances, not be an accepted, ordinary feature of human existence?

So much so for the question of particular experiences, which Descartes seems confident can most of the time be resolved to satisfaction. As a cause for general scepticism regarding sense-perception, the argument from dreams may be easily resolved through the theory of the mind I have stipulated. Observe that since it does not have to do with the objects of the intellect such as simples, according to the very formulation in the First Meditation and since according to the analysis carried out above it cannot concern sense perception alone, the argument from dreams is aimed at the imagination. In so far as it is not about particular perceptions, which can be corrected by an alliance of faculties, but about the general nature of sensation, it has to do with object-veracity, and not sense-veracity. In this sense the argument from dreams concerns the stipulation of reality by the imagination. However, it has already been argued that the stipulation of reality to the objects of the intellect and sensation is a faulty or improper functioning of the imagination. The true function of the imagination is to report on the mind-body union. The mind-body union is of course as dubious an object as possible, without the need for introducing the argument from dreams, which would be redundant. In expanding the scope of the improper working of the imagination then, the argument from dreams is truly a figment of the imagination, if it is meant to apply to the world at large.

Thus the argument from dreams has been exhausted by the theory of mind advanced in the *Meditations*. Following the critique of the imagination the burden of argument now falls to the critic who nevertheless wants to insist that the argument from dreams, remaining unsolved and probably

unsolvable as initially formulised, is the Achilles' heel of the Cartesian system.⁷⁴ I have indicated before that this only appears to be so as a result of the tendency to look for a point for point treatment of doubts and solutions and an edifice rigidly constructed out of these building blocks in the *Meditations*.

Now the "doubts of the past few days" might be laughable in their extremity, but even at this point, the problems that spawned them in the first place require one to be constantly on guard. We might have insight into the workings of the faculties and be confident of the goodness of God. Yet these God given faculties are only good as long as they are correctly employed, and yet circumstances do not always allow for the fully proper use of the mind. Descartes' magnum opus, having circumvented its "principle reason for doubt" ends with a sombre reminder:

But since the pressure of things to be done does not always allow us to stop and make such a meticulous check, it must be admitted that in this human life we are often liable to make mistakes about particular things, and we must acknowledge the weakness of our nature.⁷⁵

3.4 Conclusion: The Imagination

The "weakness of our nature" does not stem from our temporal existence alone. Neither is it simply the fact that the ego has a body, on which it does not depend, that interferes with the intellect's eternal contemplation of its objects that makes us liable to err. Our nature, in the sense of the totality that has been bestowed upon us; the mind, the body and the composite of the two, is by default given to err about "particular things" and while theoretically it is possible to correct such errors which have to do with particular perceptions, the acceptance that in some perceptions we will be mistaken is the reasonable lesson to be drawn.

This rather measured and stoic approach to the weakness of nature of course has to do with errors resulting from the imagination and not the intellect. From the assumption that one may make mistakes while working on the subject matter of pure mathematics, it does not follow that this should be an acceptable risk. For as we have seen, this field of enquiry has determinate properties accessible by the intellect, and which the imagination can only take up limitedly and imprecisely. In this case the faculty to be employed to the full extent is clear.

⁷⁴ Recall Williams' claim that the sceptical problems raised by the *Meditations* "once grasped, tend to be more compelling than any particular solutions".

⁷⁵ CSM II 62, AT VII 90

With regard to the composite of mind and body the faculty to be employed for its peculiar end, its preservation, is also clear. Neither the intellect nor the senses can access the external or internal data provided by the imagination in its role as intermediary between mind and body. Externally, movement and change can only be suggested by the imagination; the intellect knows corporeal objects are mobile and mutable not in instances but generally. The senses do not perceive movement and change prior to the treatment of the data by the imagination. The faculty of sense perception does not in itself contain any concept which enables it to compare distinct perceptions. It therefore cannot capture change, which in any case is only available through the memory or the imagination. Internally the connection between various bodily sensations which are intellectually not relatable to one another is furnished by the imagination. How this comes to be, or how it is that the imagination operates in such cases is not intellectually knowable, except negatively; there must be some transcendental assumption the imagination relates to its objects which are taken to be immediate and unitary.

In the imagination, the mind is in possession of a faculty it does not fully understand, since nothing that is not perceived clearly and distinctly by the intellect may be deemed free from error. Furthermore the essential concepts of the imagination such as unity and distinctness cannot be placed among either the subject matter of mathematics or the essential attributes of corporeal nature. We can only say that as useful as the imagination is and as essential it is to the composite of mind and body, it will lead to error in judgment and memory, unless one is constantly on guard against it. This vigilance has to be observed in all matters philosophical and scientific. With regard to daily life however, it is possibly too much effort to be on constant guard against the imagination. Given that the working of the imagination is geared towards the preservation of the composite of mind and body and also given that the radical doubts introduced at the onset are either counterproductive or irrelevant to philosophical enquiry the imagination may be left alone in its daily functioning. Furthermore, not every mistake made by the imagination may be corrected by a radical questioning of it by the intellect.

The enquiry into the imagination plays a fundamental role in the *Meditations*. This is not only in terms of methodology, whereby as I have claimed the distinct faculties of the mind are established and the argument from dreams is mitigated. The two conclusions which follow from this deployment of the imagination are no less impressive. The first of these is the separation of daily life and scientific pursuit. The second is the explanation offered for error.

Descartes had started his enquiry with the aim of laying the grounds for establishing something certain in the sciences. Although this might be taken to mean undertaking the task of showing that

the human being or the intellectual part of it is capable of scientific knowledge, we now see that the structure of the enquiry was not as radical as this. The *Meditations* is more of an enquiry into what keeps us from attaining scientific, certain knowledge; its possibility is not disputed. The answer is the contagion of the abstract intellect by the everyday mode of thinking. While at first sight this resonates well with a quasi-ascetic tradition that stretches back to antiquity; Descartes' approach is novel in laying bare the mechanism by which the imagination can supplant the intellect and in assigning the faculty of the composite of the mind and body an essential status in so far as one is human. While scientific enquiry is separate from concerns of the preservation of the composite, it is not epistemologically detached from it *a priori*, nor is the promise of scientific certainty a universal remedy for the shortcomings of all aspects of thought. To wit, errors will be made. Yet, they arise from the daily life of the composite of the mind and body and belong to the imagination, where certainty does not imply truth, as it does for the intellect. Even though some of these errors may be corrected and one can deliberate, for example, whether a certain experience was a dream or not, it is better to seek certainty where one has been assured that the necessary grounds for its conjunction with truth exist. Those "things to be done" which put a constraint on examining one's sensory perceptions need not all have to do with affairs of the day. Some of them might have to do with the "acquisition of knowledge."

That which is doubtful may be said to have found its natural, as opposed to metaphysical milieu in the imagination. The question now, as far as the stated aim of the *Meditations* is concerned, is to formulate the qualities of that which cannot be doubted. This brings us to the question of what can be known with certainty by the intellect and the treatment of the pure intellect and its objects in the *Meditations*. This will be subject of the next chapter.

CHAPTER 4 – THINGS THAT CANNOT BE DOUBTED: MATHEMATICS, THE EGO AND GOD

In this final chapter, I would like to turn to the proper objects of the intellect. Anything that is not given to the senses or the imagination, but nevertheless understood, must be attributed to the intellect. Of course, this list would include much of the philosophical terminology introduced in the *Meditations*, items such as clear and distinct perception and various qualities of ideas; innate, adventitious and the like. It would also include the laws of logic. However, since the text does not problematise these points, and because they are not considered to have added to our increased knowledge as much as what has been said regarding the propositions of mathematics, the ego and God, only the latter three will be included in the discussion of the present chapter.

I will claim that mathematics or arithmetic and geometry as Descartes sometimes refers to it, have a special significance in the *Meditations*. Not only does the idea of distinguishing mathematics from other, *a posteriori* sciences such as medicine and astronomy appear early, in the First Meditation; reference to the subject matter of pure mathematics is also frequent in the establishment of the external world in the Fifth Meditation. The consideration of mathematics therefore textually frames the theoretical endeavours of Meditations Two, Three and Four. Nowhere else is the importance of mathematics put plainly enough though as it is in the Fifth Meditation, where introducing the so called ontological argument, Descartes writes:

Hence, even if it turned out that not everything on which I have meditated in these past days is true, I ought to still regard the existence of God as having at least the same level of certainty as I have hitherto attributed to the truths of mathematics.¹

Given that the meditations of the past few days have included such important points as the establishment of the *sum res cogitans*, the first set of arguments for the existence of God, the difference between truth and falsity, references to clear and distinct perception and the introduction of the intellect as the proper faculty of certain knowledge, much depends on the word ‘hitherto’. Either the word stands for “these past days”, since the First Meditation or, more probably ‘hitherto’ here means since the time I became aware of attributing a special certainty to the propositions of mathematics. In either case, there seems to be a problem with the treatment of mathematics in the First Meditation: the truths of mathematics seem to have survived hyperbolic doubt with a special degree of certainty, not attributable, for example, to the objects of the senses.²

¹ CSM II 45, AT VII 65-66

² Notice that in the Fifth Meditation, Descartes ought to be comfortable in claiming the existence of God, since he has devoted the entire Third Meditation to a complex argument on proving precisely this point. If, as suggested by the supposition that everything meditated upon may not be true and the seeming need felt for a

This problematic of the certainty of truths of mathematics in the First Meditation will form the mainstay of the present chapter. I shall frequently refer to the treatment of the same problem by Harry Frankfurt. In *Demons, Dreamers and Madmen* Frankfurt makes much use of the idea that the First Meditation does not include clear and distinct perception, thereby accounting for how the propositions of mathematics may come to be doubted in the First Meditation, but in fact, when taken up as a collection of clear and distinct ideas later in the *Meditations* it is seen to be the set of indubitable truths that it is. Frankfurt takes this route because it seems he wants to show that nothing can survive the doubts of the First Meditation.³ I shall argue that this approach, while possibly explaining how the certainty of individual propositions of mathematics may have survived the First Meditation doubts, is misleading in a significant way, in that it relies on a standard of clear and distinct perception that is independent of the propositions of mathematics, while the subject matter of mathematics, it appears, is a measure of certainty. In other words, Frankfurt's account empties the set of clear and distinct perceptions by excluding the propositions of mathematics, which it will be shown are natural members of this set.

I shall follow my claim that the standard of clear and distinct perception is furnished by the indubitable propositions of mathematics in the establishment of the *sum* and more importantly in its identification as a thinking thing. Once more referring to the example of the wax, I shall try to show that what is clearly and distinctly known by the intellect as belonging to the ego, the aspects and faculties of thinking are furnished solely through the concepts of the intellect which are separable from the subject matter of pure mathematics. This intellectual separation, a sign of clear and distinct knowledge according to Descartes, takes place before the establishment of a non-deceiving entity or the external world; thereby contradicting Frankfurt's claim that the truths of mathematics require the existence of at least *some* composite in the external world. That is to say that prior to the question of the relationship between mathematics and its subject matter in the external world, there exists a relationship between mathematical and non-mathematical indubitable cogitations.

Finally I turn to a treatment of God in the *Meditations*. Descartes regards the existence of a good omnipotent deity as proven in the *Meditations* to be indubitable and this has certain implications for his system, not least the infamous Cartesian circle. Rather than engaging in the voluminous debate over the issue, I shall try to show how in the light of the preceding discussion regarding the faculties of the human mind, the problem of God in the *Meditations* can be read in a different light which lends Descartes' philosophy an aspect of 'commonsensical' epistemological optimism. The basic

second discussion of the existence of God, Descartes is not fully convinced of the arguments of the Third Meditation, the yardstick of "certainty I have hitherto attributed to the truths of mathematics" becomes an even greater admittance of their privileged position.

³ Cottigham dubs Frankfurt's account an "'extreme' view of Cartesian doubt". (Cottingham, p.68).

claim will be that even without granting many of Descartes' points regarding God, or the proofs of God's existence, the *Meditations* can still be read as a coherent work of philosophy of mind. A proof of God would validate Descartes' metaphysics but would contribute very little to the epistemological system established in the *Meditations* and which I have tried to describe.

4.1 The Truths of Mathematics in the First Meditation

The First Meditation introduces the treatment of truths of mathematics following the establishment of the class of simples; extension and its modes.

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 whether I am awake or asleep two and three added together are five and a square has no more than four sides. It seems impossible that such truths should incur any suspicion of being false.⁴

It is expressly claimed that the subject matter of mathematics are the simples to do with corporeal nature in general and extension which had been listed in the previous paragraph.⁵ The propositions of these sciences are true arithmetic operations, geometrical definitions and such.

What is the relationship between the subject matter and propositions of mathematics which treats of them? This seems to be a reasonable question to ask, given that the existence of simples and the truth of the propositions of mathematics are both taken to be indubitable. It seems that simples, "whether they really exist in nature or not" might be such things as shape and number, while the true propositions would consist of the definition of relations between these.

This explanation might be mistaken in its simplicity. For although one might claim that the square, insofar as it is a geometrical definition given by the proposition 'shape bound by four sides of equal length forming four right angles' is a simple, to this it might be objected that the concepts of the "side" or "line" and "angle" insofar as they feature in the definition are simpler still. Hence the

⁴ CSM II 14, AT VII 20

⁵ Descartes' list of simples is given in the paragraph of the First Meditation preceding his preliminary conclusion regarding which sciences might contain indubitable propositions: "This class [of simple and universal things] appears to include corporeal nature in general, and its extension; the shape of extended things; the quantity, or size and number of these things; the place in which they may exist, the time through which they may endure, and so on." (CSM II 14, AT VII 20)

square would not be a simple but a proposition defining the relationship that might obtain in a certain configuration of lines. To wit, a composite. This would not pose a problem, were the concept of “shape” also not mentioned by Descartes in the list of simples.

Of course, we need not adhere to the notion that any set of simples, such as four lines, makes a composite. The square, along with the lines which form its sides could be considered a simple. To define composites, such as might exist in the real world, we might impose a condition that they exhibit *all* of the simples listed by Descartes.⁶ This would allow us to retain the abstract square as a simple, since it does not have duration or even necessarily quantity.

I think qualifying such abstract shapes as simples is necessary if we are to keep to the form of the argument that geometry examines such simples regardless of whether they exist in nature or not.⁷ For if such geometrical constructs, that is to say any shape, are not taken as simples, they are not among the subject matter of pure mathematics. The admission of abstract shapes as simples essentially involves the hypothetical task of listing the members of the set of shape. A sensible composite object might feature any member of this set as its shape and conversely there might be members of this set to which no sensible objects correspond. This argument by analogy applies to all the simples listed by Descartes such as extension, quantity, size, number, place and time. The concept of shape, it should be noted, is not a member of this set it denotes. Hence, the door is open as to whether “shape”, or any other member of Descartes’ list of simples, are also simples of a different order.

Harry Frankfurt provides an opposite argument regarding simples. According to Frankfurt:

When Descartes says we can be certain that the simples exists, or that our ideas of them are true, what he means is that we can be certain of the existence of material objects whose characteristics include the simple characteristics he enumerates. Our ideas of the simples are true, then, in the sense that there are real objects with the characteristics of which we have ideas. The simples exist in the sense they characterise real things.⁸

⁶ This point is taken from Frankfurt, who lists a number of questions raised by Descartes’ treatment of simples. One of these questions is: “Are all simples and universals characteristic of every sensory object or may a sensory object be characterized by only some of them?” (DDM 56)

⁷ This point receives extensive support in the Fifth Meditation. (Cf. CSM II 44-45, AT VII 63-65) However, I will not at this point make use of the argumentation of the Fifth Meditation, since according to Frankfurt, the latter meditation treats of clear and distinct ideas whereas they are simply not in consideration in the First Meditation. If, as I propose to argue below, there is no sound reason to make Frankfurt’s strong demarcation, then the arguments of the Fifth Meditation would apply to this part of the text (See section 4.2: Some Problems Regarding Clear and Distinct Perceptions, Propositions of Mathematics and Simples, below.)

⁸ DDM 71

This approach is based on a viewpoint expressed earlier, which Frankfurt calls Descartes ‘theory of the imagination.’ The theory of the imagination is the idea introduced by Descartes in the First Meditation as read by Frankfurt: “the imagination merely arranges elements that are given to it” and “imaginary things are necessarily composites: the simple cannot be fictitious but must be real.”⁹

Of course, this is all to be doubted through the introduction of the omnipotent deceiver. However, the ‘theory of the imagination’ and the subsequent account of simples, according to Frankfurt is emphatically not Descartes’ own viewpoint, but one which is attributable to the “naive empiricist” of the First Meditation.¹⁰

4.1.2 A priorist and a posteriorist construction of simples

At the risk of pretentiousness, I would like to call the viewpoint I presented above *a priorism* regarding simples, and the position Frankfurt sets up to be doubted in the First Meditation *a posteriorism* regarding simples. According to *a priorism*, the set of simples extends to all possible configurations of corporeal objects regardless whether they actually exist or not, whereas *a posteriorism* implies that only characteristics of real objects can be counted as simples. If, for example no object that is a chiliagon exists in the sensible world, the chiliagon is not a simple according to *a posteriorism*, but it is still a simple according to *a priorism*.

Recall that the discussion of simples proceeds from the argument from dreams, where it was established that sense-perception may be the case even if the senses are not properly engaged with their objects, or, as Frankfurt reads it, “discrimination between veridical and non-veridical data *with the senses alone* remains uncertain”.¹¹ How can it be claimed, in this light, that simples are characteristics of real objects, given that simples are according to the ‘theory of the imagination’ necessary parts of even imaginary composites? *A posteriorism* may be a valid perspective only insofar as one is certain that sense-perception always furnishes perceptions corresponding to real objects, i.e. veridical perceptions. Given that this supposition was dropped just before the introduction of simples in the First Meditation, can we then get away with the supposition of *a posteriorism*?

But perhaps, the simples which according to Frankfurt exist “in the sense that they characterise real things” are not of those classes which include abstract instances, such as the chiliagon under the

⁹ DDM 56

¹⁰ Frankfurt makes this claim for almost all aspects of the First Meditation throughout the first part of his book *Demons, Dreamers and Madmen*. For those parts specifically concerning simples and the propositions of mathematics see chapters 6, 7 and 8.

¹¹ DDM 42

class of shape, but they are simply those categories introduced in Descartes' list. In which case it is more plausible to claim that whatever corporeal object must exist must bear these characteristics. This could be a way out for an *a posteriorist* construction of simples.

This does however leave open to question whether geometrical abstract shapes and numbers (in series) are simples or composites. I have above argued that they ought to be treated of as simples, though in a separate class than the general list Descartes enumerates. If the argument that a composite should exhibit each and every one of the simples from the general list is sound, then these abstractions cannot be numbered among composites.¹² We would not expect number to have extension, shape, part, local motion, etc.

As already mentioned, Frankfurt does not claim *a posteriorism* as his, or Descartes' considered position. This is the position attributed to the 'naive empiricist' of the First Meditation. Frankfurt is following a different agenda in setting up a version of the theory of the simples that is to be doubted by the introduction of the deceiving entity, namely, that nothing brought into doubt in the First Meditation should be of a clear and distinct form encountered later in the *Meditations*.

Leaving aside for the moment the merits of distancing every argument in the First Meditation from clear and distinct ideas by an appeal to the ignorance of the 'naive empiricist', there will be problems further down the road unless the issue of simples is cleared in the First Meditation. For if Frankfurt is right, then there is no indication of what the clear and distinct idea of simples might be before the example of the wax in the Second Meditation, where, as I shall try to demonstrate, the discussion relies heavily on a form of *a priorism* regarding simples. If on the contrary, *a priorism* is opened to doubt in the First Meditation, then it cannot be utilised in the Second Meditation. I think, however, there is a case to be made for *a priorism* being described in the First Meditation, though this comes at the price of accepting that not everything in the First Meditation is rendered doubtful by the omnipotent deceiver.

I have so far argued that Descartes' conception of simples includes the general list which he provides, as well as the instances of shape, number, duration and extension which are mathematically quantifiable in the form of particular (abstract) shapes and numbers; such as, put very simply the

¹² We could at this point interject Frankfurt's insistent claim that the meditator of the First Meditation does not view his subject matter clearly and distinctly and hence would not make a separation between, say, the geometrical definition of a given shape and its abstract instantiation (i.e. containing relations with other shapes such as when used as part of a demonstration). Hence there is no use in explicitly stating these abstractions to be simples for an *a priorist* construction. This hardly seems to work in favour of the claim that simples are characteristics of real things however, unless abstractions are also real things. We would expect the "naive empiricist", however unsophisticated, to be aware of such abstractions when commenting on the certainty of sciences.

square and the number four. These abstract instantiations necessarily exist in relations with each other, which is investigated by mathematics; algebra to be specific. This is true, I have argued against Frankfurt, even if no composite entity exists, or even if some of these particular instantiations do not have a corresponding composite in the world of sensory perception. I have also indicated that the general class of simples listed by Descartes and the various sets of abstract simples which enumerate some of these species form distinct categories of simples. In the demonstration of this final point, I believe, lies the key to understanding the omnipotent deceiver hypothesis and why it leaves the propositions of mathematics undoubted.

4.1.3 Enter the Omnipotent Deceiver

Having made his point regarding the certainty of arithmetic and geometry, Descartes then introduces the omnipotent deceiver hypothesis:

And yet firmly rooted in my mind is the long standing opinion that there is an omnipotent God who made me the kind of creature that I am. How do I know that he has not 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?¹³

This list of examples in the introduction of the omnipotent deceiver hypothesis groups together corporeal composites and simples, which, other than being an indicator that this is the ultimate form of doubt, has been read by Frankfurt as a point of support for his view that simples are necessarily characteristics of real things. He writes:

It is apparent that Descartes conceives the possibility he describes in his question as providing a basis for doubting the truth of mathematics. And the possible nonexistence of earth, sky and the simples would hardly provide such a basis if the truths of mathematics did not depend upon the existence of something.¹⁴

I have above indicated that the relations which the propositions of mathematics deal with are furnished as a class of simples. The simples through which the sensation of the corporeal world is built and the simples through which form the objects of mathematics only overlap insofar as the everyday perception of shape and number is definable in mathematical terms and not the other way around. This was the gist of the *a priorist* argument mentioned above. Hence to suggest that the group of simples which are necessary for sense-perception is classed together with certain

¹³ CSM II 14, AT VII 21

¹⁴ DDM 76

composites in introducing a form of doubt does not warrant the conclusion that Descartes here is introducing a doubt regarding the truths of mathematics. These do depend on certain entities, namely the *intellectual simples* as opposed to the *sensory simples*, but the former do not necessarily “exist in nature”, which is not to say they do not exist.¹⁵

The only time where mathematics seems to be directly made the object of doubt is when the supposition of constant error is introduced by Descartes right after the passage quoted above:

What is more, 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 even simpler matter, if that is imaginable?¹⁶

There seems therefore a good reason to separate the omnipotent deceiver hypothesis into two parts: the first dealing with the idea that sensory simples may not be certain, that is to say sense-perception may be doubted beyond the scope of the argument from dreams, and the second dealing with the propositions of mathematics. The underlying idea is of course that sensory simples may only appear to exist.

To take up the second point with which we are concerned now through the supposition of constant error, we should first note that the doubt is foremost directed at the psychological confidence one may entertain in the certainty of propositions of mathematics. Experts can go wrong in their field of expertise, hence to claim that one simply cannot go wrong in a given subject area, because everything in it seems so well known, clear and effortless is no guarantee that there will be no errors involved. Indeed this seems to be the entire force of the argument.¹⁷

This is hardly a satisfactory dismissal of the idea that mathematics may achieve certainty, due to its indifference as to whether its objects exist in nature or not. It may be argued that nevertheless it has some place in Descartes’ final formulation of doubt in the form of the malignant demon, that shaken confidence in the certainty even of propositions of mathematics contributes to the final resolution

¹⁵ This point also has ample textual support in the Fifth Meditation. Regarding why I do not here discuss it at length see footnote 7 above.

¹⁶ CSM II 14, AT VII 21

¹⁷ Frankfurt too suggests that the example is “based on nothing more elaborate or sophisticated than an awareness that men are susceptible to committing blunders of even the most egregious sort and that they sometimes become confused about even the most transparent matters.” (DDM 78; see the relevant discussion DDM 76-78)

not to affirm any proposition whatsoever. Such a reading implies that although there is no essential doubt over the propositions of mathematics, care should be taken in their formulation.¹⁸

This, however, is clearly not in keeping with the spirit of doubt that animates the First Meditation. We have already seen that Frankfurt proposes to work around the problem by identifying the objects of mathematics as those simples enumerated by Descartes, which I have called sensory simples and which characterise sensory objects. This way the first part of the omnipotent deceiver hypothesis that casts doubt on simples also casts doubt on the certainty of propositions of mathematics. But this view is open to counterexample from those entities, which may or may not exist in nature, which

¹⁸ I have divided the omnipotent deceiver argument in two parts, one regarding the fact that God may deceive a subject regarding the existence of composites and the sensory simples which pertain to them and the other regarding the possibility of error in intellectual simples. It may be objected that although there might be two wings of the argument, it functions as one. After all is it not the possibility of error as introduced by the argument from dreams that gives the meditator the confidence to assert that he may be deceived regarding any composite? So, the objection would go, the observation of error in the practice of pure mathematics, or anything simpler, would open the objects of those disciplines dealing with intellectual simples up to doubt through the omnipotent deceiver hypothesis. This objection, since it also appears to be textually cogent, merits refutation rather than dismissal.

Observe that insofar as the First Meditation is an exercise in finding some reason for doubt so as to refute all established opinions, it would appear that it could not have struck on a more promising field than the propositions of mathematics. For example, as soon as one can find some reason to doubt the proposition 'the sum of two and three is five' or 'the square of the hypotenuse is equal to the sum of the squares of the other two sides in a right angled triangle', we would expect the entire system which takes these propositions as valid to "collapse of its own accord".

Yet there is a major problem in introducing a doubt over the propositions of mathematics, something that is highlighted by Descartes' introduction of error by experts. Insofar as the truths of mathematics are in bi-conditional reliance on the entirety of the system that contains them, one cannot rely on their contingency in introducing doubt, as one can when introducing doubt over the sensory perception of a given composite. Error in mathematical operations can be checked against the defined series in which the operation takes place, unlike perceptions of corporeal objects. Hence, it does not work towards the aim of doubt to say that sometimes one adds two and three together and gets four, however true an observation this may be.

Rather, one would have to assert that it can never be the case that two added to three makes five. On what grounds one can make such an assertion I do not know, but even if it can be made, it does scant good for the purposes of doubt. There is no reason that one cannot reorganise the system of arithmetic under question so that the proposition 'two plus three equals five' is no longer valid in it. This would of course be a highly cosmetic change.

If doubt is to work, one has to impose it over the entire system of mathematics under question. In our example, it would be something like saying the proposition "two added to three makes five" is necessarily false because any proposition of the form "x plus y equals z" is dubious which comes down to saying we simply do not allow the operation of summation within our system. In terms of casting something into doubt; this is the height of absurdity though; it is akin to suggesting that if a given function were not the case, the outcome would not be true. It rings true enough, while managing to throw so much out it at the same time leaves something to be desired in terms of doubt.

In the light of these observations, it becomes a choice of either asserting as Frankfurt does, that these considerations do not occur to the naive empiricist of the First Meditation, so that he falsely doubts the propositions of mathematics, or that the propositions of mathematics are not doubted *per se*. It simply does not seem possible to strengthen the omnipotent deceiver argument so that the propositions of mathematics become doubtful in the same way as sense-perception. It does however introduce some refrain to the customary psychological confidence over the operations of mathematics, which is, as I have indicated above necessary for the formulation of suspension of judgement in the form of the malignant demon, though whether it is sufficient is open to question.

may partake of some of the sensory simples such as shape and number but of those which are abstractions of those simples in the form of particular shapes and numbers. We have seen that they cannot be composites, yet are not of the same class of simples in Descartes' list. Even if going along with the omnipotent deceiver hypothesis we are in doubt over the sensory simples, it does not follow that such intellectual simples and the relations they contain are under doubt.

An argument akin to the one presented here, and which also contains criticism of Frankfurt's position is provided by John Cottingham in his book *Descartes*. According to Cottingham, a clear and distinct, simple proposition such as 'two plus three is five' as long as it is being consciously reflected on cannot be doubted, because it has no "extraneous implications" which can lead to doubt over the relevant assertion.¹⁹ Cottingham's point seems to be that (intellectual) simples cannot be doubted, because they by definition do not entail that we assert the truth of other propositions which we have not considered and will not be able to simultaneously consider.²⁰

According to the viewpoint I have argued for, it is true that simples cannot be doubted when they are brought before the mind, since I have argued that they are indubitable anyway. The trouble is in explaining how they come to be doubtful once they are out of the mind's sight. If I at time t consider that two plus three makes five and see it to be certain and at $t+2$ again consider the proposition and see it to be certain, can one still interject that at the interval time $t+1$ the proposition was not certain? One could perhaps say that I did not know it to be certain at $t+1$ and now that $t+1$ is in the past, I can have no idea whether the proposition was certain at that point in time, since I did not consider it at $t+1$. For otherwise, if I conclude that a mathematical proposition must always be certain from the fact that whenever I concentrate on it is certain, I will be committing an inductive fallacy. Two problems therefore confound Cottingham's account: 1) the problem of explaining why a proposition denoting something unchanging can differ in certainty at different times 2) the problem of providing a cognitive mechanism which does not resort to the inductive fallacy in order to explain why whenever I concentrate on a simple proposition it will be certain.²¹

Hence although our conclusions are similar, I think Cottingham's view that for as long as I continue to concentrate on them, (mathematical) simple propositions cannot be doubted is severely limited. I have tried to show that mathematical simples form a distinct set, because the objects of mathematics cannot be taken to be composites and yet they are not in Descartes' list of (sensory)

¹⁹ Cf. Cottingham, p.67

²⁰ Cottingham adds to in a note right after the relevant section some remarks by Descartes that only one object can be perceived distinctly at a time. (Cf. Cottingham, p. 70, note 28)

²¹ Regarding the explanatory mechanism it does not help that rather than refuting the suggestion that the meditator might here be voicing a subjective conviction, Cottingham simply states that the issue has epistemic implications for Descartes. (Cf. Cottingham p.69)

simples. Their textual exclusion from the First Meditation is a good indication that they are not subject to its doubts. Nevertheless, I shall try to show below that the concept of simples in general is not doubted in the First Meditation, or in the case of sensory simples, doubt is introduced in a very specific sense.

4.2 Some Problems Regarding Clear and Distinct Perceptions, Propositions of Mathematics and Commentary

The suggestion that some things, namely intellectual simples or the truths of mathematics, survive the doubts of the First Meditation is rather bold in terms of Descartes scholarship. It is a well established and rarely challenged notion that the First Meditation is intended to be the successful overthrow of all opinions, where the term ‘opinions’ is read as all contents of the mind.²² The argument over the successes and failures of the Cartesian project of the *Meditations* often makes use of this yardstick regarding whether the First Meditation doubts achieve their purpose, as I have already argued.²³

Furthermore, the suggestion that some things may survive the doubts of the First Meditation, if not made in the spirit of rejecting the “Cartesian enterprise”, or at least much of the cogency of Descartes’ magnum opus, then might be seen as arguing the merits of the master’s work against the master himself. To avoid this pitfall, one must examine the source of the claims that are made by commentators regarding the structure of the *Meditations*. Since the argument here against Frankfurt’s interpretation of simples turns on whether clear and distinct perceptions are ostensibly absent from the First Meditation, I shall now treat of two such sources both of which are taken up by Frankfurt; one from the *Seventh Set of Objections with the Author’s Replies* and another from the *Conversation with Burman*.

4.2.1 “Nothing in the First Meditation is Clear and Distinct”

One of the chief reasons why Harry Frankfurt so adamantly argues that the propositions of mathematics in the First Meditation are not clearly and distinctly perceived and are therefore doubted by the naive empiricist, or the beginner in philosophy is, as he explains in *Demons*,

²² As shown above, Cottingham is a notable exception to the prevailing view that no content of mind should survive the First Meditation, so long as we accept that something is only contained in the mind as long as one is consciously aware of it.

²³ See above, Chapter 1

Dreamers and Madmen an extract from the *Seventh Set of Objections with the Author's Replies*. I shall quote the passage at length to better convey its significance in Frankfurt's treatment:

In any case, my interpretation does not need to rely for support either on an inference or on a disputed point concerning translation. For Descartes himself asserts quite explicitly that he supposes the mathematical propositions he discusses in the First Meditation to be perceived only confusedly. He makes this assertion in the course of considering a misunderstanding of the First Meditation on the part of the author of the Seventh Set of Objections. Of this critic Descartes remarks that

from the fact that I once said in Meditation One that there is nothing about which one may not be in doubt, where I was supposing that I was not attending to anything that I perceived clearly, he concludes that also in the following [Meditations] I can know nothing with certainty – as if the reasons we occasionally have for being in doubt about something were not legitimate and valid unless they proved that one must always be in doubt about that thing.

The emphasised clause hardly leaves any room for doubt that nothing discussed in the First Meditation is taken to be clearly and distinctly perceived.²⁴

It is clear that Frankfurt considers Descartes' dismissal of Father Bourdin's objection to be the final say on the matter, so that the inference and the point regarding translation he made earlier to the effect that nothing in the First Meditation should be taken to be clear and distinct take only second place.

Frankfurt's suggestion that in the Seventh Set of Objections, Descartes "asserts quite explicitly that he supposes the mathematical propositions he discusses in the First Meditation to be perceived only confusedly" is somewhat misleading, in that although Descartes explicitly considers "whether there is an earth or whether I have a body", he makes no explicit mention of the propositions of mathematics in his reply.²⁵ This matter is not helped by the fact that Bourdin's initial objection makes repeated mention of the proposition "two and three make five" and asks how it can be doubted.²⁶ Hence we require the further inference by Frankfurt that from "[in the First Meditation] I was supposing that I was not attending to anything I perceived clearly"; "nothing discussed in the First Meditation is clearly and distinctly perceived."

Postponing for a moment whether this is the final say regarding the dubiousness of the propositions of mathematics in the First Meditation, insofar as they are taken up confusedly, I would like to point

²⁴ DDM 64. Emphasis in the original. The *Mediations* passage quoted is quoted from the Haldane and Ross translation. from HR II, 266. Cf. CSM II 309, AT VII 460.

²⁵ Cf. CSM II 308-310, AT VII 458-462

²⁶ Cf. CSM II 304-308, AT VII 455-459

out that the real misunderstanding between Bourdin and Descartes in the relevant objection has more to do with Bourdin's misrepresentation of what is clear and distinct perception, rather than what exactly the doubts of the First Meditation entail. Bourdin's argument seems to be that the "maxim" adopted by Descartes in the *Meditations* is just as open to doubt as anything else that has been doubted in the First Meditation. According to Bourdin this maxim is:

'If something appears certain to someone who is in doubt whether he is dreaming or awake, then it *is* certain – indeed so certain that it can be laid down as a basic principle of a scientific and metaphysical system of the highest certainty and exactness.' You have not at any point managed to make me consider this maxim to be as certain as the proposition that two and three make five, you have not shown it to be so certain that no one can have any kind of doubt about it, or be deceived about it by an evil demon.²⁷

To this Descartes makes a number of replies in an acerbic tone, one of which is the separation of clear and distinct perception from the considerations of the First Meditations. According to Descartes, Bourdin has lifted his material from the First Meditation and the beginning of the Second and the Third as well as the Synopsis and has mixed them up into an unrecognisable form.²⁸

The part of this reply with which we are concerned, and which is quoted partially by Frankfurt, concerns Bourdin's initial charge that if Descartes' manner of proceeding is adopted, *nothing* can remain free of doubt. To this part Descartes replies:

I have explained, in several places, the sense in which this 'nothing' is to be understood. It is this. So long as we *attend* to any truth which we perceive very clearly, we cannot doubt it. But when, *as often happens, we are not attending* to any truth in this way, then even though we remember that we have previously perceived many things very clearly, nevertheless there will be nothing which we may not justly doubt so long as we do not know that whatever we clearly perceive is true.²⁹

This passage immediately precedes that quoted by Frankfurt, so that we may take the use of "attending" in Descartes' denial of "attending to anything I perceived clearly" in the First Meditation in the sense used throughout the passage. Descartes' point seems to be that as he wrote the First Meditation, he was giving a general treatment of matters, in the course of one of those common experiences of not attending to any one truth perceived very clearly. It is not that the meditator could not have attended to any one of his clear perceptions during the First Meditation, or necessarily did not have any clear perceptions during the First Meditation, it is simply that for the

²⁷ CSM II 306-307, AT VII 457. Emphasis in the original.

²⁸ Cf. CSM II 308, AT VII 459

²⁹ CSM II 309, AT VII 460. Emphases mine.

purposes of the First Meditation the treatment of any particular clear perception was unnecessary. This is reasonable, since Descartes is yet to work out the conclusion “whatever we clearly and distinctly perceive is true”, and hence does not need to deal with clear perceptions beforehand. Thus Bourdin’s claim of apparent certainty can be dismissed and so Frankfurt’s inference from “[in the First Meditation] I was supposing that I was not attending to anything I perceived clearly” to “nothing discussed in the First Meditation is clearly and distinctly perceived” becomes more suspect. Frankfurt needs to further argue that there can be no clear perceptions of the meditator of the First Meditation.³⁰

Indeed, it is difficult to follow Frankfurt’s statement “nothing discussed in the First Meditation is clearly and distinctly perceived”. If this is read as ‘none of the (apparent) conclusions of the First Meditation are (or can be) clearly and distinctly perceived’ it seems innocuous enough. But if the intension of the term ‘discussed’ is to be taken as the content of the subject matter of the First Meditation, then this statement is problematic in its apparent claim that the individual propositions of mathematics cannot be clearly and distinctly perceived in the First Meditation or by the meditator at this stage. It seems, indeed, to run against Descartes’ replies to Bourdin from which Frankfurt derives his foremost piece of support.

But my interpretation and objections against Frankfurt seem to hit an obstacle, considering that Descartes singles out a proposition of arithmetic and geometry each in the First Meditation. These are namely ‘the sum of two and three is five’ and ‘the square has four sides’. I have relied on the idea that since individual propositions of mathematics which are at some level part of the discussion of the First Meditation are not individually brought up in the reply to Bourdin, they are unaffected by Descartes’ claim that nothing in the First Meditation is clearly perceived and hence can survive the First Meditation undoubted as clear and distinct ideas. But Descartes’ express use of individual propositions’ threatens this position. If in the First Meditation Descartes considers doubtful those individual true propositions of mathematics, which as intellectual simples I have argued cannot be doubted, then one must assert either that there are no clear and distinct perceptions in the First Meditation, or that the First Meditation is, at least in its final arguments, entirely rhetorical.

I think this charge can be deflected. It is true that in the First Meditation, introducing the preliminary point regarding the certainty of mathematics, Descartes writes “For whether I am awake or asleep, two and three added together are five, and a square has no more than four sides.”³¹ This is at first sight the admission that is dangerous to my interpretation. But in the next paragraph, when through

³⁰ This Frankfurt tries to do through a treatment of a passage from the *Conversation with Burman*. See below section 4.4.2 “The Naive Empiricist”.

³¹ CSM II 14, AT VII 20

the supposition of constant error the propositions of mathematics are supposedly brought into doubt no complete propositions of the form 'x+y=z' or a 'given shape s has t sides' is given. Rather the question is "may I not go wrong every time I add two and three or count the sides of a square".³² Whereas the initial admission of certainty was made using the complete proposition, the supposition of doubt is introduced through an incomplete proposition. Hence Descartes may genuinely claim, at least for the incomplete propositions that he was not attending to anything clear, because surely an incomplete proposition cannot be clear. This might also be the reason he avoids expressly mentioning mathematical propositions in his reply to Bourdin. The point could have been made more forcefully through a more complex operation such as 'whenever I take the square of 78,945' perhaps, but the essential point is, so long as there is no question of rejecting a complete proposition, we cannot claim Descartes expressly doubts mathematical simples in the First Meditation and we do not need to accept that there can be nothing clear and distinct there; since the propositions "two and three added together are five" and "a square has no more than four sides" remain said though not doubted *per se*.

4.2.2 The Naive Empiricist

Another point of support raised by Frankfurt, indeed the inference which he claimed was somewhat unnecessary given the discussion of the passage in the Seventh Set of Objections, comes from the *Conversation with Burman*. The passage quoted by Frankfurt is a comment of Descartes' regarding the principle "Whatever I have up till now accepted as true I have acquired either from the senses or through the senses" expressed in the First Meditation.³³ There seems to have been raised an objection against this principle in that it "leaves out the common principles and the ideas of God and of ourselves, which were never in the senses."³⁴ Descartes gives a three pronged reply to this, two arguments out of which are quoted by Frankfurt in *Demons, Dreamers and Madmen*.³⁵

The first argument is that these ideas must have been learnt, through hearing spoken words or reading written words, from other people. If this argument were to stand on its own, it might lead to the rather bizarre idea that the idea of the self, or the principle of identity are expressly taught to people and the bold claim that a child raised in isolation would not have an idea of such things as the

³² CSM II 14, AT VII 20

³³ CSMK 332, AT V 146

³⁴ CSMK 332, AT V 146

³⁵ Cf. DDM 62

self.³⁶ But it is clear that Descartes does not mean this assertion to be understood in the sense that there is only one way of obtaining these types of ideas. For he continues: “Secondly, the author is considering at this point the man who is just beginning to philosophise and who is paying attention to only what he knows he is aware of.”³⁷ Following a brief discussion of these “creatures of the senses”, Descartes gives his third response, which Frankfurt omits from his discussion. The third reply in its entirety is “Thirdly, here we are dealing primarily with the question of whether anything has real existence.”³⁸

Frankfurt’s analysis relies on a key sentence in the discussion of the manner of thinking of the beginner in philosophy. Descartes distinguishes between thinking about those general principles in the abstract and confusedly, where the abstract thought seems to involve thinking about the general principles “apart from material things and particular instances.”³⁹ He goes on to denounce the sceptics:

Indeed if people were to think about these principles in the abstract, no one would have any doubt about them, and if the sceptics had done this, no one would ever have been a sceptic; for they cannot be denied by anyone who clearly focuses his attention on them.⁴⁰

Frankfurt suggests an inference can be made from this point. Since according to Frankfurt Descartes here maintains it is impossible to doubt what is clearly and distinctly perceived and scepticism is thus a failure to perceive the general axioms clearly, it can be inferred “that whoever is considering the mathematical propositions discussed in the First Meditation cannot be perceiving them clearly and distinctly.”⁴¹

Frankfurt’s line of argument includes a series of assumptions. He first suggests that “What Descartes says here about ‘general principles and axioms’ applies equally to the propositions of mathematics and to such ideas as those of God and of the mind.”⁴² Whereas the latter two are expressly mentioned in the text, propositions of mathematics are not. But the more important reason not to include the propositions of mathematics among the general principles is Descartes’ refrain “we are

³⁶ This assertion should not be taken so far as raising questions regarding philosophical issues such as the private language argument. (See for example Cottingham’s article “‘The only sure sign...’: Thought and Language” in *Cartesian Reflections*, pp.107-128) I simply contend that such an assertion regarding a child raised in isolation would be a bold one on Descartes’ part. I think the real significance of the assertion that even common principles can be obtained as sense data is that insofar as they are true ideas they are expressible, and insofar as they are expressible they can be derived from sense data.

³⁷ CSMK 332 AT V 146

³⁸ CSMK 333 AT V 146

³⁹ CSMK 333 AT V 146

⁴⁰ CSMK 333 AT V 146

⁴¹ DDM 63

⁴² DDM 62

dealing primarily with the question of whether anything has real existence.”⁴³ This sentence seems to imply that whether there is an external world or not, the truths under consideration would remain. They are not at issue. If the author knows with what issues he is supposed to be dealing in his meditation, and based on the style of his exposition there is no good reason to judge he is not, it is a somewhat strange notion to take his insistence of naiveté to trump his underlying motive.⁴⁴

The second assumption Frankfurt relies on is the validity of Descartes’ hyperbolic denunciation of the sceptics. Frankfurt’s assertion that “scepticism must depend on a failure to perceive [general principles or axioms] clearly and distinctly”⁴⁵ does show that clear perceptions might not be clearly and distinctly perceived by everyone all the time, though it does not mean that the meditator is in this position himself as long as he attends to these propositions. I have already claimed above that once seeming doubt is introduced regarding the propositions of mathematics, it is introduced over incomplete propositions. In a manner of speaking, it is much more difficult to confusedly perceive the transparent truth of ‘two and three makes five’ than to assent to it.

I do not wish to claim that I have completely refuted Frankfurt’s inference regarding mathematical propositions based on the section of the *Conversation with Burman*. I have tried to show that it relies on more than it discusses, the consideration of which points renders it quite complicated. I do not think Descartes’ work requires this much theoretical burden be borne by some comments he made on it years after it was written. Had Descartes furnished any reason for the propositions of mathematics being clear and distinct later on in the *Meditations*, we might have considered his narrator of the First Meditation ignorant of the fact. Yet nowhere in the *Meditations* do we encounter such a demonstration. The point is simply taken for granted. As Frankfurt himself points out, speaking of Descartes in the introduction to *Demons, Dreamers and Madmen*, “no one appears in his *Meditations* but himself.”⁴⁶ I would prefer to leave the work that way in that this allows for avoiding the difficulty of explaining the miraculous transformation of a naive empiricist to the

⁴³ CSMK 333, AT V 146

⁴⁴ In the *Conversation with Burman*, Descartes distinguishes between “the order of discovery” which he used in the *Meditations* and the “order of exposition” which is the style of his *Principles*. (Cf. CSMK 337-338, AT V 153) This distinction particularly concerns the order of presentation of the two separate proofs of God, which is reversed in the later *Principles* (i.e. the ontological proof precedes the non-prior argumentation of the Third Meditation). This assertion on Descartes’ part should not be taken further than the ordering of arguments, to imply that the *Meditations* is a series of notes on ideas as they occurred to the author. We need not turn to the ample biographical material to claim that the *Meditations* was a work in long planning by the time Descartes wrote it; he tells us as much in the opening paragraph of the First Meditation (Cf. CSM II 12, AT VII 17-18). Although it could be insisted that it is the naive empiricist speaking here, it is really Descartes’ word against Descartes’ word.

⁴⁵ DDM 63

⁴⁶ DDM 4

Cartesian demiurge, where the two characters sit at the opposite sides of an unbridgeable epistemological spectrum.

4.2.3 The Intellectual and Sensory Simples

We have seen that Frankfurt's claim that there are no clear and distinct perceptions under consideration in the First Meditation cannot be non-problematically attributed to Descartes. In this light, we may now proceed with introducing the material from the Fifth Meditation regarding intellectual simples, i.e. the propositions of mathematics. This will serve to elucidate how intellectual simples differ from sensory simples. Following this, a few remarks on how unlike the intellectual simples the sensory simples are doubted in the First Meditation will lead us to the Second Meditation and the *sum*.

Before we examine the relevant parts of the Fifth Meditation verbatim, I would like to point out that at no point in the previous meditations has the subject matter of mathematics come under another round of surveillance. This is significant in that, as we shall see, Descartes is content to simply assert the truths of mathematics as being clear and distinct perceptions and does not try to prove the point in the Fifth Meditation, lending support to the viewpoint that they have never been cast under sufficient doubt.

Descartes starts by telling us that before he can treat of things outside the ego, he must treat of the "ideas of these things in so far as they exist in [my] thought, and see which of them are distinct and which of them are confused."⁴⁷ Having noted that he imagines quantity clearly and can distinctly imagine the length, breadth and width of extended things, Descartes' tells us that parts, local motions and durations can also be so understood. Descartes then says that such things may be generally understood, but there are also very many specifics about "shape, number and motion" which present little problem to the attentive mind.⁴⁸

So much on the sensory simples, which Descartes will not return to until the Sixth Meditation. He now goes on to tell us:

But I think the most important consideration at this point is that I find within me countless ideas of things which even though they may not exist anywhere outside me still cannot be called

⁴⁷ CSM II 44, AT VII 63

⁴⁸ CSM II 44, AT VII 63-64

nothing; for although in a sense they can be thought of at will, they are not my invention but they have their own true and immutable natures.⁴⁹

There are two points to note about this passage. The first is Descartes is still disallowing the imagination any role in his inquiry. There can be nothing certain which is thought of at will and is an invention, or an adventitious idea. Secondly, now that my existence is proved, anything that can be demonstrated to be external to me will also be proven to exist. But the imagination cannot provide such a proof and yet what the intellect can perceive as something distinct to me seems to have no external existence.

The connection between external existence, or mind-independence, and truth is problematic. But Descartes here says that though the propositions of mathematics do not satisfy external existence, they still satisfy the criterion of truth. Hence they are mind-dependent entities. However, if mind-dependent truths are to be allowed in a system in which God is also to be furnished with proof, what difference remains between the mind-independent truth of God and the mind-dependent truths of mathematics?

In the *Meditations* Descartes cannot allow for mind-independent entities with the exception of God. Yet whatever is mind-dependent is possibly illusion and fantasy. But what then becomes of God, whose existence is about to be proved with as much certainty as the propositions of mathematics and of the ego, which were proven with certainty to exist? If the utmost certainty cannot provide direct inference to external existence, is not the quest for certainty nonsensical for the establishment of “real” existence?

We should note that the peculiar nature of propositions of mathematics applies only to them as intellectual simples. Sensory simples, such as extension, which only serve to characterise (possibly) external objects are by definition mind-independent. If they serve to form true ideas (of composites) they serve the proper functioning of the senses and the imagination, whereas they are also open to abuse by the imagination.

It cannot be claimed that any composite has a “true and immutable” nature and hence it cannot be claimed that sensory simples are determined and completely defined by the intellect. It is true that they are limited by the intellect. Thus for example we know the wax is by nature capable of being extended in more ways than can be enumerated, i.e. imagined. The calculation of the surface area of the wax, for example, can be taken to a level of precision which the imagination simply cannot be able to differentiate between its degrees. No amount of mathematical calculation however will tell

⁴⁹ CSM II 44, AT VII 64

me that there is such an extended thing as the piece of wax. Nor is there any parallel between the uniform units of calculation available to the intellect and the images of the piece of wax sensed by the imprecise imagination. It could be said that in that the mind cannot gain complete knowledge of the existence and the sensible qualities of any one corporeal object, the object must exist.

Mind-dependent entities such as the objects of mathematics cannot be doubted through appeal to contingency. Unlike external objects, mind-dependent truths have objects which are immutable in nature. Were it not for the fact that these absolute properties can be demonstrated, they would be fictitious inventions.

If certainty were the entire point of the *Meditations*, Descartes could have easily finished with intellectual simples. We have already seen that he views the objects of mathematics as certain in the First Meditation. However, certainty is only an aspect of the larger search of the *Meditations* regarding what can be said *to exist with certainty*. In the Sixth Meditation, Descartes claims corporeal objects exist because he seems to receive data from them which cannot be accounted for by any other source. His contention is that if any piece of the relevant data is true, then the corporeal world must exist. Had all simples exhibited the certainty of mathematical simples, doubt regarding the corporeal world and its eventual resolution as described could not have been carried out.

Of course we should qualify this claim that sensory simples, unlike intellectual simples, are open to doubt. They are only open to doubt if a set of strict criteria is applied, which I believe my account allows for. Above I have treated of *a priorist* constructions of simples, according to which simples exist whether they have corresponding objects or not. Now mathematical simples are in a sense their own objects, and hence they cannot come under doubt from this perspective. Sensory simples, however, might prove to be vacuous, in that they are never utilised in the construction of a 'real' composite. This would be the case in the absence of an external world. That the mind should contain concepts of perception which could never be realised in sensation might be grounds enough to form doubts over them. But of course, Descartes does try to prove the existence of the external world, from the fact that these sensory simples exist. The point is significant for once more showing the indubitable nature of mathematical simples.

The idea of indubitable mathematical simples is of course very significant for Descartes' construal of the intellect. Here we have the prime example of clear ideas which may be distinctly perceived. In other words, mathematical simples form the yardstick of clear and distinct perception. However, the fact that I exist in possession of an intellect and other faculties is not a mathematical simple, though the acceptance that they are indubitable certainties accessible to the mind plays an important role in

the formulation of the thinking thing. I would now like to turn to the Second Meditation to show how this is achieved.

4.3 Me and the Wax – *Sum* and *Res Cogitans* in the Second Meditation

4.3.1 *Sum*

The famous argumentation of the Second Meditation can be taken up in two parts: first comes the establishment of the *sum*, the argument that an ego exists; which is followed by the qualification of this entity as the *res cogitans*, the thinking thing. I shall refer to these as the ‘*sum* argument’ and the ‘*res cogitans* argument’ respectively.

The fundamental point to be made about the Second Meditation is that it relies on the separation between doubtful sensory simples and the certain intellectual simples in moving from the *sum* argument to the *res cogitans* argument. This is not only apparent in the example of the wax which has been extensively discussed before, but also in the confidence that the concept of the ego can have a demonstrable intension, without appeal to any accidental properties.

The *sum* argument is straightforward, relying on the identity of the subject ‘I’ with the predicate ‘existence’. Hence, even if I have a suspicion of being deceived regarding my existence, ‘(I exist) and am deceived (that I exist)’ the supposition will be found to be contradictory. To quote Descartes’ classic formulation: “I must finally conclude that this proposition *I am, I exist* is necessarily true whenever it is put forward by me or conceived in my mind.”⁵⁰

Notice that there is no discussion of clarity or distinctness but only of the truth of the proposition ‘I exist’. In fact, it sounds as though one can accidentally voice this truth, or happen upon it.⁵¹ At this point the demonstration of the *sum* relies not on its clarity, but on the fact that it is indubitable in a very peculiar way: that even the supposition the proposition may be false leads to a contradiction.

Of course calling “I exist” a proposition is rather generous. Indeed its special indubitable structure seems arise from it either being a subject or a predicate but not containing both. It is x. One can

⁵⁰ CSM II 17, AT VII 25

⁵¹ Frankfurt makes a similar point. Cf. DDM 103; 109-111

hardly call it a philosophical day after such a conclusion. For all its peculiar certainty, the incomplete proposition *sum* proves very little.⁵²

Of course Descartes does not consider the *sum* argument finished business. Much of the Second Meditation is devoted to what this thing is; the *res cogitans* argument. Before we go on to examine it, we should note that there is a tendency to interpret thinking as proof of the existence of the ego. This is probably influenced by the catchphrase *cogito ergo sum* of the *Discourse*. The construal of the argument in this manner leads to objections such as Gassendi's that any action would suffice to infer existence.⁵³ Such a proof is not the case in the *Meditations* and even if it were, it would be redundant. To go on to prove my existence from the fact that I think would be to take a step backwards. In any case, as we have seen, to prove that an ego exists, one need not make any assumptions regarding its qualities or attributes. Hence the *res cogitans* argument is an important one on its own and should not be viewed as offering support to the *sum* argument. If anything the observation that I exist is perquisite to the establishment of myself as a thinking thing under hyperbolical doubt.⁵⁴

4.3.2 *Res Cogitans*

Immediately after the formulation quoted above, the meditator issues himself a warning:

But I do not yet have a sufficient understanding of what this 'I' is, that now necessarily exists. So I must be on my guard against carelessly taking something else to be this 'I', and so making a mistake in the very item of knowledge that I maintain is the most certain and evident of all.⁵⁵

Thus begins the argument that will establish the ego as the *res cogitans*. In general the argument is reductive and relies on determining the unnecessary nature of various qualities, such as the possession of a body, or a material soul. The argument culminates in the critique of the imagination in the form of the example of the wax, which was discussed extensively under section 3.1 "The Wax

⁵² The incompleteness of the *sum* as a proposition is reminiscent of the incomplete mathematical propositions Descartes used to cast some doubt on the propositions of mathematics, discussed above. It seems that certainty regarding existence is more easily attainable through incomplete propositions which appear to be the only way of opening intellectual simples to apparent doubt. I note this only as an interesting correlation and a further example of Descartes' use of incomplete propositions.

⁵³ Cf. *The Fifth Set of Objections and Replies*, See CSM II 180, AT VII 258-259 for Gassendi's objection and CSM 243-244, AT VII 350-352 for Descartes' reply. Frankfurt makes note of the same objection in DDM 95-96.

⁵⁴ Almost all of the points made in this paragraph have also been voiced by Frankfurt in *Demons, Dreamers and Madmen*. Regarding *cogito* and the *Discourse* see pp. 93-94, 113-115. Regarding Gassendi and *ambulo* see pp. 109-111. For a version of the 'formal' primacy of the *sum* argument see pp. 95-96.

⁵⁵ CSM II 17, AT VII 25

and the Imagination” above. The following passage is illuminative of the entire *res cogitans* argument:

I know that I exist; the question is what is this ‘I’ that I know. If the ‘I’ is understood strictly as we have taken it, then it is quite certain that knowledge of it does not depend on things of whose existence I am as yet unaware; so it cannot depend on any of the things which I invent in my imagination. And this very word ‘invent’ shows me my mistake. It would indeed be a case of fictitious invention if I used my imagination to establish that I was something or other; for imagining is simply contemplating the shape or image of a corporeal thing.⁵⁶

Descartes goes on to say that although he is certain of his existence, he is aware that all bodily things “could be mere dreams <and chimeras>”.⁵⁷ Given this further premiss, the conclusion that the ego cannot be corporeal is not difficult to draw. However, the positive conclusion that the ego is therefore a cognizant thing does not follow, unless there is a hidden premiss that there are only two substances, namely the extended and the thinking substance.

I claim that this premiss is provided by the separation of intellectual simples from sensible simples. Descartes at this point needs to know that non-imaginary thought can still remain once he has done away with the entire corporeal nature. The *sum* does not serve this purpose; since if I imagine I exist, I exist. During the formulation of the *sum* Descartes is barred from a separation of faculties since it is only now in the *res cogitans* argument we have come to question the constitution of the ego.

In order to formulate the *res cogitans* argument, Descartes is however in need of a certain, that is indubitable proposition, if as he has himself stated he will not be inventing his constitution. The propositions of mathematics and other intellectual simples fit the bill perfectly. They serve as an anchor for thought, as it were, so that the concept of thinking at this point has definite intension.

In this light it is not strange that the intellect, which unilaterally grasps the intellectual simples is the only faculty that can correctly take the self as an object. Once this firm ground is established, one can elaborate, as Descartes does, on why true knowledge is provided by the intellect, despite it not being the only faculty of the mind.

This argumentation relies on a hidden premiss, namely that so long as the ego exists, objects (of thought) and faculties of the mind are directly and mutually deducible from one another. Through mutual deducibility of object and faculty, the mathematical simple which has not been doubted lends itself to the proof of the intellect as the faculty of certain knowledge. Insofar as the intellect has an

⁵⁶ CSM II 18-19, AT VII 27-28

⁵⁷ CSM II 19, AT VII 28

awareness of the common products of the imagination and sensory perception, taken as sensations alone, it furnishes them as objects, namely sensory simples. Applying the principle again, from the fact that it has access to sensory simples, the conclusion that the ego must be in possession of the faculties of imagination and sensory perception emerges. We thus come to the total *res cogitans*. The mutual deducibility of object and faculty is therefore one of the significant currents at work within the *Meditations* and may be termed Descartes' transcendental principle, following terminology that has already been used above.

This then is the existential significance of the intellect. Insofar as it has access to intellectual simples, the intellect has grounds to establish certainty with regard to the existence of definite objects, that is, objects which are not presumed to be variable. Such variable objects are indefinite entities like the initial ego of the *sum* argument. The *res cogitans* carries out the work of defining this entity, the ego. On the foundations raised by the intellectual simples, one can now build up knowledge of sensible simples, insofar as they are considered as aspects of thought. The point is well put by Descartes himself near the end of the Second Meditation. Having claimed that the examination of the wax contributes to the distinctness of the knowledge of the self, Descartes says:

This is because every consideration whatsoever which contributes to my perception of the wax, or any other body, cannot but establish even more effectively the nature of my own mind. But besides this, there is so much more in the mind itself that it scarcely seems worth going through the contributions made by considering bodily things.⁵⁸

I think this passage quite neatly sums up the epistemology of the *Meditations*. One could leave it here were it not for the need to work out one final distinction between Descartes' metaphysics and his epistemology through the role played by the knowledge of God.

4.4 God and the World

Descartes offers two separate proofs for the existence of God in two diverse parts of the *Meditations*. These are the so called trademark arguments of the Third Meditation and the ontological argument of the Fifth Meditation.⁵⁹ I do not here intend to consider the merits of the arguments individually. I will only try to examine what function a proof of God may serve in the light of Descartes' construal of the mind as discussed above. To this end I shall assume for the moment

⁵⁸ CSM II p. 22, AT VII 33

⁵⁹ The former title follows John Cottingham's phraseology (cf. Cottingham, p.48), the latter is the better known title given to the argument by Immanuel Kant (cf. Kant, A591/B619).

being that the two arguments are meant to serve the same function and at least one of them holds. Both of the assumptions I make are strong, but may easily be dropped once the purpose of positing the existence of God in the *Meditations* becomes clear.

The well known interpretation is that having posited the ego as *res cogitans*, Descartes goes on to look for something that is external to the self. This he finds in God, who according to the trademark argument must necessarily be the cause of the ego's 'innate' idea of God, or whose essence must entail existence, according to the ontological argument. Having established the existence of God and having argued that his perfection cannot entail deception, Descartes then supposedly frees himself from his greatest doubt, namely that he may be under a ruse perpetrated by a supernatural entity.

We may immediately note that according to my interpretation, the supposition of the omnipotent deceiver is not a strong factor in the *Meditations*. I have concentrated on the scope of the faculties and errors which may arise structurally through their misuse, but have tried to allow for the inevitable random error. Hence although the purpose and power of the faculties of the mind may be determined, their correct use is still bound by human limitations. The omnipotent deceiver hypothesis threatens the first part of this argument while the supposition of a non-deceiving God, without the further supposition about the freedom and the operation of the will, bodes ill for the second part.⁶⁰ Although this might just as well be an objection to my interpretation of the *Meditations*, we might add that Descartes considers the argument from dreams and not the omnipotent deceiver hypothesis as the main reason for doubt as he states clearly at the end of the Sixth Meditation.⁶¹ Furthermore, it is difficult to argue that the omnipotent deceiver hypothesis applies with equal force after what has been said regarding certainty of the propositions of mathematics above and more importantly after the establishment of the *sum*.

The *sum* represents a crossroads between hyperbolic doubt and reasonable doubt, or moral certainty and mathematical certainty. In establishing the *sum*, Descartes openly challenges the deceiver:

But there is a deceiver of supreme power and cunning who is deliberately and constantly deceiving me. In that case I too undoubtedly exist, if he is deceiving me; let him deceive me as much as he can, he will never bring it about that I am nothing as long as I think I am something.⁶²

⁶⁰ In this essay on the *Meditations*, the Fourth Meditation, in which the cause of error is linked to freewill, is conspicuous by its absence. This is mainly because like the proof of God where it has its roots, I believe the argument of the Fourth Meditation is inessential to the epistemology of the *Meditations*. The obscurity of the arguments of the Fourth Meditation has also been influential in my decision not to include it.

⁶¹ Cf. CSM II 61, AT VII 89-90

⁶² CSM II 17, AT VII 25

Two things are clear from this passage. First Descartes is still willing to consider the existence of the supreme deceiver. Now both the ego and the deceiver exist. Secondly the supreme deceiver is not omnipotent, this is not only clear from Descartes' wording, but also because the self-consciousness of the ego represents a limitation on the deceiver's power. Indeed with every indubitable demonstration of anything that can be the object of the mind, the deceiver would constantly diminish in power, until he is nothing more than a personification of the human tendency to make mistakes.

So the omnipotent deceiver is only tangentially related to the proofs of God. It seems to me that in the proofs of God in the *Meditations*, Descartes is arguing more against the atheistic suppositions of the First Meditation than the prospect of an omnipotent deceiver. In the First Meditation, Descartes had chosen not to argue with those who would deny the existence of an omnipotent God, but accept their arguments. This, he claimed, was because atheistic arguments would serve his sceptical aims just as well, if not better, than the supposition of a deceptive omnipotent entity. Here is the relevant passage:

According to their supposition, then, I have arrived at my present state by fate or chance or a continuous chain of events, or by some other means; yet since deception and error seem to be imperfections, the less powerful they make my original cause, the more likely it is that I am so imperfect as to be deceived all the time.⁶³

Claiming my cause to be the omnipotent entity relies of course on the same correlation between the power of my original cause and the likelihood of my being deceived all of the time established in this passage. Later in the *Meditations* Descartes accepts the major premiss; "If I am the effect of any cause less than omnipotent I am more likely to err all of the time" but denies the minor; "I am not the effect of an omnipotent cause". According to this line of reasoning the ego is the product of an omnipotent entity and is therefore the least likely to err and be deceived in the grand scheme of things.

The problem now becomes why such an early passage, introduced in the First Meditation, should enjoy such a determinant position. There is no doubt that Descartes' response to this passage in the form of proofs of God is not only suitable for rejecting the atheistic position, but also is cogent with the ascribed aim of rejecting the supposition of an omnipotent entity. Indeed driving a wedge between omnipotence, or other perfections, and deception is Descartes' strategy. So why should the major premiss established here be accepted uncritically?

⁶³ CSM II 14, AT VII 21

Since I have already argued that the First Meditation does not entail doubt regarding everything mentioned in it, I will leave aside the question what business such a seemingly important principle has in the First Meditation. Descartes could claim it is a logical necessity and the fact that he provides no argument for it suggests that he might have so viewed it. Of course the proposition “If I am the effect of any cause less than omnipotent I am more likely to err all of the time” hardly seems like a logical necessity. On the other hand, it seems to imply something more than immediately meets the eye.

First, notice that unless I am created by an omnipotent entity, it is the possibility of my erring *all the time* rather than erring *simpliciter* that is raised. Descartes is not concerned here with individual instances of thought or opinion forming. In fact we will soon find instances in which it is not possible to err. He simply suggests that it is possible I may be in error all of the time and the probability is greater if my cause is not omnipotent. The possibility still remains even if my cause is omnipotent, but it is not as likely as it would have been had my cause been a continuous chain of events, for example.

One must of course ask why. How does one determine the relative probabilities of being continuously deceived by an omnipotent entity and being deceived all the time because one has one’s cause in a continuous chain of events, especially under the supposition that in either case this possibility obtains? I will only give a speculative reason here regarding why Descartes should affirm such a principle seemingly by fiat. I will also offer two points Descartes makes in the *Meditations* to support this speculative perspective.

4.4.1 The Metaphysics of the Meditations

I think Descartes’ conception is that the more immediately relevant the possible cause of our perception is to the object of our perception, i.e. the world, the less likely we are to be deceived *all the time*. This is because whereas an omnipotent entity is as much my cause as the cause of the world, I cannot assert the same for chance, or fate, or a continuous chain of events. Although it is possible that any of these causes is ultimately also the cause of the world, it is not logically entailed as in the case of an omnipotent entity.

On the ground this amounts to the following: in any one instance I may be deceived by an omnipotent entity. But for this to apply to all instances, the omnipotent entity should have decreed a complete separation between my mind and the world. By definition the omnipotent entity is capable of decreeing the complete opposite of this, as well as any range of deceptive instances that might lie

in between. Creation by chance, a chain of causes or fate however implies that my mind must have diverged incorrigibly from the world at some point in the sense that these causes imply some amount of change was necessary in the world for my being as effect. Hence in locating the principle of non-deception in an otherworldly cause, Descartes tries to maintain a symmetry between the mind and the world.

This is a curious metaphysics of God-guaranteed correspondence with the world, but it is supported by two points Descartes makes elsewhere in the *Meditations*, namely the claim that anything that is perceived distinctly by the intellect can be separated at least by the power of God and the cosmology Descartes introduces in the Fourth Meditation. I will examine them briefly only insofar as they concern God-guaranteed correspondence with the world.

In the beginning of the Sixth meditation, speaking of material things, Descartes says that he perceives them clearly and distinctly, as the subject matter of pure mathematics. This suggests to him that corporeal objects exists:

For there is no doubt that God is capable of creating everything that I am capable of perceiving in this manner; and I have never judged that something could not be made by him except on the grounds that there would be a contradiction in my perceiving it distinctly.⁶⁴

This neatly sums up the role of God as mediator between the ego and the world. God is capable of creating everything that can be perceived distinctly, and he would never create anything the distinct perception of which would involve a contradiction. I can never err as long as I concentrate on that which I distinctly perceive and this is because my distinct perception is guaranteed by God, who, for lack of a better word, respects this rule of the human mind.

One cannot attest this for chance or series of events; for although they might allow me distinct ideas, it is not the case that these circumstances of creation would have any influence over whether my distinct perception is really the case, or that a distinctly perceived contradiction is not an actual state of affairs. In such a case, my being is separate from my perception, in the sense that the inalienable certainty of distinct perceptions of a God-given mind do not obtain.

The important point here is that there almost seems to be a contract between God and the thinking thing. This contract demarcates existence in the world. While the thinking thing agrees that it cannot doubt anything distinctly perceived, God agrees not to create anything that will lead to a distinct contradiction. One might say that the thinking thing has the better deal here.

⁶⁴ CSM II 50, AT VII 71

However, the terms are reversed in the cosmology of the Fourth Meditation. Here we are told that it is not possible to scrutinise God in entirety. Because the ego knows its nature to be weak and fallible, and knows God's nature to be immense and infinite it "also [knows] without more ado that he is capable of countless things whose causes are beyond my knowledge." From this it is to be concluded that the final cause, in trying to investigate the will of God, is an utterly unsuitable scientific device.⁶⁵

Descartes also makes the point that since we are not capable of fathoming entire creation, we are not good judges of perfection. "For what would perhaps rightly appear very imperfect if it existed on its own is quite perfect when its function as a part of the universe is considered." And although since beginning to doubt everything the ego only knows of its own and God's existence with certainty, and would be deemed imperfect if this were all, there is hope "that I may have a place in the universal scheme of things".⁶⁶

So the ego's existence, in the sense as the thinking and potentially knowing thing, would have a place in the universal scheme of things that it could know about, if it could contemplate existence in its entirety. This passage essentially argues the point that God cannot be a deceiver and leads to the desired conclusion that all my errors are my own. The point that concerns us the most at this point is that as a being which can know some things with certainty and others not at all, the *res cogitans* is still not independent of the universe, and its world-correspondence is guaranteed by God even if it is not in the ego's power to totally comprehend the means through which this is achieved.⁶⁷

4.4.2 Circles

It is one thing of course to say that the idea of God could serve this purpose and that the idea of God does serve this purpose. I have so far supposed that the proof of God in the *Meditations* is valid to better gain an understanding of the function of the concept. However, whether God is actually proven in the *Meditations* is a matter of considerable controversy.⁶⁸ Furthermore, the famous problem of the Cartesian Circle makes it problematic for the metaphysics of the *Meditations* to rely on God, even if the existence of God were to be granted. According to the various versions of this

⁶⁵ CSM II 38-39, AT VII 55

⁶⁶ CSM II 39, AT VII 56

⁶⁷ A similar point is made regarding bodily sensations in the Sixth Meditation. For our purposes here it is completely the same point, hence I do not treat it in detail. Cf. CSM II 56-61, AT VII 80-89. I have discussed it in some length above in Chapter 2.

⁶⁸ Even whether Descartes wanted to offer a proof of God has been scrutinised from the very start and Descartes was charged with atheism. (See Popkin, Chapter 10, pp. 158-173 for an account of such charges by Descartes' contemporaries.) Modern 'insincerity' views such as that advanced by Soffer (see footnote 204 below) also see Descartes as uninterested in proving the existence of God.

debate, the Cartesian system relies on its *own* proof of God, in order to advance knowledge, that is clear and distinct perception, about the mind and the world, yet insofar as its proof of God is dependent on clear and distinct ideas it is circular.

I do not have anything to say regarding whether these objections ultimately condemn the Cartesian project or not. I will however advance a much weaker form of the circularity argument, which I have already hinted at, in order to show where the difference between the epistemology and the metaphysics of the *Meditations* lies.

Above I hinted that God is mind-dependent insofar as the ontological argument affords its existence the same amount of certainty as that of the objects of mathematics and therefore God is not a composite object.⁶⁹ But it seems that in the sense that God should be prior to any other mind-content, God should also be mind-independent, especially if we are to accept the trademark argument that God himself is the cause of our idea of God. It seems like another case of Descartes' wanting to eat his cake and have it too.

Now this charge I think is valid not only because it seems contradictory to have something be mind-dependent and independent at the same time, but also according to my analysis, it is contradictory for God to be a mind-independent object, which would imply that God is a composite and therefore has corporeal qualities.⁷⁰

Hence Descartes' conception of God does not sit easily within his philosophical system, and it is no wonder that it has led to the generation of various charges of circularity. I have suggested that according to one proof in the *Meditations* God is mind-independent and according to the other, God is mind-dependent. God would have traditionally be taken to exist mind-independently and as there is no indication on Descartes' part that he considered anything on the contrary. However, proof of an absolute, mind-independent omnipotent non-deceiving entity is not easy to find in the *Meditations*, if only because of the classical Cartesian Circle argument.

There could still be a way out, though it would no longer be Descartes speaking. Agreeing to a mind-dependent God does not mean admitting a God-dependent mind. Here the circularity can be broken, if God is placed into the schema of increasing knowledge in between the objects of the intellect and the imagination. A mind-dependent God does pose a lot of problems for the proofs of existence of

⁶⁹ Cf. p. 79 above. In the *Principles of Cartesian Philosophy*, Spinoza categorically rejects the notion God is a composite.

⁷⁰ An interesting point to note is that since the ontological argument depends on our ability to infer existence from essence, the very point which renders the objects of mathematics mind-dependent, rejecting mind-dependency in order to save the trademark argument might in turn endanger the ontological argument.

God, especially the trademark argument of the Third Meditation. While it might not actually have been Descartes' intention to argue the point, it has the great merit of explaining why so much confusion exists over the function of God in the *Meditations* as well as distinguishing the epistemology of the work as a freestanding part from its metaphysics.

There now emerges the problem of Descartes' metaphysics not agreeing with his epistemology, in fact, the latter faulting the former within the same work. To what extent this is a damning realisation depends on whether we view the *Meditations* as the handbook of an entire worldview or a work of genuine, if somewhat ambitious philosophy.⁷¹ I have repeatedly argued for the latter viewpoint. However, I would like to leave my final say on this matter to the concluding chapter and make one final point regarding the purpose of God in the *Meditations*.

4.4.3 Epistemological Optimism

It is possible to view Descartes' insistence of God-guaranteed certainty, or correspondence with the world, as a case of common-sensism. By this term I understand nothing more than the postulation that there is apart from the ego a world which the ego can know about. What Descartes does through the use of the concept of God in his *Meditations* is nothing more than declaring a similar principle that once upon investigation we are sure of what we have perceived, there can be no metaphysical objections to the claim that we have acquired or ascertained knowledge.

Yet Descartes' common-sensism is not of the same order as for example that of G.E. Moore's, the acceptance of whose postulation of common sense principles renders the project of the *Meditations*

⁷¹ This debate is taken up by Walter Soffer in his book *From Science to Subjectivity* in terms of a sincerity-insincerity argument. According to Soffer's characterisation, the prevailing view of the *Meditations* is amenable to a "hermeneutics of sincerity" in which Descartes is taken to have genuinely pursued matters such as the existence of God and the immortality of the soul. The counterpart are insincerity views of Descartes' theological metaphysics, which at the extreme see Descartes' referral to God in the *Meditations* an attempt to divert hostility towards his philosophical system. (Soffer, pp. xi-xv) Since I have treated of the *Meditations* in the context of the text rather than Descartes' intentions, I have *de facto* been in the *weak* sincerity camp. Weak, because while I have not at any point approached a part of the *Meditations* under the impression that it needed to be reduced to its inner content, I do not however think that every word of the *Meditations* needs to be taken literally. To this end I have quite freely ignored the order supposedly imposed on the work by its chronological narration.

Therefore, I think it is possible to suggest that there might be a certain tension between the metaphysics and the epistemology of the *Meditations*, in that with the epistemological task complete, the metaphysical part may seem less than necessary. Whatever the merits of such an argument, it is crucial to acknowledge that I am not attributing this reading to Descartes, or making interpretive use of what I take to be Descartes' intentions.

and its use of hyperbolic doubt superfluous.⁷² It should rather be said that Descartes arrives at a common-sensical metaphysical viewpoint during the course of the *Meditations*.

In one sense, then, the *Meditations* may actually be read as much as a critique of commonsense or dogmatist points of view as of sceptical points of view. It shows how much theoretical burden must be borne by a metaphysics at odds with some of its accompanying epistemology to support common-sensical points of view.

On the other hand, if what is established regarding the faculties of the mind, i.e. the epistemology of the *Meditations*, is taken to be correct, or at least better grounded than its metaphysics, then the *Meditations* presents a major challenge to any sceptical point of view in its detachment of philosophy of knowledge from metaphysics. Once the faculties of the mind have been rendered objects of study independent of any specific content, scepticism has before it a whole new field of theory with which it must deal on its own terms.⁷³

God, as the central concept of the metaphysics of the *Meditations* is then the conceptualisation of what I would like to call epistemological optimism. Epistemological optimism is the confidence in our ability to know about the world stemming from the satisfaction of certain cognitive conditions. We have seen that Descartes is worried that if these satisfied cognitive conditions, namely the mind as described in the *Meditations*, relies on anything less than an omnipotent being, then we may be constantly deceived; that is there might not be any correspondence between our perception and the world. Yet this applies to only those perceptions which are not distinct, such as may belong to the imagination and the senses. The contrasting clear and distinct perceptions have their justification in the intellectual simples known to the intellect with unavoidable certainty. I have already demonstrated, I hope, that whether sense-perceptions correspond to the world *per se* is not the main problem of the *Meditations*. I have also tried to show that the same applies to the imagination. To at all function as a faculty, the imagination needs to be free from the supposition of constant correspondence with the external world. What use is there then in supposing that a God-guaranteed correspondence between the mind and the world should be the case?

One answer is that it gives God something to do, a purpose which is sorely lacking in the *Meditations*. For all his omnipotence God does not do much in the *Meditations*, less still because final causes which are supposed to scrutinise God's will have also been abolished. There is a certain nuanced

⁷² Cf. Moore, G.E. (1925). "A Defence of Common Sense" in Muirhead, J.H. (ed.), *Contemporary British Philosophy* (2nd series), London: Allen and Unwin, pp. 193-223.

⁷³ I believe Williams makes a similar point when contrasting traditional and modern scepticism in his article *Descartes and the Metaphysics of Doubt*.

position of belief in a God who does not make the world around me as it is but allows me to know the world around me as it is.

A second reason for God-guaranteed correspondence is that it allows the mind to directly know the world, particularly the body conjoined to the mind. While, according to the Sixth Meditation, we have no reason to suppose that we have a perception of a bodily sensation as it is, we still respond to it in the best possible way.⁷⁴ This outcome is only possible insofar as God allows us to have, at least when healthy, a distinct sensation of various bodily effects and motions.

Thirdly, God accounts for the imagination. I have said that in the imagination the mind has a faculty it does not fully understand. Now although all faculties are of course taken as God-given in the discussion of the *Meditations*, imagination is the only faculty that seems to require a cause other than the ego (and the maintenance of the ego as a whole by God) to explain its functioning. An incompletely comprehended faculty, by Cartesian definition, cannot function fully out of my volition. This is reminiscent of what was said regarding the involuntary functioning of the imagination above.⁷⁵ Hence the workings of the imagination in this special sense depend more than the other faculties on God, whose totality we are also unable to comprehend.

These are some reasons why Descartes may have wanted to espouse this type of epistemological optimism, but they are not by themselves compelling reasons for any reader of the *Meditations* to admit the correspondence between the world and the mind that is guaranteed by God. The important point is that the rejection of the metaphysics of the *Meditations* has little bearing on the epistemology it establishes, insofar as the latter is taken as the critique of a mind in search of certainty. It remains to conclude this point in more depth.

The great benefit of assigning a reduced role to God in the scheme of the *Meditations* is that it allows for the work to be read more easily as an epistemological undertaking investigating the human mind. It relieves the Cartesian account of many problems, such as the infamous charge of circularity, which grew out of Descartes' own imposition of two strict and possibly contradictory conditions to his world-explanation. Of these two strict conditions the first is the self-standing authenticity of the thinking thing, the second is the mediation of God between the thinking thing and the world. However, the key expression above is 'Descartes' own imposition'. Any attempt at reducing the role assigned to God in his philosophical system would likely be opposed by Descartes himself. The points made in the short section above should therefore not be attributed to Descartes as some of the earlier points on the imagination, the senses and the intellect, but should be read as my attempt to

⁷⁴ CSM II 59-61, AT VII 85-89.

⁷⁵ Cf. CSM II 19, AT VII 28-29.

reduce the problem of God in the *Meditations*, so that the structure of mind it contains may emerge more clearly into sight.

CHAPTER 5 – THE SCIENTIFIC CONFIGURATION OF THE FACULTIES

We have been treating of Descartes' *Meditations* as a work primarily concerned with the structure of the mind. While I have argued that such a reading can account for many points which a building block view might not be able to resolve, this in itself is no strong point of support for espousing the reading of the *Meditations* as a work of philosophy of the mind. It could be that both approaches are equally mistaken.

An even graver accusation seems possible. There is a very thin line between talking about knowledge and perception and talking about the knowing or perceiving subject, a line which probably became thinner as a result of the very philosophy under discussion here. There is therefore no reason why one cannot simply start introducing faculties to correspond to as many types of proposition or category as one wishes. Going down this path of assigning faculties for every kind of perception will soon land us in absurdities or truisms. One might find oneself ready to claim that emptiness is perceived by the *vacuous* faculty, only to be derided as a ridiculous dogmatist. Alternatively, one could say that the *vacuous* faculty often errs, to be scorned as an obnoxious sceptic.

A convincing limit needs to be introduced to the number, as well as the function of the faculties which constitute the mind. An investigation into whether the three faculties; the intellect, the imagination and sense-perception have any explanatory function beyond the finer points in the *Meditations* would be a good starting point.

Recall that the *Meditations* started with the intention of establishing something in the sciences "that was stable and likely to last".¹ If the structure of the mind introduced in the *Meditations* is in keeping with this intention then we will have a strong point of support for having introduced it.² For this it is necessary to show that the configuration of the mind as described above is capable of scientific undertaking. Scientific undertaking cashes out as something beyond the intellect's understanding of stable propositions. Rather it implies that the distinctions introduced above can be seen as functioning in Cartesian methodology. To this end we will take a look at Descartes' geometrical work.

We shall first take examine the distinction between the intellect and the imagination introduced by Stephen Gaukroger, which is similar to the distinction I have made, though there are significant differences between the two accounts. Gaukroger's conception introduces an important analysis of geometry, or geometrical thinking in the context of faculties of the mind and I try to expound upon

¹ CSM II 12, AT VII 17

² Among the commentators taken up in the preceding discussion, Harry Frankfurt attaches special importance to the scientific intentions of the *Meditations*. For him, clear and distinct perceptions, for example are the very "solid and permanent" beliefs advertised in the First Meditation. (Cf. DDM 124)

this idea. To this end I make use of an article by Henk Bos on Descartes' *Geometry*. Through the technical introductions of that work, namely the algebraic definition of the geometrical curve, I suggest that Descartes had been engaged in the task of intellectualising geometry, which is to a certain extent also accessible by the imagination: Descartes had been aware of this and Gaukroger has made it an explicit part of the construction of Cartesian science. I invoke a distinction that might be made between Descartes' heuristic and epistemic approaches: although we have to make epistemic allowance for the fact that a body of knowledge such as geometry might be influenced by the imagination (which infringes on the proper objects of the other two faculties), heuristically an attempt must be made to reduce geometry to its proper faculty; namely the intellect. This is I claim what Descartes accomplished through the algebraic definition of the geometric curve. The operation upon the epistemic understanding that the imagination may infringe upon the operations of the intellect and the heuristic task of reducing geometry to the functioning of the intellect is what should reflect on scientific undertaking from the theory of the mind.

Finally I turn to a view of sensation that is commonly attributed to Descartes, here notably in Gaukroger's article, which sees sense-perception as a passive faculty which is incapable of conveying any semblance of what the world is like. This view, which I find very strong does not do justice to the view of sense-perception that may be found in the *Meditations* and I do not think it serves any benefit to Descartes the scientist. I shall not, however, undertake a strong refutation of the view of sensory misrepresentation but will point out that there are credible alternatives.

The guiding idea of this chapter is that while engaged in epistemology, we may distinctly see the tripartite nature of the mind, the scientist approaches the object of enquiry with the usual functioning of all of these faculties. To say I shall use my intellect to solve a previously unsolved geometrical problem is a fine and proper maxim; but it is methodologically useless. Rather, the method for solving such problems must be first aligned to the intellect, following which use of the method may then be made even without the epistemological considerations. Below we shall trace this understanding and functioning of Cartesian geometry.

5.1 Gaukroger's Distinction between the Intellect and the Imagination

In his article *The Nature of Abstract Reasoning: Philosophical Aspects of Descartes' Work in Algebra*, Stephen Gaukroger presents a relationship between the imagination and the intellect that is similar

to what has been said in this essay.³ According to Gaukroger's account, through algebra Descartes introduced a level of abstraction to geometry which had not been there before his *Geometry*. This underpins Descartes' mathematical-mechanistic worldview, which is in turn reflected in his epistemology and metaphysics. Thus for Gaukroger:

This [Descartes' algebraic] work made him one of the greatest mathematicians of the seventeenth century. But in following through its consequences for the development of a quantitative mechanical understanding of the corporeal world, he became one of the greatest natural scientists of the seventeenth century; and in following through its consequences for the question of method, he became its greatest philosopher.⁴

The viewpoint that Descartes' view of the different faculties, closely related to his understanding of simples and composites stems from his earlier mathematical and scientific interests is worth examining. It is an interesting claim that later works such as the *Meditations* serve to provide a philosophical grounding in this context, not least because it seems so simply to explain the otherwise isolated mention of certainty in the sciences in the First Meditation.⁵ It will be recalled that Descartes had set out his enquiry to establish "something certain in the sciences" and that after the argument from dreams was willing to give up on the task for non-mathematical sciences, provided that arithmetic and geometry contained "something certain and indubitable."

I believe that Gaukroger's treatment of the intellect and the imagination in terms of scientific ends is similar to my own. However, I also emphasise a link between the imagination and sense perception that is independent of the intellect and that is conducive to the maintenance of the mind-body union and the ordinary perception of the world. In this sense I have treated the faculty of the imagination as something greater in scope than allowed for by the treatment of it in scientific terms provided by Gaukroger. Gaukroger's theory however is indifferent to whether this might be the case and as such I note the fact not as criticism. later, however, some mention will be made of the restrictions Gaukroger has imposed on sense-perception.

According to Gaukroger, the chief difference between the intellect and the imagination lies in the intellect's ability to distinguish between the meanings of terms separately from the identical content

³ Gaukroger, S., "The Nature of Abstract Reasoning: Philosophical Aspects of Descartes' Work in Algebra" in Cottingham, J. (ed.), *The Cambridge Companion to Descartes*, Cambridge, CUP, 1992, pp. 91-114.

⁴ Gaukroger, p. 113

⁵ Cf. CSM II 12, AT VII 17; CSM II 14, AT VII 20

of ideas in the imagination. Whereas the imagination does not differentiate between the ideas of “extension” and “body” for example, for the intellect these two terms are distinct.⁶

Based on the distinction between the faculties and his earlier argumentation that Descartes had rendered geometrical enquiry completely abstract and separate from a deductive system, Gaukroger posits that the imagination functions in order to apply the abstract mathematical concepts of the intellect to the world. Gaukroger claims that the intellect, which has the algebraic as a class of simples among its proper objects, requires the imagination to render “determinate” those algebraic entities conceived in the intellect.

The intellect understands “fiveness” as something separate from five objects (or line segments, or points, or whatever) and hence the imagination is required if this “fiveness” is to correspond to something in the world. What we are effectively dealing with here, as far as the intellect is concerned, is algebra.⁷

Through rendering the conceptions of the intellect determinate, the imagination “represents *general* magnitudes (abstract entities) as *specific* magnitudes (which are not distinct from what they are the magnitudes of).”⁸ But Descartes has in mind one specific magnitude, which is spatial extension. According to Gaukroger there are two reasons for this; the first is the identification of mathematical notions, such as equations, with geometric representations. The second is that secondary qualities are supposed to be in no way representative of bodies in the actual world, leaving only spatial extension among corporeal qualities.⁹

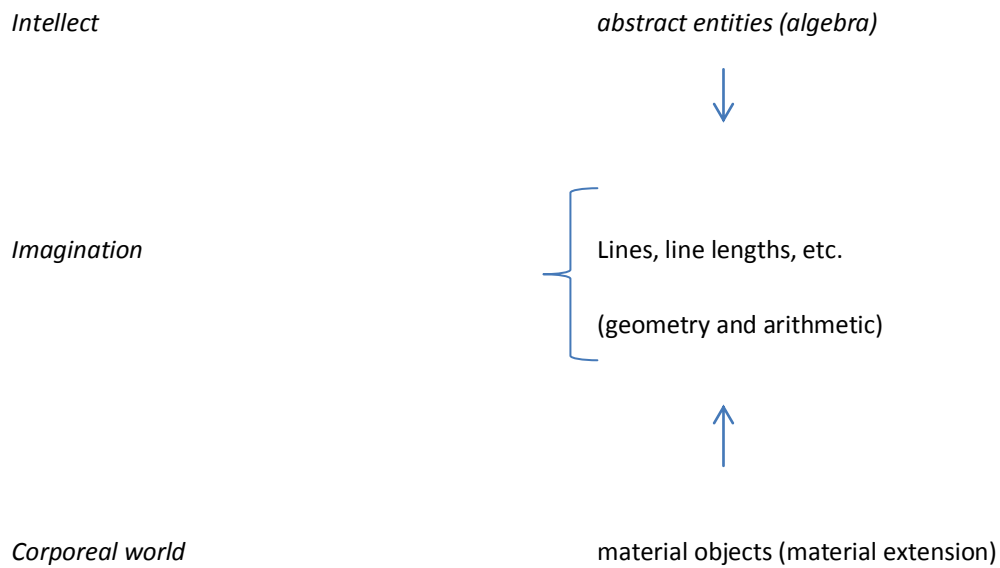
Gaukroger completes his account by providing a schema which is reproduced below along with the explanatory remarks which follow:

⁶ Cf. Gaukroger, p.109. Gaukroger makes this distinction between the intellect and the imagination based chiefly on the *Rules for the Direction of the Mind*. Whether the *Meditations* contains enough support to allow such a distinction is not clear. On the one hand, since clear and distinct perception belongs to the intellect proper, insofar as what is at stake is a reiteration of this principle, it is innocuous enough: we would not expect the imagination to be able to differentiate between the meanings of terms. However, whether we can attribute the differentiation of concepts to the imagination or even the intellect, rather than to judgment that relies on or feeds of the imagination or the intellect is problematic. (See the Second Meditation for Descartes’ admonishment on committing the error of concluding from ordinary ways of talking. CSM II 21, At 31-32.) This point becomes important later on, when it emerges that Gaukroger ascribes qualitatively different types of perception to the intellect and the imagination.

⁷ Gaukroger, p.110

⁸ Gaukroger, p.110. Emphases in the original.

⁹ Cf. Gaukroger pp.110-111



In this schema, the pure thought characteristics of algebra which the intellect engages in does not map directly onto the corporeal world. Rather, a representation of it in the form of arithmetic and geometry maps onto a representation of the corporeal world, a representation consisting exclusively of two dimensional shapes.¹⁰

Noting once more that I am largely sympathetic to Gaukroger’s account, I would like to advance two objections to it. The first has to do with the relationship between “abstract entities (algebra)” and “lines, line lengths, etc. (geometry and arithmetic)”. The second is part of a larger objection regarding the role of sensory perception and secondary qualities in the *Meditations* and will be treated further down.

To put the first objection plainly, geometry and arithmetic are *not* sciences of the imagination, at least so far as Descartes’ approach in the *Meditations* is concerned. This is not only evident from Descartes’ willingness to consider mathematics as certain even after the argument from dreams has introduced the doubt that all ideas regarding corporeal things might be imaginary, in the sense of being adventitious. There is also Descartes’ claim in the Fifth Meditation that demonstrable qualities of shapes such as the triangle, “though they may not exist anywhere outside of me still cannot be called nothing”.¹¹ If, as I have argued, the imagination is to be taken as the faculty that can impose on the proper objects of the intellect as well as sense perception, it must retain its adventitious quality and cannot be reduced to a correspondence of geometry and arithmetic with extended magnitudes, for there may be no extended magnitude that is represented by a particular mathematical

¹⁰ Gaukroger, p. 111

¹¹ Cf. CSM II 44-45, AT VII 64

proposition.¹² It would be a strong claim however to say that the imagination cannot conceive of such an object, although it is not available through the senses. This would mean that the imagination is adventitiously creating mathematical entities, so that some intellectual simples are false: consequently the class of intellectual simples can be doubted. In other words, to posit extended quantity as the intension of mathematical quantity is problematic, as I have also argued against Frankfurt's *a posteriorist* account of mathematics in the *Meditations* above. The point comes down to observing, along with Descartes, that the intellect is capable of conceiving any configuration of extension, although that configuration may not take place.

We may try to weaken the argument by suggesting the imagination contains valid correspondences between extended magnitudes and mathematical propositions, among other things. In that case geometry and arithmetic might be sciences which with the help of the imagination determine the abstract entities of the intellect in keeping with the perception of extended magnitudes. This amounts to saying that the imagination is necessary though not sufficient for mathematics.¹³

The point still remains, however, that for every geometrical proposition, there must be a distinctly imagined correspondent extended magnitude. Descartes denies this, through the example of the non-distinct images of the chiliagon and the myriagon in Meditation Six, two shapes whose properties are nevertheless distinctly accessible by the intellect.¹⁴

Therefore, the imagination does not treat of intellectual simples such as equations or shapes. That it can treat of sensory simples seems to be implied by the following remark of Descartes in Meditation Six:

¹² Even for geometrical representation, it must be kept in mind that only functions which fulfil certain conditions translate into geometric representations. There simply is no geometrical representation of the old arithmetic favourite 'two plus three equals five'. The equality of equation and curve Descartes introduced in the *Geometry* should not be taken for more than what it is. What is more, although it might be claimed that the numerical components of the proposition ' $2+3=5$ ' really stand for specific objects furnished by the imagination and "fiveness", for example, "is made to correspond with the world"; we must note that this is different than the correspondence between an equation with two or more unknowns and the curve it defines, which is fixed and differentiated from other curves on its plane. Propositions such as " $2+3=5$ " on the other hand are perfectly contingent, the set of its correspondences can theoretically include anything admitting of quantity; but might just as well be empty.

¹³ Treating of faculties as causes of the outcomes of the operation of the mind is a risky proposition. The counterfactual "if it were not for the imagination we would not have been able to understand (or practice, have a conception of, etc) mathematics" is simply too sweeping. Given that the mind would be fundamentally different without the faculty of the imagination, so that no verification of the proposition is possible, the problem seems antinomical.

¹⁴ CSM II 50, AT VII 72

“Quantity, for example, or ‘continuous’ quantity as the philosophers commonly call it, is something I distinctly imagine. That is I distinctly imagine the extension of the quantity, (or rather of the thing which is quantified) in length, breadth and depth.”¹⁵

Various properties of extended things as three dimensional objects are given to the imagination. One should however observe that this is all in general, and there is nothing to indicate that the mathematical specification of any object is given to the intellect through the determination of the imagination. What Descartes is saying here is that when one mentions an extended object, I (adventitiously and without sensory experience) assign to this object three dimensionality, duration, divisibility etc.

Troubling for one of Gaukroger’s claims, namely that as opposed to the intellect the imagination cannot distinguish between “extension” and “body” is the phrase “I distinctly imagine” as well as the express claim by Descartes that the imagination enumerates parts of an object: “I also enumerate various parts of the thing and to these parts assign various sizes, shapes, positions and local motions; and to the motions I assign various durations.”¹⁶

If the imagination can operate with distinctness, this ought to be understood as implying that it can take up an object with an understanding of it as separate from any other object. Hence, length, breadth and depth for example, insofar as they pertain to a potential object, must be distinct from any quantifiable stretch of length. In fact, in forming the distinct image of a quantifiable object the actual size of these axes seem to matter less than their planar quality. But if the imagination can make use of such a distinct image of the three dimensional corporeal thing, and also of its parts which would occupy the same extension, yet are distinct from the whole, it becomes rather difficult to confidently assert that the imagination cannot distinguish between body and extension, at least in the context of the *Meditations*. Hence, if indeed the imagination ‘determines’ the concepts of the intellect through spatial extension, it brings more to the table than Gaukroger would allow it. Namely, the ideas that corporeal objects are three dimensional and that they have enumerable and distinctly quantifiable parts seem to belong to the imagination. Descartes, however, expressly claims that enumeration is an intellectual activity in the Second Meditation.¹⁷

I have so far argued against Gaukroger that while mathematical simples are not accessible by the imagination, the imagination has its own distinct images of the corporeal world for which it does not

¹⁵ CSM II 44, AT VII 63

¹⁶ CSM II 44, AT VII 63

¹⁷ It is very likely that the concepts of part and whole, at the very least, would also be intellectual.

need the grounding of the intellect.¹⁸ This leaves us in the problematic situation of having to explain where geometry can be posited, if not in the imagination as Gaukroger has suggested, even though certain components of it, such as the distinct images of corporeal objects as three dimensional, belong to the imagination.

To reiterate the problem; we should observe that the knowledge of geometrical certainties belong to the intellect. However, the customary knowledge of the objects of geometry, such as three dimensional shapes are given by the imagination. This, however does not come about through the imagination's determination of the concepts of the intellect, as Gaukroger would have it, but rather as a result of the imposition of the imagination on the proper faculty of geometry. The problem lies in Descartes' admittance that some geometry might be practised using the imagination, though this is of course not the best procedure. If this improper use can be admitted, how can we insist upon the sharp distinction between the two faculties over grounds of the Cartesian conception of science?

We have now seen the epistemic situation regarding geometry: namely the observation that even the mathematical sciences are not free from the meddling imagination. It remains for the heuristic task of reducing geometry necessarily to the intellect to show that our distinction between the intellect and the imagination has the backing of Cartesian science.

5.2 Descartes' Understanding of Geometry as an Example of Alignment of Sciences to Faculties

There is an interesting twist in the treatment of mathematics as one advances through the *Meditations*. It will be recalled that geometry and arithmetic are introduced initially in the First Meditation, as sciences treating of those things which are most certain, though such things may not exist in the corporeal world. Later, we learn in the Fifth Meditation that the objects of mathematics, even if they cannot be found outside of the ego, are still something, in that they are not adventitious products of the imagination. In the Sixth Meditation, we learn that these objects are easily accessible by the intellect and are somewhat limitedly and with greater difficulty open to the imagination. Throughout this journey the certainty of propositions of mathematics remains unchallenged. What changes is that while the objects of mathematics at first cannot be found outside of the ego, they are

¹⁸ In fact, Descartes' seems to be of the opinion that some geometry can be practiced using the imagination. (Cf. Rule 4 CSM I 15-19, AT X 371-378) Descartes seems to have adhered to this notion, as it is voiced once more in Conversation with Burman (Cf. CSMK 352, AT V 177).

nevertheless open to *some* scrutiny by the imagination, which is a faculty which properly deals with objects external to the mind.¹⁹

We must once again introduce a distinction between the heuristic and epistemological intentions of Descartes regarding the subject matter of mathematics, or geometry, which we shall henceforth take as an example. In that objects of geometry are clearly and distinctly accessible qua objects of geometry by the intellect and not by the imagination, one who wishes to practice proper geometry needs to proceed through the use of the intellect. This is the heuristic requirement. But geometrical considerations seem to imply some sort of correspondence between the intellectual simples of the intellect and the general, sensory simples which are also used by the imagination. There therefore seems to be an obstacle facing the heuristic course; the problem becomes how to reduce geometry to the purely intellectual. This problem is acute in considering those geometrical problems the solution to which cannot be constructed through a ruler and compass, where the geometer must decide on his own criterion of simplicity.²⁰

Descartes may have already answered such a question in his essay *Geometry*, published before the *Meditations*, and the former probably influenced the treatment of the question of geometry in the latter work.

In his article *The Structure of Descartes' Géométrie*, Henk J.M. Bos claims that a curious theme occurs in the third book of *Geometry*, where Descartes is concerned with a fault he attributes to geometers in dealing with constructions which cannot be drawn with a ruler and compass. According to Bos:

What was this "*faute*"? It was to construct the solution of a problem with improper means, particularly with means more complicated than necessary. According to Descartes such a procedure was improper, it showed ignorance. *However, a mathematician who commits this error is not doing something which is mathematically incorrect.* Descartes' insistence on the "*faute*" shows the importance he attached to certain 'rules beyond mathematical correctness' and we shall have to inquire into the nature and effect of these rules.²¹

That Descartes should be trying to impose certain rules beyond the mathematical for solutions to geometrical problems fits in with the idea expounded above regarding the distinction between the heuristic and epistemic intentions. "Rules beyond mathematical correctness" underpin Descartes'

¹⁹ "As Descartes puts it in the Sixth Meditation "when the mind understands, it in some way turns towards itself and inspects one of the ideas which are within it; but when it imagines, it turns towards the body and looks at something in the body which conforms to an idea understood by the mind or perceived by the senses." (CSM II 45, AT VII 65.) The passage is incidentally the only one from the *Meditations* which is quoted by Gaukroger (cf. p.110).

²⁰ Descartes had treated of this problem in Book 3 of his *Geometry*. (Cf. Bos, p. 359).

²¹ Bos, p. 352 (italics mine).

concerns that the imagination may be at work within geometrical undertaking, which is informed by his epistemic considerations and the consequent desire to eliminate them as far as possible, which is his heuristic aim. Now insofar as geometry and the imagination both to some extent treat of the sensory simples, it is possible that certain adventitious constructions stemming from an interference of the imagination may arise in response to geometrical questions. This may complicate the solution to a problem beyond the required degree.

Thus the problem, which is eventually solved through Descartes' reliance on algebra, is as follows: geometrical constructions beyond ruler and compass geometry may be formed through the intellect but also through the imagination. They may be more or less complex with regard to the problem they address and it is better that they should be as simple as possible. Simplicity ensures that the imagination has played as small a part as possible in the construction. However, there cannot be any guarantee that the imagination does not play any role in these formulations. Thus the role of the imagination in geometrical construction must be limited to fulfilling the peculiar needs of simplicity in construction. The imagination had fulfilled this role in the construction of ruler and compass problems.

Ruler and compass geometry thus formed an interesting example of a 'valid' use of the improper functioning of the imagination. Within its bounds one must operate only through those constructions which could have been made using a ruler and a compass. The only way to ensure that constructions fit the bill was to imagine their real construction through the described means. Bos notes that the operation was expected to be mentally performed.²² Where the imagination can no longer distinctly go, as in the solution of non-planar geometrical solutions which require more than constructions with ruler and the compass, the intellect must furnish the necessary means.

In other words here is a possible demonstration of the distinctness of the intellect and the imagination as faculties, the difference between their proper objects and the precision of the intellect beyond that of the imagination.

According to Bos' account of the *Geometry*, Descartes introduces the notion of reducing all lines to an equation for a segment of an unknown length. From the degree of the resulting equation one can tell whether one is in the domain of ruler and compass geometry (if the equation has a degree of one or two) or beyond ruler and compass maths (if the degree of the equation is greater than one or two).²³ Notice that this already limits the role of the imagination; we need no longer carry out mental

²² Bos, p.356. Note that it would not matter for our purposes if the constructions were drawn or otherwise physically modelled: the task would require the prior engagement of the imagination.

²³ Bos, p.359-360

imagery of construction by ruler and compass to tell whether we are engaged with planar problems or not.

In determining what new curves can be acceptably introduced to geometry beyond the domain of the ruler and the compass, Descartes chose what Bos terms a “motion criterion”, in that acceptable curves are determined by a continuous motion so that no new curve is determined by a motion introduced after the determination of earlier curves; because they are all determined simultaneously.²⁴ Observe that these geometrical curves can be sensory simples in that motion is something that can be distinctly imagined regarding particular composites. Hence they can be applied by the imagination.

Considering many questions raised by the choice of the not too obvious motion criterion, in particular whether it fits the bill for simplicity: “Descartes dealt extensively with all these questions and reached a final position, which was: *acceptable curves are precisely those that have algebraic equations*, that is involving only addition, subtraction, multiplication, division and roots.”²⁵

The criterion for construction beyond the ruler and the compass as simply as possible is therefore the same intellectual criterion of algebraicity which is also used in the construction of ruler and compass problems. However, at this point, it is only through the stipulation of the intellect that this is possible: even if the curves obtained through the motion criterion are accessible by the imagination as composites; there is no argument that they all are or that those accessible are distinctly and precisely so as simples. Yet in its equation of the curve with the algebraic formulae, the intellect faces no such theoretical obstacles. That the algebraic equations should involve only the five arithmetic operations, or in other words be members of the set of all possible such operations which are all translatable into geometrical expression, is also significant. It shows, once again, that the scope of intellect is greater than that of the imagination, even if we grant that the imagination can access a geometrical object at all. In the operations used in the algebraic equations the intellect has the simples necessary for geometry; and they may form more permutations than can be imagined.

Thus geometry for Descartes is demonstrably intellectual. This in itself is no grand revelation, but the argumentation that has been employed to reach this point shows that the distinction of faculties of the mind in the *Meditations* may be shown to be relevant to Descartes’ non-philosophical pursuits. The geometrical method requires awareness that the imagination may be involved as a faculty in geometrical practice. This is not something Descartes has denied. Through this awareness, one can try to limit the role of the imagination, which Descartes considers leads to the fault of forming over

²⁴ Bos, p.362-363

²⁵ Bos, p.364. Emphasis mine.

complicated constructions for problems. This is not a mathematical error according to Bos. That Descartes should nevertheless base his method around limiting the role of the imagination in his geometry, or that his subsequent philosophy is influenced by this geometrical heuristic establishes a link between his idea of faculties of the mind and scientific practice. This connection is not as straightforward as it is portrayed by Gaukroger. In Gaukroger's delimitation of the faculties, the only active faculty is the imagination, which takes its concepts and data from the two other passive faculties. This is clearly not the case in the *Meditations* where all faculties have their proper objects and vie for attention; although the imagination does infringe on the others' domains. The link with the geometrical method I have tried to draw here fits in with this constantly active and possibly constantly mistaken mind; one needs to guard against methodological errors, which may be unproblematic for outcomes within a certain field. The choice of the improper procedure may have betrayed "ignorance" not of the practicalities of geometry, but of the tenets of human capacity for knowledge.

We have seen in Gaukroger's article that a distinction can be made between the intellect and the imagination based on an early work by Descartes, and through Bos' article we have seen that the same distinction, drawn according to the *Meditations*, may have had ramifications for Descartes' geometrical work. It is, as I have already claimed, to the advantage of the theory of mind reading that it is not at odds with the work of Descartes the scientist and may indeed make some explanatory contributions to understanding Cartesian scientific theory.

One final point remains. Gaukroger had claimed that in Descartes one finds the beginnings of mathematical physics, which is a considerably greater claim than can be made for geometry in terms of faculties of the mind, as it involves a particular view of sense-perception. A brief section elaboration of the role of sense-perception is I believe necessary.

5.3 Sense-Perception Between Representation and Misrepresentation

Recall that in Gaukroger's schematisation given above, the perceptive tripod rests on the intellect, the imagination and the corporeal world. While the corporeal world is presumably accessed through the senses, they are nowhere explicitly mentioned. Such dismissal of sense-perception as an uncomplicated means through which the corporeal world enters the ego is, I believe, far too reductionist.

Had Descartes not taken any issue at all with sense-perception and claimed that it straightforwardly mirrors the external world, this would not have been a great problem. But according to Descartes the

senses do not always function uniformly, though there is no way to compare different experiences according to the propriety of their content, or their object veracity.²⁶ In fact, Gaukroger's scheme seems to make use of this fact in claiming that not all sensations represent the corporeal world, which is essentially represented by two-dimensional shapes in the imagination.

So for Gaukroger, whatever the content of sense-perception, in terms of a scientific view of the world the imagination draws selected qualities from it. I have already argued that this task cannot be carried out by the imagination autonomously, but that is beside the point. Because sense-perception furnishes a greater number of images than essential (i.e. secondary qualities) this view of sense-perception may be called the over-representation view.

A related viewpoint, voiced for example by Michella De Rosa in her book *Descartes and the Puzzle of Sensory Misrepresentation* is that the senses always misrepresent their objects.²⁷ Accordingly, anything that does not fit the mathematical-mechanical view of the universe Descartes takes to be the case is a misrepresentation. This includes the entirety of sense-perception the data of which do not conform to the ideas of the mathematical-mechanistic world known to the intellect.

The over-representation view is only distinct from the misrepresentation view as long as two-dimensional shapes are considered a form of sense perception and it is difficult to argue that they are. If nothing that is represented in the imagination in Gaukroger's schema is actually available to the senses, then over-representation collapses into misrepresentation.

But is it really the case that the senses always misrepresent their objects, because the essence of every object is given to the intellect independently of sense-perception?

I do not think there are strong grounds to hold this view in the context of the *Meditations*. My fundamental objection is that since the intellect and the senses are radically different in terms of their proper object, it is not very useful to insist that sense-perception is always misrepresentative, rather than leaving the point as an open question. Letting the question lie is more favourable because it allows for at least some sense-perception, which is checked by the attentive mind to represent something of its object as constant and certain, thereby allowing for some amount of observation in scientific undertaking. This does not appear to be something Descartes would want to deny out of hand and there is no textual evidence in the *Meditations* to suggest that the senses

²⁶ One can of course ensure that an individual experience at present is not a dream. One cannot however tell between given experiences, how the content of one might compare with the other; even if one is supposed to be the dream image of a verified waking perception. (see section 2.4.1 "Refining Madness")

²⁷ De Rosa, p. 75. De Rosa's reliance on clear and distinct ideas to formulate the misrepresentation of the senses makes for a straightforward contrast between the objects of the intellect and those of the senses.

always provide misrepresentative information, only that they are likely to err and their data should be approached with caution.

From the perspective of a reading of the *Meditations* it is possible to mount a more rigorous criticism of the misrepresentation view: one cannot with any amount of certainty claim that sense-perception is always misrepresentative. For let us assume that indeed, whatever mathematical construction the intellect has is the true perception of the world for Descartes. It is crucial to note that taken intellectually, this world is devoid of every possible sensible quality. To claim that this mathematical world overlaps with the world offered by sensory-perception, which is misrepresentative is by no means an easy argument. To claim that the intellectual and sensory worlds overlap, while neither of them contains a single characteristic that is to be found in the other requires some principle of identity or at least non-exclusion within the perceiving subject. This can only be furnished by the imagination, as it is the faculty which infringes on the other two. But in order to posit the reality of the mathematical world of the intellect as subsisting beyond the world of phenomena the imagination needs to draw on some assumed link between the two; such that a certain mathematical configuration may be (in reality) sensible as a chair, or example. This is precisely what the imagination does, according to my account. But if the imagination is correct, then one cannot talk of sensory-misrepresentation, and if the imagination is wrong, either the sensory data is mistaken (hence misleading but not misrepresentative) or the imagination is pursuing its fancies. We have seen that the imagination can function improperly but this does not lend any support to the argument that the senses are always misrepresentative.²⁸

It is not of crucial importance for my account of the faculties of the mind in the *Meditations* whether sense data corresponds with the truth. But in order to preserve Descartes' idea that for particular instances of observation sense-perception may be trustworthy and because this strong claim does not seem to have any textual basis in the *Meditations* or an interpretive use, I suggest that it is dropped.

Sense-perception is therefore not necessarily an inactive quality of the mind the data of which maps onto some sort of intellectually constructed plane. There is nothing which would necessitate taking it as such. If anything, the idea of sense-veracity introduced above allows for differentiating between sensations the representativeness of which the subject is not concerned about and other sensations which the attentive subject would consider representative. But insofar as these are privileged sense-

²⁸ I leave aside the question of whether the intellectual construction might also be wrong since it is a thorny issue which does not concern the matter at hand.

perceptions and are known for what they are and their limitations, it would hardly matter if ultimately they do not represent the essential qualities of their objects.

CHAPTER 6 – CONCLUSIONS REGARDING THE MIND, ITS FACULTIES AND EXISTENCE

The *Meditations* has not suffered for a lack of competing interpretations. It has been seen as a work of scepticism or dogmatism, as advancing an archaic theological metaphysics and a modern scientific world view and as succeeding or failing in its supposed aims of grounding science, combating scepticism, dislodging Aristotelian teachings, proving God and the immortality of the soul. It has been of pivotal importance to modern philosophy, it has inaugurated a modern scepticism, it has according to some detractors let loose upon the world the ego-centricism of man and has fostered the unscientific fallacy of viewing the mental as distinct from the material. For a rather short book, it seems to have touched an entire range of great issues and had a major impact across the intellectual spectrum.

What is the point of introducing another reading of the *Meditations* in terms of an examination of the structure of the mind? Even if this reading comes from as acceptable a philosophical standpoint as any other issue the *Meditations* has been seen dealing with, why should it be favoured over the other issues? More importantly, what does it change for the modern reader of the *Meditations*, who looking back on the centuries of thought the work is supposed to have had a hand in creating, recognises at the other end of the familiar web of ideas a version of the *Meditations* in which some doubts or some proposed solutions to the doubts form the subject matter? Why should the reader drop this linear reading of the *Meditations*, the building-block view of the pages above, to accept a reading which places more emphasis on some faculties of the mind Descartes nowhere takes the time to define systematically?

It would be besides the point to repeat what has already been said about the various passages and arguments of the *Meditations*, to once more delve into detail regarding sensory perception, the distinction between sense-veracity and object-veracity, the sceptical force of the example of madness and the nuanced elaboration of the argument from dreams. While more could be written on the delimitation of the imagination as a faculty in its own right, which is responsible for our common notion of reality, which is in charge of preserving the mind-body union and which is always involved in philosophical error, though not necessarily as the culprit and while more can be said regarding the division between the intellectual and sensory simples, the absolute certainty of the former and their status as a measure of clear and distinct perception of the intellect, I believe enough has been said to bring before us the outline of a tripartite Cartesian structure of the mind. In similar vein, though it is possible to go into endless elaboration regarding the relationship between Descartes' epistemology and his view of science, I believe enough has been said in the context of

geometry to introduce the idea that a theory of the mind outlined is in the close company of the Cartesian heuristic.

I would like to consider in concluding remarks an issue that has not been overtly addressed, namely the totality of the mind as a collection of three faculties and what this entails for a philosophical outlook in general. This is especially important, since the mind, considered as the ability to think, to imagine and to have sensory perceptions is precisely what is essential to existence in Cartesian terms.

This existence, the *sum res cogitans* then entails the intellectual, imaginary and sensory capacities and the various relationships which obtain among them. It is significant that any relationship between these three faculties entails corporality. The body joined to the mind forms the relationship between the intellect and the imagination, while the world external to the mind lies between the imagination and sensory-perception. Without the transcendental deductions or assumptions that material things as defined exist, the faculties would not be linked as described above, robbing the Cartesian system of any explanatory power. This is very significant, in that while the *sum res cogitans* may not be substantially material, its operation in a form even remotely resembling our daily commonsense experience requires bodies. One would be hard pressed to find a theory of the mind in which matter plays such explanatory role, much less in Descartes, whose reputation suggests quite the contrary.

This point I would like to emphasise: matter as a substance is essential to the *Meditations*, though not for the ego in the too strict sense of the intellect. But recall that having sensory perceptions and images, though they may be false still belongs to thought. So either we dispatch of these sensations as vacuous, false or non-veridical, or we account for them in terms of the existence of the corporeal world and the truthful operations of the mind, the template for which is furnished by the intellect. Descartes of course has no qualms about following the second path: and when the question is put in terms of the existence of faculties dealing with the corporeal world, *as it is in the Second Meditation*, I cannot see how the sceptical choice is more compelling or its arguments more forceful.

Continuing the same theme, we have in the *Meditations* the imagination as the faculty which has as its object the union of mind and body and which is charged with the preservation of this union; at the expense of truth or precision. Why would this union be preserved by a God-given faculty, if the essence of existence is that of an ethereal mathematician or theoretical physicist? Why does the ego have sensations, for that matter?

Faced with these questions, it is tempting to characterise Descartes as theologian of earlier times, who having placed humanity between immaterial angels and incognisant brutes, relies on a strong normative cosmology to explain to us why we should have the hindrances of corporeal beings as well as the exaltations of spiritual agents. Descartes, however, is no cosmologist; the entire creation of God he admits to be inscrutable. But in God, we have a standard for the *coherence* of the distinct faculties, even if not their cause or aim. That is to say, if we view the faculties as God given, or hold a belief in epistemological optimism that in general the structure of the human mind is conducive to knowledge and survival, we can explain the coexistence of these faculties of the mind.

To start with the imagination, we should observe that so long as the intellect can distinguish between errors of the imagination, such that occur when one attributes reality to sensations which offer no such guarantee, and the proper use of the imagination which is the preservation of the union of the mind and body, of which the intellect is completely incapable of, there is no incoherence implicit in having an imagination as well as the intellect.

If anything, it is more of a problem why we have the intellect, provided that we have the imagination. The easy answer, of course, is that this is a non-question, in that demonstratively, the intellect has to come before the imagination. By the time we have realised we are in possession of the faculty of the imagination, we have already made use of the intellect.

This answer is not wrong, but I do not think it tells the whole story. The intellect is not after all a tool which is used to ascertain that we have an imagination and that it is functioning in the interests of the mind-body union or human life. The intellect, Descartes never tires of repeating, needs to be cultivated and directed towards the sciences. What compulsion can a mind-body union in possession of a survival instinct have towards theory?

The answer is that in essence, existence is a scientist; the ego exists as a scientist. The imagination can only function through the sensory simples which rely on the intellect. This does not necessarily imply a crude rationalistic caricature in which one is born with all sorts of ideas pertaining to secondary quantities. It means that the possibility of sensing extended things requires an intellect which is capable of perceiving extension and its modes distinctly.

This is why the *res cogitans* is essentially a scientist, in that it is capable of comprehending things which are not essential to it; thus the immaterial substance can behold corporeal nature. Its survival unthreatened by the world of corporeal things, the scientist is free to engage in theoretical constructions of the world, and the often referenced Cartesian mathematical-mechanistic world view is just the world stripped bare by the disinterested intellect.

Recalling that the mind, through the functioning of its various faculties constitutes human existence, we might therefore say that worldly life involves the life of the scientist and the life of the higher animal, to use a phrase Descartes would not have liked. But sense-perception seems to hardly fit this schema as an equal to the other faculties. What purpose can sense data have, other than to furnish the imagination with rudimentary data for survival? Would the essence of the mind suffer if we were not in possession of sense-perception?

Similar to the argument we posited for the demonstrative priority of the intellect over the imagination, we can say that by the time we have assented to being in possession of a faculty of imagination, we must have made use of at least one piece of sense-data. Otherwise the imagination would have had to look to the intellect with respect to its survival function, which we have already established is of no relation to the intellect. Again the argument is not wrong, but again it is not the whole picture.

In establishing the faculties of the mind, we saw that even the relationship between the intellect and the imagination depends on the supposition of the existence of corporeal things. We have also said that for the intellect, corporeal things are nothing more than extension and its modes. But notice that an imaginary corporeal object has the same attributes, since these modes are the precise sensory simples which the imagination makes improper use of in dealing with the objects of the intellect. If the reality of corporeal objects is necessary to explain the structure of the mind, and it is, since imaginary and sensory capabilities are just as essential to the mind as the intellect, then we have to posit a faculty which *if* it reports the truth, provides a direct inference to the existence of the corporeal world. This faculty is sense-perception, of course. In this lies its distinction from the imagination.

I have argued, through the distinction of sense-veracity from object veracity in Chapter 2, that Descartes is not so much concerned with the reality of corporeal objects as whether one could ever be sure of obtaining stable data regarding them through the senses. We have seen that Descartes thinks this is possible for particular instances of careful observation involving the whole attention of the mind. The stipulation of the attentive mind forms the intellectual part of what is almost a scientific experiment in this conception of non-deceptive sense perception. If at any one instance, I can be sure of receiving proper sense-data, this of course opens up the possibility of investigating the material conditions of sense-perception. If one can observe the structure of a corporeal part which can suggest to the intellect the workings of that body through the imagination, then it becomes possible to investigate bodily functions which are not normally sensible. There is a lot to be found in the corporeal world through the intellect, aided by the imagination. Descartes the optician and

Descartes the anatomist no doubt made plenty of use of these possibilities. Hence, the senses contribute their bit to the scientist as well as the higher animal. It is no objection to say that what they contribute is inessential to the intellect, for it is essential to the mind taken at large, which is not just a theoretical physicist.

That the mind is greater than the intellect is another important point to make. The imagination and sensory perception play their vital role in the *res cogitans* and allow it to be something more. It is too often an uncritically accepted point that should Descartes' doubts overcome his solutions to them nothing can be known and that should hyperbolic doubt be overcome the status of human knowledge in commonsensical terms is saved. Neither of these assumptions is true. Even under the strongest circumstances for doubt, the intellectual simples remain. If every doubt is overcome, we are still none the wiser regarding the unique position of the ego in straddling the intellectual and the corporeal, save to confidently claim that it does, in other words that there is more to *sum* than the intellect. This is easily highlighted through a reading of the *Meditations* in terms of the structure of the mind, yet it is very easy to ignore in a building block view, which as it looks for the next piece to be placed in the structure of certain knowledge, misses the essential connection between the faculties.

The *Meditations* then is just as much about what can be said regarding the mind as it is about the external world. This is not surprising since the book is an account of the intellect turning as inward as it can and examining the conditions of its own existence. But it speaks to Descartes' always rather pragmatic scientific understanding that the intellect frames the mind in terms of a scientist in search of certainty, to subsequently discover that there certainly belong to it other aspects which are less scientifically inclined.

In the *Meditations*, in keeping with Descartes' work in general, there never really is any consideration of humanity without it having in its possession some standard of privileged and desirable knowledge which is termed science. The *Meditations* is therefore the investigation into the structure of mind of the scientific man and science is after Descartes a natural human attribute in a sense it perhaps never was before. That the scientific should be rendered essential to existence on the penalty of complete darkness and uncertainty is the shatteringly modern aspect of the *Meditations*.

It is therefore difficult to call the author of the *Meditations* a sceptic, if scepticism involves suspicion as well as pessimism regarding what is known. Descartes may not have been very impressed with the sciences of his time, but he certainly worked hard for their improvement, going so far as to incorporate the universal science into the structure of the mind. Was this a type of new dogmatism then: an insistence that because one introspectively finds the mind to be deployed in a certain

fashion, one cannot entertain doubts regarding the external world and that the mental is prior to the material? Yes, in the sense that there are truths in the *Meditations* which are guaranteed not by proof but by the virtue of their being and their substantial characteristics. But no: in the sense that the faculty of the imagination highlights something which the modern reader probably accepts uncritically, but was quite new to Descartes' time: that the thinking animal maintains its existence not through a quality of the soul which is subsidiary to but comparable with the thinking part of the soul, but through an instinctive operation that is completely removed from the activities of the intellect. Theoretical endeavour and practical endurance, the proper faculties of the intellect and the imagination respectively, mark the true dualism of the *Meditations*.

When Descartes finished his work on the *Meditations on First Philosophy*, he had the text circulated among a group of personages which included eminent intellectuals of the day, and promised to answer all of their objections, in a move of extreme intellectual boldness which perhaps was an adventurous flashback to his *Wanderjahre* in which his beginnings as a philosopher lie. There were seven sets of objections in total, six quick and one belated, and the controversy has been going on ever since, though not always as bombastically. I have already listed the various guises the work was seen to be wearing and the various things for which it has been blamed and praised. In exploring the construal of the mind to be found within the Descartes' main philosophical work, I hope to have made a contribution to the Cartesian debate, which in recent interpretations in English at least had been not so justly reduced to a series of technical discussions, the successful resolution of which promised nothing which would be immediately recognisable as Cartesian. To treat of Descartes as now only relevant to the history of philosophy while taking up the debate of various parts of the *Meditations* as intuitively relevant and independently workable philosophical problems is the great error of the building block views. To treat of Descartes with the significance his position in the history of epistemology deserves requires a far more united view of his philosophy, to which the now very famous doubts and dictums are subservient. A philosophy of the mind reading provides the necessary superstructure. Even if not every part of it is correct, it must be remembered that error is of those things that can hardly be escaped in this life, that is as long as the mind retains its faculties in unity.

REFERENCES

- Bos, J.M.H. (1990). "The Structure of Descartes' *Géométrie*". In G. Belgioioso, G. Cimino, P. Costabel, G. Papuli (Eds.) *Descartes: il Metodo e i Saggi* (Vols. 1-3). (pp. 349-369). Rome: Istituto della Enciclopedia Italiana.
- Cottingham, J. (1986). *Descartes*. Oxford: Blackwell.
- _____(2008). *Cartesian Reflections*. Oxford: OUP.
- De Rosa, R. (2010). *Descartes and the Puzzle of Sensory Representation*. Oxford: OUP.
- Descartes, R. (1964-74). *Oeuvres de Descartes* (Vols. I-XI). (C. Adam, P. Tannery, Eds.). Paris: Librairie Philosophique J. Vrin.
- _____(1984). *The Philosophical Writings of Descartes* (Vols. 1-2). (J. Cottingham, R. Stoothooff, D. Murdoch, Trans.). Cambridge: CUP.
- _____(1991). *The Philosophical Writings of Descartes. The Correspondence*. (J. Cottingham, R. Stoothooff, D. Murdoch, A. Kenney, Trans.). Cambridge: CUP.
- Frankfurt, H. (1970). *Demons, Dreamers and Madmen*. Indianapolis: Bobbs-Merrill.
- Gaukroger, S. (1992) "The Nature of Abstract Reasoning: Philosophical Aspects of Descartes' Work in Algebra" in Cottingham, J. (ed.), *The Cambridge Companion to Descartes*. Cambridge: CUP, pp. 91-114
- Kant, I. (1998) *The Critique of Pure Reason* (P. Guyer, A.W. Wood, Trans.). Cambridge: CUP.
- Moore, G.E. (1925). "A Defence of Common Sense" in Muirhead, J.H. (ed.) *Contemporary British Philosophy* (2nd series). London: Allen and Unwin, pp. 193-223.
- Popkin, R.H. (2003) *The History of Skepticism*. Oxford: OUP.
- Soffer, W. (1987). *From Science to Subjectivity*. Connecticut: Greenwood Press
- Spinoza, B. (1905). *The Principles of Descartes' Philosophy* (H.H. Britan, Trans.). Chicago: The Open Court Publishing Company.
- Williams, M. (1998). "Descartes and the Metaphysics of Doubt". In J. Cottingham (Ed.), *Descartes* (pp. 28-49). Oxford: OUP.
- Wilson, M.D. (1978). *Descartes*. London: Routledge&Keagan Paul.