

A Study Guide to
Descartes' *Meditations*

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24.01 Classics of Western Philosophy
edition

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INTRODUCTION

René Descartes (1596-1650) is a philosopher widely regarded as the founder of modern philosophy, and his philosophy is a dramatic expression of an intellectual revolution that changed philosophy forever. Today Descartes is most famous for his *Meditations*, especially for his sceptical arguments in the First Meditation, and his dualistic philosophy of the mind and body. In epistemology, the theory of knowledge, many philosophers still believe they need to answer the challenge posed in the First Meditation. In philosophy of mind, philosophers today tend to construct their theories of the mind in deliberate opposition to the dualism of Descartes. In his own day, though, Descartes was best known as a philosopher of science, and as an author of a distinctive theory about matter, which was a major competitor to the atomic theory that was later associated with Isaac Newton. Descartes was one of a number of thinkers responsible for the death of scholasticism, a philosophy which had reigned in Europe in an almost unbroken line from the time of Aristotle in the 4th century B.C. It was a philosophy with which Descartes was very familiar, from his training at the Jesuit college of La Fleche. Scholastic philosophy was marked by a reverence for authority: the authority of the Church, and the authority of Aristotle. It assumed a harmonious and hierarchical vision of the world: the earth is at the centre of the universe, the sun rises and sets, circling the earth every day; the planets and stars move around the earth in orbits that describe the most beautiful and perfect shape of the circle; the movements of material things are explained by their elements of earth, air, fire, water, each of which has a motion natural to it. Fire has a natural tendency upward; earth has a natural tendency downward, and that is why smoke rises, and a stone falls. But the scientific revolution of Descartes' time was showing that many of these long held scholastic assumptions were false. The sun, and not the earth, is at the centre of the solar system. The planets move around the sun, not

the earth, and their orbits are elliptical. Things in general are very different to how they had always seemed.

Imagine how it would feel to be part of a community that had discovered that so much supposed 'knowledge' was not knowledge at all: so much that had been accepted as true for thousands of years was not true at all, but false. Discoveries like these are unsettling, and they can provoke questions about the possibility of knowledge itself. People have been wrong, for so long, about so much. But if we can be wrong about so much, can we be sure we are ever right? Can we be certain of anything at all? That is the question of Descartes' *Meditations*, published in 1641. In looking for an answer, an appeal to authority clearly will not do. Scholasticism's appeal to authority had been useless. So the *Meditations* argue that truths are not to be accepted on the basis of authority, and that nothing can be taken for granted. Instead, each individual has the resources within himself, or herself, to raise the question 'what can I know?' and discover the answer.

Why 'Meditations'? Why 'First Philosophy'?

Descartes is not writing a scholarly or philosophical treatise in the usual sense. He is not, or not just, aiming to convince you of the truth of some theory. He is aiming to transform you, his reader; or rather, he is offering you the means to transform yourself. He says, 'I would not urge anyone to read this book except those who are able and willing to meditate seriously with me'. The literary form of the *Meditations* is unusual, for a philosophical work. It follows the form of instructions for religious meditation. The author of the traditional religious genre guides the meditator through stages of reflection, of self-reform through self-examination, and Descartes is aiming at something similar, except his purpose is philosophical rather than religious. Each meditator must become aware of, and overcome, the defects and errors within their own soul, in order to reach the truth.

In the Preface to the *Principles of Philosophy*, published later in 1644, Descartes uses a metaphor that

helps to explain what he means by 'first philosophy'. He says 'the whole of philosophy is like a tree of which the roots are metaphysics, the trunk is physics, and the branches emerging from the trunk are all the other sciences'. You will notice that Descartes is using the word 'philosophy' in this passage to describe the whole of knowledge, including physics and all the other sciences. This reflects the usage of his time, when physics itself was described as a kind of philosophy, 'natural philosophy'. He says that knowledge is like a tree, whose branches depend on the strength of the trunk, and whose trunk depends on the strength of the roots. You cannot hope to secure knowledge as a whole, until you have shown that the roots are secure. For example, if you want to show that physics is secure, as a science, you must show that its roots in metaphysics are secure. If you want to have a theory of the material world, you must first settle some questions about metaphysics, that is, some general questions about existence. Does a material world exist? What is the general nature of matter? Descartes considered these to be among the questions of 'first philosophy', and they are considered in the *Meditations*. The idea of 'first philosophy' is the idea of roots, or foundations, on which but all other forms of knowledge depend. The aim of the *Meditations* is to show that those roots, or those foundations, are secure.

The work is divided into six meditations, which are designed to correspond to six days of contemplation. If you can approximate this in your reading of the *Meditations*, so much the better! The *Meditations* are not to be rushed. It is a good idea to pause at the end of each Meditation, and continue in the self-interrogatory manner of the meditator. Ask yourself what you have discovered. Ask yourself what implications the argument has for what you have always believed, and whether the argument is convincing.

FIRST MEDITATION

What can be called into doubt

Descartes begins the First Meditation by saying that many of the beliefs he had long cherished were false, and that this made him think that the 'whole edifice' of his beliefs was 'highly doubtful'. The realization that he has been mistaken leads him to think that the whole edifice of his beliefs may be threatened. What is his response to the threat of scepticism? 'I realized that it was necessary, once in the course of my life, to *demolish everything completely and start again right from the foundations* if I wanted to establish anything at all in the sciences that was stable'. Descartes' response to the problem looks paradoxical: it is not to turn his back on scepticism, but to embrace it. It is not to stop doubting, but instead to try to doubt everything: to refuse to accept anything that it is possible to doubt. Why? Because Descartes thinks that is the only way to discover *whether there is something that cannot be doubted*. If one has a house with rotten timber and shaky foundations, the solution is to demolish it, and find the foundations, and then rebuild from scratch. A different metaphor is given elsewhere, in his replies to some objections:¹

Suppose [someone] had a basket full of apples and, being worried that some of the apples were rotten, wanted to take out the rotten ones to prevent the rot spreading. How would he proceed? Would he not begin by tipping the whole lot out of the basket? And would not the next step be to cast his eye over each apple in turn, and pick up and put back in the basket only those he saw to be sound, leaving the others?

If one has a basket full of apples, some of which are known to be rotten, the solution is to empty the whole basket out, and put back only the good ones. This

¹Objections were raised by a number of Descartes' critics at the time of publication of the *Meditations*. The objections, and Descartes' responses to them, are included in standard editions: see e.g. John Cottingham's translation, *Descartes' Meditations on First Philosophy, with Selections from the Objections and Replies* (Cambridge University Press, 1986).

method, as applied to beliefs, is to doubt everything it is possible to doubt, in the hope of finding something that it is impossible to doubt. The goal is to take the sceptical challenge seriously, not by believing the skeptic outright, but rather by withholding assent to any belief that is vulnerable to the sceptical attack. 'It will not be necessary for me to show that all my opinions are false'; instead 'I should *hold back my assent* from opinions which are not completely certain and indubitable'. One does not have to literally inspect each belief, one at a time, as one would inspect each apple! Descartes says 'I will not need to run through them all individually, which would be an endless task....I will go straight for the *basic principles* on which all my former beliefs rested'.

Having shown the need for the method of doubt, the meditator then raises a number of sceptical arguments, as a way of implementing the method. The thinker of the First Meditation follows through a complex train of thought in an internal dialogue, raising arguments against the 'basic principles' that ground his beliefs, replying to the arguments, and raising more arguments. The thinker presents himself as a naive believer in common sense who must force himself to take seriously the sceptical hypotheses that undermine his naive beliefs. So the Meditation has a certain rhythm, as the thinker plays first one role, and then the other: first the skeptic, then the naïf, and then the skeptic again. The Meditation also has a certain crescendo: the sceptical hypotheses considered at the outset are relatively mild, but the hypotheses becomes more extreme, and the doubt more hyperbolic, as the Meditation progresses.

The deceptiveness of the senses

One of the 'basic principles' on which our beliefs about the world in general rest, is the belief that our senses can be trusted. Consider some of the beliefs you have right now. Perhaps you believe there is a cup of coffee on the table, perhaps you believe that there is a tree just outside. Perhaps you believe that birds are singing, or that a bus is going by, or that someone is

mowing their lawn. Perhaps you believe that you are sitting in a chair, perhaps you believe that you are wearing a dressing gown, sitting by a fire, with a piece of paper in your hands! You have these ordinary beliefs because you trust your senses. Descartes' first sceptical argument aims to undermine this confidence we have in our senses. How does the argument work?². Ordinarily, we naively follow a 'basic principle' that looks something like this.

- A. Whatever is sensed is as it appears to the senses.

Pause for a moment, and ask yourself whether the principle is correct or not. Can you think of an example from your own experience that shows it is wrong? Can you think of a *counter-example* to the principle?

Descartes points out that our senses deceive us with respect to objects 'which are very small or in the distance'. This shows that at least sometimes, what is sensed is *not* as it appears to the senses. Principle A is therefore wrong. If you look at a circular tower that is a long distance away, it may look square. If you look at a straight stick half submerged in water, it will look bent, because of the refractive properties of the water. (This example is discussed by Descartes in his responses to some objections.) The conclusion of the thinker is that we have reason for caution. 'From time to time I have found that the senses deceive, and it is prudent never to trust completely those who have deceived us even once'.

Does this argument provide grounds for doubting all of those ordinary beliefs based on the senses, at the beginning of this section? In the illusions discussed by Descartes there is a kind of *external interference* in our perceptual processes, and one might think this is a kind of external interference that is often absent. If it were not for the great distance, or the water, our senses would not have deceived us. We might want to say that the circumstances in which our senses deceive us are especially unfavorable circumstances. We know that

²The following reconstruction draws on Harry Frankfurt's interpretation, in *Demons, Dreamers and Madmen* (Bobbs Merrill, 1970).

when things are far away, or half-submerged, our senses can be unreliable. We know that there are favorable circumstances too, and that in these circumstances our senses are reliable. This is how the thinker of the Meditation responds to the sceptical argument he had just thought of. He says,

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

The suggestion here is that there are some perceptual circumstances, for example when the things you see are close by, in good light, and so forth, when our senses deliver the truth. When it comes to distant towers, we get it wrong. But when it comes to a nearby fire, we get it right. If we want to defend the senses, we might want to fix up the naive principle A, in a way that captures this suggestion.

B. If the circumstances are favorable, then whatever is sensed is as it appears to the senses.

Perhaps this conditional principle is good enough to capture the thought in the passage quoted above. Ask yourself again whether it will work. Suppose the principle B were true, but you could never *tell* whether circumstances were favorable or unfavorable. Suppose you could not tell whether things were close by, or distant. Would the principle be any use? Surely not. You need to be in a position to know *that* the circumstances are favorable, before you can draw the conclusion that things are as they appear. The next question is: can we know whether circumstances are favorable or not? The answer implied by the thinker in the above passage is, yes. We can know when circumstances are favorable, and they are favorable in the cases of these apparently undeniable beliefs: that I am sitting by the fire,

wearing a winter dressing gown, and so forth. We should then amend our principle to yield a better one.

- C. We can distinguish favorable from unfavorable circumstances; and if the circumstances are favorable, then whatever is sensed is as it appears to the senses.

This principle is better than A, because it allows for the possibility of sensory illusions. It is better than B, because it includes the vital claim that we can in fact distinguish favorable from unfavorable circumstances. Does it adequately support the trustworthiness of the senses? Can you think of any example that would show this principle to be wrong? Try to test the principle, again, by seeing if you can find a counter-example to it.

Descartes raises an example, a new sceptical hypothesis, which undermines this kind of defence of the senses. Consider the situation of 'madmen, whose brains are...damaged by the persistent vapors of melancholia'. The sensory beliefs of such people are often false, *even when the circumstances in their environment are favorable*. Such people believe, so Descartes claims, 'that they are dressed in purple when they are naked, or that their heads are made of earthenware, or that they are pumpkins'. Whatever the details of the story, it seems clear that in some cases of mad hallucination there is no *external* interference in ones perceptual processes, but there are *internal* interferences in ones perceptual processes. In such cases the external circumstances are favorable, and (we can suppose) the mad person knows that the external circumstances are favorable: the light is good, and so forth. And yet it is not true, in such cases, that things are as they appear to the senses. So the case of the mad hallucination seems to be a counter-example to principle C. We have not yet found a principle that will permit us to trust our senses.

Notice that the thinker in the Meditation seems to laugh off the sceptical hypothesis of madness. 'Such people are insane, and I would be thought equally mad if I took anything from them as a model for myself'. The suggestion is that mad people are incompetent perceivers, who suffer from internal interferences; and

that we can tell competent from incompetent perceivers; and in particular the thinker of the *Meditations* can tell that he is not one of the incompetent ones. Perhaps we can take this suggestion into account, and find a principle that will improve on C.

D. We can distinguish favorable from unfavorable circumstances, and competent from incompetent perceivers; and if circumstances are favorable, and the perceiver is competent then, whatever is sensed is as it appears to the senses.

Look what has happened to our naive principle that things are as they appear! It has become hedged about with all kinds of qualifications, burdened with all kinds of conditions: when the circumstances are right, and the perceiver is competent, then at least, things are as they appear. Will this more complex and qualified principle successfully defend the senses?

Consider its assumption that we can distinguish competent from incompetent perceivers: that we can distinguish, for example, sane perceivers from the mad ones. Ask yourself: who are the 'we'? The pronoun is supposed to apply to everyone. So it is supposed to apply to people, whether they are sane or mad. Suppose I am mad. The principle says that I must be able to tell that I am mad. The principle says that we can distinguish competent from incompetent perceivers, therefore I must be able to tell that I am an incompetent perceiver. The problem though is that if I am mad, I suffer not only from *sensory hallucinations*, but *defects of judgement*. And if I suffer defects of judgement, then I may well not know that I am mad. The assumption of principle D that we can distinguish competent from incompetent perceivers is false. We have not, it seems, been able to find a principle that will adequately defend the senses.

Dreaming

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! ... I see plainly that there are never any sure

signs by means of which being awake can be distinguished from being asleep'.

This is one of the most famous sceptical arguments in philosophy. I have had dreams which were qualitatively indistinguishable from waking experiences. So the qualitative character of my experience does not guarantee that I am not now dreaming. So I cannot know that I am not now dreaming. There seems to be an implicit continuation of the argument: So I cannot know that I am not always dreaming. So I cannot know to be true any belief based on my sensory experience. What do you think is the conclusion of the dreaming argument? Perhaps it is, for all I know, I may be dreaming now. Perhaps it is, for all I know, I may be dreaming *always*. Will either of these do equally well, for Descartes' purposes?

This sceptical argument is still aimed at the kinds of beliefs that are based on sensory experience. The dream argument threatens our beliefs about bodies outside us, but Descartes does not seem to think it threatens our beliefs about mathematics. Even in a dream one may know that 2 plus 3 make 5, and that a square has only four sides. The dreaming argument threatens all knowledge based on experience, but it does not threaten knowledge of *a priori* truths, i.e. truths known independently of experience.

In responding to the dreaming hypothesis, the thinker of the First Meditation concludes that it undermines all empirical beliefs, that is, *all beliefs based on experience*. The sceptical force of the argument is devastating. Nevertheless, there are, he thinks, some beliefs that escape the sceptical net.

[W]hether 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 transparent truths should incur any suspicion of being false.

He concludes, provisionally, that beliefs in arithmetic and geometry contain 'something certain and indubitable'. Notice Descartes' assumption here, that the probability of our being wrong about our sensory beliefs is greater than the probability of our being wrong about our arithmetical beliefs. This assumption

that the intellect is more reliable than are the senses is a sign of Descartes' rationalism, and we will be seeing more of it throughout the *Meditations*. However, even this confidence in the beliefs about mathematics will be called into question by the next, and final, sceptical hypothesis.

The Malicious Demon

Descartes first considers the possibility that God could be causing him to be deceived, both with respect to empirical beliefs about the earth, the sky, the material world—and also with respect to the truths of mathematics that are believed independently of experience.

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? What is more...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?

This hypothesis does not fit well with the concept of God, 'who is supremely good and the source of truth', so he adjusts the hypothesis, so that the being who controls my beliefs is not God, but some powerful and deceiving demon.

I will suppose...some malicious demon of the utmost power and cunning has employed all his energies in order to deceive me. I shall think that the sky, the air, the earth, colours, shapes, sounds and all external things are merely ...delusions.

My experience would be exactly as it is if it were produced in me not by the workings of the physical world but by a malicious demon. Moreover, my beliefs about the truths of mathematics would also be the same if my arithmetical inferences were under the same control.

Notice that the scope of this sceptical argument is the broadest of all, undermining confidence not only in the veridicality of the senses, but in judgments of reason. But does it threaten all judgements of reason? What would be the consequences for Descartes' own

argument if it did? This question was raised in connection with the madness hypothesis, and it is equally relevant here.

Some questions to consider about Meditation I

(1) We saw that Descartes does not take seriously the possibility that he himself is mad. If he is taking the skeptic seriously, why does he not pursue this possibility? Why does he dismiss the madness hypothesis, if he is really refusing to take nothing for granted? Part of the reason is because he considers instead a related hypothesis that describes a kind of 'madness' of the sane, the *dreaming* hypothesis.

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!

If dreams are a kind of madness for the sane, then there is less reason to consider more seriously the sceptical hypothesis of madness. But while it seems plausible that dreams and madness are indeed similar in so far as they involve defects in sensory beliefs, it is not obvious that they are similar when it comes to defects of judgement. In Descartes' opinion, a dreamer has defective sensory beliefs, but he does not have defective reasoning powers. The mad person can have *both*. What would happen, if he were to take the madness hypothesis seriously? If madness can involve not only the defects of *perception* that Descartes considers, but defects of *judgement*, then think about the implications this sceptical hypothesis would have for the project of the Meditations: the project of *using reason* to show *by argument* that we can have knowledge.

(2) Descartes says that there are 'never any *sure signs* by means of which being awake can be distinguished from being asleep'. Is this true? Can you think of anything that might be a candidate 'sure sign'? J. L. Austin

suggested that there are qualitative signs that help us to distinguish waking from dreaming. The signs are hard to describe, but the fact that we are able to recognize them is shown by the phrase we have in ordinary language to describe it, namely a 'dream-like quality'³). Some peculiar waking experiences have 'a dream-like quality'. We know what a dream-like quality is, and that typically dreams have it and waking experience doesn't. In support of Austin's point there is also the phenomenon of lucid dreams. When someone has a lucid dream, they become aware that they are dreaming, while they are dreaming, and they are able to affect and control the narrative in the dream. If this is so, then they will be aware of the dream's dream-like quality. Moreover, lucid dreamers provide a counter-example to Descartes' apparent suggestion that one never knows that one is dreaming, when one is dreaming. Is this sufficient to answer Descartes' sceptical argument?

Remember that Descartes claimed there are never any *sure* signs to distinguish waking from dreaming. Are there *some* dreams that seem very similar to waking life? Have you sometimes had the experience that Descartes describes, of believing that you are awake and doing all kinds of things, when really you are asleep in bed? If this is ever the case, then it seems that Descartes is right to say that there are no *sure* signs that will tell you that you are asleep, when you are asleep. Perhaps dreams can have a 'dream-like quality'. But that quality would be of no use against Descartes' argument, if (i) dreams do always have the dream-like quality, but the quality is noticed only when you wake up, and remember what the dream was like, or (ii) dreams do not *always* have the dream-like quality. What is needed is a 'dream-like quality' that will be a 'sure sign': that is, it will always be there to tell you *that* you are dreaming *when* you are dreaming.

(3) Suppose we accept that is not the case that I always know that I am asleep when I am asleep. At least sometimes, when I am asleep, I believe that I am awake. Does this imply that I therefore do not know that I am

³ Austin, *Sense and Sensibilia* (Oxford University Press, 1962), p. 49

awake, when I am awake? One of Descartes' critics, Gassendi, said that it does not. He acknowledged that dreams may give rise to deception, but nevertheless 'for as long as we are awake, we cannot doubt whether we are awake or dreaming'. Perhaps Descartes' thinking is guided by the following general principle (see Williams, *Descartes: the Project of Pure Enquiry* (London: Penguin, 1978), 309-313):

I can only tell that S, when S, if I can tell that not-S when not-S.

Applied to dreaming, this principle would imply that I can only tell that I am awake, when I am awake, if I can tell that I am not awake, when I am not awake. (Ask yourself whether the principle is implicit in Descartes' sceptical hypothesis about the senses.)

How plausible is the principle? Apply the principle to the cases of being alive, conscious, sober. Substitute for S in the above principle 'I am alive'; 'I am conscious'; 'I am sober'. An application of this principle seems to tell me that I cannot know that I am alive, when I am alive, since I would not know that I was dead, if I were dead. I cannot know that I am conscious, when I am conscious, since I would not know that I was unconscious, if I were unconscious. And so forth. Notice that we have not shown what exactly is wrong with the principle. But we have shown that it has some apparently absurd consequences. Of course I can tell that I am alive, when I am alive!

This argumentative strategy is called a *reductio ad absurdum*. It is a useful strategy in philosophical argument, especially when something looks suspicious, but you can't quite see what is wrong with it. Ask yourself: what is the principle here? Would we get ridiculous consequences, if we applied the principle somewhere else? If so, then the principle should be questioned. Of course, one's opponent is always free to bite the bullet and respond: 'I don't see what's so ridiculous about that consequence!', a philosophical manoeuvre colloquially known as 'outsmarting one's opponent'—named after Australian philosopher Jack Smart, who is thought to be fond of it. But it does seem hard to imagine anyone 'outsmarting' this particular *reductio* argument, accepting that I cannot tell I am alive, when

I'm alive, because I couldn't know I was dead if I were dead. But there may be more to the principle: if you want to pursue this, read the Williams passage cited above.

(4) Suppose Descartes has established that any given experience may be a dream. Is he entitled to infer that therefore *all* experiences may be a dream? Consider this analogous inference, about a lottery. It is a fair lottery. Any number has the same chance of winning as any other number. So it is true that *anyone can win the lottery*. Is it therefore true that *everyone can win the lottery*? Is it possible that every ticket holder wins? Of course not. Similarly, 'For all x, possibly x is a dream' does not imply 'Possibly for all x, x is a dream'. This objection is related to an argument made by Gilbert Ryle, who used an analogy of counterfeit money. Suppose you know that there is counterfeit money around, and that it is hard to tell from the genuine article. Then perhaps it is true that, for all you know, any given 50 dollar bill is a counterfeit. Does it follow that, for all you know, every 50 dollar bill is counterfeit? No. And what is more, it doesn't even make sense to suppose that *all* money could be counterfeit, or so Ryle argued. The notion of a counterfeit is in a sense parasitic on the notion of the real thing.

A country which had no coinage would offer no scope to counterfeiters. There would be nothing for them to manufacture or pass counterfeits of. They could, if they wished, manufacture and give away decorated discs of brass or lead, which the public might be pleased to get. But these would not be false coins. There can be false coins only where there are coins made of the proper materials by the proper authorities. In a country where there is a coinage, false coins can be manufactured and passed; and the counterfeiting might be so efficient that an ordinary citizen, unable to tell which were false and which were genuine coins, might become suspicious of the genuineness of any particular coin that he received. But however general his suspicions might be there remains one proposition which he cannot entertain, the proposition, namely, that it is possible that all coins are counterfeits. For there must be an answer to the question: 'Counterfeits of what?' (Gilbert Ryle, *Dilemmas* (Cambridge University Press, 1960) 94-5).

Ryle argued that the same applies to the sceptical hypotheses of the *Meditations*, if they claim that for all we know, our senses are *always* deceiving us; or, that for all we know, we are *always* dreaming. Just as there can be no counterfeit money, unless there is also the real thing, so there can be no dreaming experiences, unless there is also waking experience. How convincing do you find this response to Descartes?

SECOND MEDITATION

The nature of the human mind, and how it is better known than the body

The sceptical hypotheses of the First Meditation had called into question apparently all the beliefs that had hitherto been taken for granted: empirical beliefs in the familiar everyday world of trees and buildings, fires and dressing gowns; beliefs in the entire physical world, 'body, shape, extension, movement and place', including belief in the thinker's own body; beliefs in a *priori* mathematical truths, that were challenged by the Demon hypothesis. Descartes hopes to find just one certainty that will be invulnerable to the sceptical hypotheses, one Archimedean point, and he finds it in the argument: *cogito ergo sum*. This famous formulation of the argument is from the version in Descartes' *Discourse on Method*: '...this truth 'I am thinking, therefore I exist' [is] so solid and secure that the most extravagant suppositions of the skeptics could not overthrow it'. In the *Meditations* he puts the argument like this.

I have convinced myself that there is absolutely nothing in the world, no sky, no earth, no minds, no bodies. Does it now follow that I too do not exist? No: if I convinced myself of something then I certainly existed. 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; and let him deceive me as much as he can, he will never bring it about that am nothing so long as I think I am something. So after considering everything very thoroughly, I must finally conclude that the proposition, *I am, I exist*, is necessarily true whenever it is put forward by me or conceived in my mind.

What kind of an argument is this? Is it strictly an argument at all? The traditional formulation, 'I think, therefore I am' looks like an argument in every way: it has a premise ('I think'), a 'therefore' indicating an

inference, and a conclusion ('I am'). On the other hand, Descartes says in reply to the Second Objections:

When we observe that we are thinking beings, this is a sort of primary notion, which is not the conclusion of any syllogism; and, moreover, when somebody says; I am thinking, therefore I am or exist, he is not using a syllogism to deduce his existence from his thought, but recognizing this as something self-evident, in a simple mental intuition.

Descartes' readers have disagreed about whether the cogito is an inference, or a simple 'intuition'. Others have said that the *cogito* is not quite an inference, not quite an intuition, but a 'performance'.⁴

The special status of 'I think' and 'I am'

Descartes says that there is something special about his belief *that he is thinking*, and his belief *that he exists*. What exactly is special about these thoughts? Descartes says that it is impossible to doubt these beliefs. So what is it about them that makes them immune to doubt? Descartes says in the passage above that 'the proposition *I am, I exist*, is necessarily true whenever it is put forward by me or conceived in my mind'. If these propositions are necessarily true, then that might be why they cannot be doubted. But are they 'necessarily true', as Descartes says? No, or not strictly. There are possible worlds in which Descartes does not exist. Perhaps in those possible worlds, his parents never even met. If Descartes is taken to be the referent for 'I', then in those worlds the proposition 'I, Descartes, exist' is false. The proposition that 'I, Descartes, think' is also false, in those worlds. And something similar will apply no matter who the thinker is. These propositions are not necessarily true, in the usual sense in which philosophers speak of necessary truth.

⁴ See e.g. Anthony Kenny, *Descartes: A Study of his Philosophy* (Random House, 1968), Ch. 3, and Jaako Hintikka, 'Cogito ergo sum: inference or performance?' in Willis Doney (ed.) *Descartes: A Collection of Critical Essays* (Doubleday 1967), pp. 108-39.

These propositions are contingent. But Descartes is surely right about their special status.

One suggestion is that these propositions have the special character of being *incorrigible*, and *self-verifying*. This suggestion has been made by Bernard Williams (Descartes: *The Project of Pure Enquiry*, Ch. 3). It is assumed in his definitions that we are dealing with contingent propositions: propositions that are not true in all possible worlds. With that assumption (and why does that assumption matter?) he proposes that a proposition *P* is *incorrigible* when it satisfies this description: *if I believe that P, then P*. Here are some candidate examples of propositions that satisfy this description. 'I am in pain.' This is, arguably, incorrigible, since if I really believe I am in pain, I am in pain. I can't be wrong about it. 'That looks red to me.' Here again, if I really believe something looks red to me, then it does look red to me. I am the expert about how things look to me. I might be wrong, of course, on how they really are. But (arguably) I can't be wrong about how they look to me. Now consider the propositions from Descartes' argument. 'I am thinking.' Suppose I believe that I am thinking. It follows that I am thinking. 'I exist'. Suppose I believe that I exist. It follows that I do exist. The propositions 'I think' and 'I exist' both seem to be incorrigible, in Williams' sense.

The propositions are also *self-verifying*. This is a closely related concept, which concerns *assertion* rather than belief. A proposition *P* is self-verifying when it satisfies this description: *if I assert that P, then P*. Here are some candidate examples of propositions that satisfy this description. 'I am speaking'. 'I can speak at least a few words of English'. 'I promise to come to the party'. If I assert (out loud!) that I am speaking, then I am speaking. If I assert that I can speak at least a few words of English, then I can speak at least a few words of English. If I say that I promise to come to the party, then I do promise to come to the party. The latter is an example of what Austin called a *performative* speech act. Some philosophers who see a similarity between this example and the propositions of the *cogito* have developed the 'performative' interpretation of Descartes' argument, mentioned above.

Is there a similarity? Yes, in so far as all are examples of self-verifying propositions. If I assert 'I am thinking', then I am thinking. If I assert 'I exist', then I exist. Contrast these examples with *self-refuting* statements. 'I am absent.' 'I cannot speak any English'. 'I cannot think'. 'I do not exist'. (Can you imagine situations where these propositions might be used in a way that is not self-refuting?)

If this is correct, then there is indeed something special about the status of the propositions of Descartes' argument. Although they are strictly speaking contingent propositions, not necessary ones, they have the special features of being incorrigible and self-verifying. That is why they cannot be doubted.

However, there is a puzzle now. The conclusion Descartes wants to reach is 'I exist'. If this proposition *on its own* has the vital properties of being incorrigible and self-verifying, then why does Descartes bother with his premise, 'I think', and trouble to present the argument as '*I think, therefore I am*'? The answer is not obvious, but here are two suggestions.

The first is that there is one formulation of the argument presented in the Meditations which can be interpreted in just this way. Descartes says, 'the proposition...*I exist*, is necessarily true whenever it is...conceived in my mind.' This could be interpreted exactly in line with Williams' suggestion: 'if the proposition 'I exist' is believed by me (conceived in my mind), then it is true'. In Williams' terminology: the proposition 'I exist' is incorrigible. On this reading, the conclusion 'I exist' is inferred from a thought about one's existence. This still leaves all the other formulations of the argument, however, in which existence seems to be inferred from thoughts about something other than one's existence (25). 'If I convinced myself of something, then I certainly existed.' If there is a deceiver who is deceiving me, 'in that case too I undoubtedly exist'. If I 'thought anything at all, then I certainly existed' (French version). In all these cases the premise that is supposed to yield a conclusion about existence is not a thought *about one's existence*, but rather a thought about e.g. a deceiver.

The second suggestion is that there is indeed a special reason for the premise of the argument being 'cogito', 'I think'. The proposition 'I think' has a special feature that is lacking in the proposition 'I exist'. The proposition 'I think' is *evident* (to use Williams' label). A proposition P is evident to me if it satisfies the following description: *if P, then I believe that P*. Compare this definition to the definition for incorrigibility above. You can see that being evident is roughly the converse of being incorrigible. Incorrigibility says, if you believe it, it's true. Evidence says, if it's true, then you believe it. If something is incorrigible to you, then you are an expert about it, in one way. If you believe it, it's true. If something is evident to you, then you are an expert about it in a different way. If it's true, then you believe it. It doesn't escape your attention.

It may be that Descartes thinks that all propositions about the mind are incorrigible and evident. Incorrigibility says: when I believe something about my mind, I get it right. If I believe some proposition about my mind, that proposition is true. That, on its own, is compatible with there being all kinds of dark corners and alleys of the mind about which I know nothing. But then Evidence adds: I know all there is to know. If some proposition about my mind is true, then I believe it. The poet Gerard Manley Hopkins said, 'O the mind, mind has mountains; cliffs of fall / Frightful, sheer, no-man-fathomed.'⁵ Descartes would have disagreed; he seems to think there are no unfathomable depths to the mind. There are no hidden corners or dark alleys. The mind is transparent to itself. I can know about all the operations of my mind.

The proposition 'I think' is evident, in a way that the proposition 'I exist' is (apparently) not. If I think, then I believe that I think. Is it true that if I exist, I believe that I exist? No, or at least it seems not. While I believe that I think, when I am thinking, I do not always believe that I exist, when I am existing. Perhaps I can continue to exist in a dreamless, thoughtless sleep, and surely this is what common sense

⁵*Poems and Prose of Gerard Manley Hopkins*, ed. W.H. Gardner, (Penguin 1953), reprinted 1971, p. 61.

supposes. In that case I exist, but do not believe I exist, since I do not believe anything. While 'I exist' is incorrigible, it is not, on the face of it, evident. So Descartes has a reason for choosing to begin his argument with the premise 'I think'.

Essence and existence

There is another reason for beginning with the premise 'I think' in the famous argument of the *cogito*, which brings us to the question not only about the existence of the 'I', but about the nature of that 'I'. Descartes wants to argue that thinking and existence are very closely connected, in the case of a self that thinks. After addressing the question of his existence, the thinker of the meditation will address the question of his own essence or nature. He will argue in the end, 'I am essentially a thing that thinks'. An essential property of a thing is a property which that thing is bound to have, a property that it cannot lack. Perhaps an essential property of a cat is that it is an animal. Perhaps an essential property of a yeti is that it is an animal. Notice, from the last example, that we can talk about the essential properties of things without being committed to the existence of the things. Nevertheless, truths about essence have implications for existence: if a cat exists, it must be an animal; if a yeti exists, it must be an animal. If it were not an animal, it would not be a cat. If it were not an animal, it would not be a yeti.

If Descartes' argument that the 'I' of the Meditations is essentially a thinking thing is successful, then the implication is similar: if I exist, I must be thinking. If Descartes' argument about his essence is correct, he will be able to argue in either direction. I think, therefore I am (*cogito ergo sum*). And, I am, therefore I think. (I am essentially a thinking thing.) This symmetry will be central to Descartes' vision of what it is to be an 'I', a soul, or self, or mind: *I am if and only if I think*. Notice that if this thesis about essence is correct, it will have the consequence that 'I exist' is not only incorrigible, as described above, but also evident: if I exist, then I

will think, and therefore (by the *cogito*) I will believe that I exist. However, this thesis about the essence of the self is yet to be argued for.

You will notice that throughout the *Meditations*, Descartes carefully distinguishes the question of the existence of something, from the question of the essence or nature of that thing. Both kinds of questions concern metaphysics: What exists? What are things like? Sometimes we might know that something exists, without knowing what it is like. You come home in the dark to a house that you expect to find empty, and you hear an ominous rustling inside. Something is there, but you don't know what it's like. Is it a cat? A burglar? A friend? In such a case you might say, in Descartes' terms, that you know of the existence of something, but you don't yet know its essence, its nature. Sometimes it might be the reverse. You know what Santa Claus is like, you know what his nature is: an old man, white-bearded, red-suited, with a generous disposition and a hearty laugh. (Perhaps not all of these properties belong to his essence. Could there be a young Santa? Or a beardless one? Or a female one?) You know, more or less, what Santa is like: but does he exist? In this case you know what his nature is before you settle the question of whether he exists. The sceptical arguments of the First Meditation have, in general, left the meditator in ignorance about the *existence* of things. The meditator knows what trees, fires and dressing gowns would be like: but he is not sure whether there are any. He knows what his body would be like, if it existed (something with hands, extended in space, etc.), but he is not sure whether it does exist.

This pattern is typical of the *Meditations*. The meditator typically begins by answering some question about essence, and then raises the question about its existence: he will begin by describing the essence of some kind of thing, whether bodies, or shapes, or God, and thereafter raise the question of whether that thing in fact exists. Descartes assumes that the essence of a thing can generally be known before one knows whether the thing exists, because the essential properties of a thing are implied by the idea or concept of that thing. For example, the idea of a triangle implies the essential properties of a triangle: a closed three-sided

figure. That tells you something about the concept of a triangle. And it tells you something about the world: if you come across an existing triangle, it will have three sides. The idea or concept of a yeti implies that being an animal is an essential property of a yet. That tells you something about the concept of a yeti. And it tells you something about the world: if you come across an existing yeti, it will be an animal. You can have an idea or concept of a thing prior to knowing whether the thing exists: so in many cases you can know the essence of something before knowing whether it exists.

The grand exception to this general pattern in the *Meditations* is, of course, knowledge of oneself. In the argument of the *cogito*, the thinker concludes, 'I exist'. It is only *after* establishing this conclusion about his existence that he raises the question: what am I? What is my nature? What is my essence? Immediately after the conclusion of the *cogito*, Descartes says: 'I do not yet have a sufficient understanding of what this 'I' is, that necessarily exists'. I know *that I exist*, but I do not yet know *what I am*. I know of my existence, but I do not yet know of my essence.

The rest of the Second Meditation is devoted to arguing that the essence of the self, or 'I' (whose existence has been proved in the *cogito*) is *to think*. Notice that the subtitle of this Meditation is basically devoted to this issue about the nature of the self or mind: 'The nature of the human mind, and how it is better known than the body'. Notice the mention of 'body' in the title. The meditator will address an important question about the essence of *matter*, or body, whose existence is still entirely in doubt. But the purpose there too will be to establish a thesis about the mind: that it is better known than the body.

Essence of the self, or mind

The argument of the *cogito* concludes 'I exist': but who or what is it that exists? Not a human body. Not a soul in the traditional Aristotelian sense. Aristotle had identified the soul with certain capacities that living things possess: capacities of nutrition, reproduction, locomotion, perception, and thought. On the Aristotelian

account, all living things have souls: plants have the first two capacities, non-human animals have the first four, and human beings have all five. Descartes considers four of these capacities (coyly omitting reproduction), and argues that none but the last capacity, thought, is essential to the nature of the soul.

What about the attributes I assigned to the soul? Nutrition or movement? Since now I do not have a body, these are mere fabrications. Sense-perception? This surely does not occur without a body, and besides, when asleep I have appeared to perceive through the senses many things which I afterwards realized I did not perceive through the senses at all. Thinking? At last I have discovered it - thought; this alone is inseparable from me. I am, I exist - that is certain. But for how long? For as long as I am thinking. For it could be that were I totally to cease from thinking, I should totally cease to exist.

He somewhat overstates his case here, to emphasize the point: the meditator is not *denying* the proposition 'I have a body', but rather *refusing to assent* to it, since the arguments of the First Meditation show that it is dubitable. I can doubt that I have a body: so I can doubt that I have any of the bodily capacities described on the Aristotelian picture, whether of nutrition, locomotion, (reproduction), or perception, in so far as that involves bodily sense organs. (Notice that in so far as perception has a mental aspect, Descartes will treat it as a mode of thinking.) All capacities other than thought are vulnerable to the sceptical arguments of the First Meditation. Descartes concludes that his essence is to think. *Sum res cogitans* : 'I am a thing that thinks'. Notice that Descartes appears to believe he has established not only 'I think'; not only 'I am a thinking thing'; not only 'thought is a property essential to me'; but the strong conclusion that 'thought is the *only* property essential to me'.

Essence of body

We have knowledge of the self: but surely, so the naive view runs, our knowledge of bodies, through the senses, is still more distinct? Descartes considers our knowledge of a particular body: a piece of wax. Or rather, since he has not yet countered the sceptical arguments of Meditation I, he is considering the concept of a particular piece of matter, without committing himself to its existence. He is conducting a kind of thought experiment. Suppose that I were to have knowledge about a material thing. What would its essence be? And how would I know it? The wax is white, scented, hard, cold: these seem to be properties that enable me to understand it distinctly. All those properties disappear when it is placed by the fire: but the thing still continues to exist. 'What was it in the wax that I understood with such distinctness?' Not the fragrance, hardness, coldness, but merely something 'extended, flexible and changeable'. This is a variant of a 'think away' argument, to discover the essential properties of something. (Think away Santa's white beard. Could he still be Santa? If so, then the white beard is not essential to him.) Unfortunately it is not quite clear what essence Descartes is trying to discover: it is not quite clear whether he is asking a question about the essential properties of wax in general, or a particular lump of wax, or of matter in general—questions which would all have different answers (what might they be?). Here it will be assumed that Descartes intends to discover the essence of matter in general.

Descartes reaches a conclusion about the essence of matter. He concludes that the concept of 'body' is the concept of something essentially *extended*, with shape and size, capacity for change of shape and size, and that is all. This anticipates the mind/body dualism, and the doctrine of primary and secondary qualities, developed more fully in the later Meditations.

One question about matter concerns its essence: what would matter be like, if it existed? Another concerns our knowledge: how would we have knowledge of matter, if it existed? Descartes reaches the apparently radical conclusion that bodies, or rather the essential properties of bodies, are known not by mere sense

perception, or imagination, but the *intellect*: perception always involves judgment. This applies to the sensory perception of all material bodies. It applies to the sensory perception I would have of the wax, if it were to exist. And it also applies to perception of the most mundane things: the people I seem to see outside the window. Even if perception were veridical (which the First Meditation gives us reason to suspect), perception would not yield acquaintance with the people themselves, obscured by hats and coats. To judge that they are men is to go beyond perception would tell us: it is to use one's intellect.

Descartes concludes this Meditation with some more discoveries about the self. Knowledge of the self, or mind, is more distinct and certain than knowledge of body. The knowledge of the self given by the *cogito* argument is prior to knowledge of body, and immune to sceptical worries about body. Moreover, every judgment about body helps me to know myself better. 'Every consideration whatsoever which contributes to my perception of ...body, cannot but establish more effectively the nature of my own mind'. This follows from the thesis about the transparency of the mind to itself: in Williams' terms, the thesis about the *evidence* of propositions about the mind. If I judge that there are men below in coats and hats, then I know that *I judge* that there are men below in coats and hats, so I know something not only about them, but about *myself*. The more I learn about anything else, the more I learn about me.

Conclusion

The method of doubt in the First Meditation appeared to threaten all knowledge, but in the Second Meditation the thinker finds something that cannot be doubted. Having tipped out the barrel, the thinker finds one apple that is sound. Having demolished the building, he has discovered a piece of timber that is firm, and that can (he hopes) form the foundation for rebuilding the edifice. Moreover, if his arguments have succeeded, he has discovered the essence of mind, which is to think; and the essence of matter, which is to be extended. And

he has discovered that, contrary to common sense, the mind is more knowable than the material world.

Some questions to consider about Meditation II

(1) How plausible is it that propositions concerning your own mental states are incorrigible to you? Isn't it possible to make mistakes about our own beliefs and desires? I might falsely believe that I like the taste of beer, when really I hate it, but pretend to everyone *including myself* that I like it, so I can be one of the crowd at the pub. Is that a possibility? Many people, and many philosophers, think that self-deception is possible. For example, if someone 'turns a blind eye' to the lipstick on her husband's collar, she somehow pretends to herself that he is faithful. In such a case she will have beliefs about her mental states that are not incorrigible: she may believe that she believes he is faithful; but in fact she believes he might not be. Let R be the proposition 'I believe he is faithful'. In this example, she believes that R; but in fact not-R is the case. She is wrong about what she believes. R is not *incorrigible*.

(2) How plausible is it that propositions concerning your own mental states are evident to you? If self-deception is possible, then that is relevant to the evidence issue too. There may be truths about one's mental life about which one is not aware. The woman in the previous example may believe 'deep down' that her husband is having an affair: but that belief is not transparent to her. She does not believe that she believes it. Let S be the proposition 'I believe he is having an affair'. In this example, S is the case; but she does not believe that S. She has a belief of which she is not aware. S is not *evident*. More generally, if there are unconscious mental processes, as many (most famously Freud) have argued, does that undermine Descartes' view?

THIRD MEDITATION

The existence of God

So far Descartes' sceptical arguments have threatened all knowledge but the knowledge of self provided in the *cogito*. But instead of turning now to the question of how knowledge of material things may be possible, the thinker turns in the Third Meditation to a question about God. 'I must examine whether there is a God, and, if there is, whether he can be a deceiver. For if I do not know this, it seems that I can never be quite certain about anything else'. He believes he must prove the existence of 'the true God, in whom all the treasures of wisdom and the sciences lie hidden', as he puts it later in the Meditations. Knowledge of God's existence is seen as the *foundation of, and more certain than,* all knowledge other than immediate self-knowledge. The importance of this Meditation is two-fold: firstly in its methodological proposal about clear and distinct ideas, developed in more detail later; and secondly in its conclusion that God exists.

Clear and Distinct Ideas

Descartes reflects on the arguments of the Second Meditation, and asks: what is it about the argument which made me so certain about it? He says that it is the clarity and distinctness of his perception of it.

I am certain that I am a thinking thing....In this first item of knowledge there is simply a clear and distinct perception of what I am asserting; this would not be enough to make me certain of the truth of the matter if it could ever turn out that something which I perceived with such clarity and distinctness was false. So I now seem to be able to lay it down as a general rule that whatever I perceive very clearly and distinctly is true.

If clarity and distinctness are a sure sign of truth, then we have the beginnings of a path out of the sceptical morass. Not only do I know of my own existence, and essential nature. Guided by the principle

of clear and distinct ideas, I can keep to the path of truth by assenting only to those ideas that are clear and distinct. Strictly speaking it is judgments, rather than ideas, that can be true or false. If I were to consider ideas merely as what they are, namely modes of my thought, 'they could scarcely give me any material for error'. However, my chief error consists in 'judging that the ideas which are in me resemble, or conform to, things located outside me'. My main source of error is a hasty judgement that some idea corresponds to, resembles, some reality outside me. Then I make judgements that are false. The principle about clear and distinct ideas can help me to avoid these errors. Here we have a hint of things to come: Descartes' theory of error and judgment, which is the proper topic of Meditation IV.

God

Two independent arguments for the existence of God are given in the Meditations, one in Meditation III, the other in Meditation V. The latter will be addressed in due course. The argument in the Third Meditation is interesting, but it makes use of certain Scholastic metaphysical concepts and principles. This presents the reader with two kinds of problem. (1) The concepts and principles are a little unfamiliar and archaic. However, some are interesting and important, and with a little effort can be grasped by a modern reader. (2) It is not obvious that Descartes is entitled to these metaphysical assumptions. Isn't he supposed to be doubting everything but the indubitable? Some readers may find the principles used by Descartes rather easy to doubt. The argument in the Third Meditation is known as the 'Trademark Argument', since the thinker's idea of God is described as if it were a trademark that the creator has left in his creature:

it is no surprise that God, in creating me, should have placed this idea in me to be, as it were, the mark of the craftsman stamped on his work.

The Trademark Argument for God's existence

The thinking begins by reflecting on the furniture of the mind, whose existence he has proved. I have many ideas, he says, some of which seem to be innate, some adventitious, some invented by me. Ideas can be considered in terms of their 'formal reality' (as mental states), or their 'objective reality' (as representational content). Here is an analogy: a newspaper photograph of a yeti may be considered in terms of its 'formal reality' (a real ink-patterned piece of paper), or its 'objective reality' (a representation of a yeti). The question may then be raised: does the yeti depicted in the photograph really exist? In Descartes' terminology, that is the question: does the yeti have 'formal reality', in addition to the 'objective reality' it has as an 'object' of a photograph? Descartes' distinction is still important, although the labels philosophers use nowadays are not the same. Philosophers now might say: does the yeti exist? Or is the yeti a merely intentional object?

[Digression: a warning about terminology] Nowadays the usage of the word 'objective' is almost the opposite of Descartes' usage: to say that something exists 'objectively' in the modern sense, is (more or less) to say that it exists 'formally', in Descartes' sense. If, nowadays, we were to say, 'the yeti exists objectively', we would mean simply that it exists. We would mean that it exists, as a real animal, and not as the merely intentional object of people's hallucinations and nightmares and photographic forgeries. This terminological change can cause confusion: and in your own work, you should make it clear whether you follow Descartes' usage, or the modern one, if you ever use these words. [End of Digression]

The thinker applies this distinction to the case of God. Among my various ideas is an idea of God, which represents God as being eternal, infinite, omnipotent. God thus has 'objective' reality, which means that he exists as the 'object' of my idea. The thinker raises a question: does God have formal reality in addition to the objective reality he has as 'object' of my idea? In

other words, does the God of which I have an idea exist independently of my idea? The idea or concept of God describes, so to speak, the essence of God: it is the idea of

a substance that is infinite, eternal, immutable, independent, supremely intelligent, supremely powerful, and which created both myself and everything else (if anything else there be) that exists.

We can know the essence of God, just as we could know the essence of material things (the wax), just by reflecting on our concepts. We can know the essence of God: but does God exist? We know that God has 'objective' reality, as the object of my concept or idea: but does God have formal reality as well?

Yes, according to the Trademark argument. God exists. God has formal reality, in addition to merely 'objective' reality. That will be the conclusion. What is the argument? The thinker focuses on a question about causality. What is the cause of this idea I have of God? According to the thinker, it is self-evident that, as a general principle, 'there must be at least as much reality in the efficient and total cause as in the effect of that cause'. This is described by Cottingham as the Causal Adequacy Principle. If we find a clock, the cause of that clock must be at least as complex as the clock. The same is true if we find a mere blueprint of a clock. The cause must have as much reality as the clock represented by the blueprint. Now apply the Causal Adequacy Principle to the idea of God: the idea of God has an infinitely high degree of objective reality. Its cause cannot be myself: for I am imperfect, finite, deceived. The only possible cause is God himself. God, 'in creating me [has] placed this idea in me to be...the mark of the craftsman stamped on his work'.

The thinker concludes that God exists. Moreover, since the concept of God is the concept of an infinitely perfect being, the thinker reaches a conclusion which will prove to be vital for the progress of the next Meditations: God exists, and *is not a deceiver*.

By 'God' I mean...the possessor of all the perfections...who is subject to no defects whatsoever. It is clear enough from this that he cannot be a

deceiver, since it is manifest by the natural light that all fraud and deception depend on some defect.

Some questions to consider about Meditation III

(1) How well does Descartes support his apparent premise that every thinker has an idea of God, innate within us? Notice that this was denied even at the time of the publication of the Meditations, by Hobbes, who flatly contradicted Descartes: 'there is no idea of God in us', he said.

(2) How plausible is Descartes' use of the concept of 'objective reality'? One of Descartes' critics, Caterus, complained that this was not a kind of reality at all. Far from having an infinite degree of reality, the idea of God—considered as something distinct from a property of one's mind—has no reality at all. 'Why should I look for the cause of something which is not actual, and which is simply an empty label, a non-entity?'

(3) How plausible is the Causal Adequacy Principle? The philosopher Mersenne objected to it as follows:

You say...that an effect cannot possess any degree of reality or perfection that was not previously present in the cause. But we see that flies and other animals, and also plants, are produced from sun and rain and earth, which lack life.

Mersenne here produces some candidate counter-examples to the Causal Adequacy Principle: the possibility of spontaneously generated animals and plants. It was believed at the time, and until much later, that some organisms (e.g. flies) could be spontaneously generated (e.g. from mud, and rotting material). Descartes replies that animals and plants are not really more perfect than sun and rain and earth; but that if they were, those inanimate causes would not be sufficient to produce them. You might be tempted to agree with Descartes, against Mersenne. You might be tempted to reply that in addition to these raw materials of sun and rain and earth, something more is indeed required. Plant seeds, and insect eggs, are required to produce these 'more

perfect' beings: showing that in these cases the causes (parent organisms) do indeed have as much reality as the effects (their offspring). It is true that Mersenne's assumption about the possibility of spontaneous generation was refuted much later (by Louis Pasteur), but it would be a mistake to conclude that Descartes is right. There is a sense in which most modern readers still agree with Mersenne. According to the theory of evolution, less 'perfect' beings ('sun and rain and earth') can indeed be the causes, given enough time, of more 'perfect' beings (plants, animals, and ourselves). Mersenne's counter-examples are good ones, interpreted the right way. In so far as science today endorses the theory of evolution, it agrees with Mersenne's objection, and rejects the Causal Adequacy Principle which seemed so evident to Descartes.

FOURTH MEDITATION

Truth and falsity

And now, from this contemplation of the true God, in whom all the treasures of wisdom and the sciences lie hidden, I think I can see a way forward to the knowledge of other things.

The previous Meditation, if successful, has established that God exists, and that he is not a deceiver. If God is not a deceiver, then he cannot have created me in such a way that I am inevitably deceived. This provokes a hard question. If God is perfect, and I am his creature, how is it that I ever make mistakes? This is the problem of error, and Descartes' account of error is the most interesting and important aspect of this Meditation. Descartes will want to argue as follows. I am God's creature, so I have an intellect which, *when correctly used*, is reliable. What this means remains to be considered. But we can see already that it provokes a second hard question. If I can know that my intellect is reliable only *after* establishing God's existence, then how can I establish God's existence in the first place? I need to trust my intellect to prove God's existence, yet without knowledge of God's existence I am not entitled to trust my intellect. This is the problem of the 'Cartesian Circle', which will be considered more closely in the discussion of Meditation V.

The Problem of Error

If God exists, and created me, and is not a deceiver, then how is it that I ever make mistakes? No-one could deny that we sometimes make mistakes, and Descartes never denies it. The First Meditation, recall, was premised on the fact that we sometimes make mistakes, and this fact was used to generate the global sceptical challenge. We are sometimes deceived (through perception, or dreaming): what reason to we have for thinking we are not always deceived? Even if Descartes, in the end, replies to the sceptical challenge, he is still left with the fact that we sometimes make

mistakes. The problem, as Descartes presents it, is similar to the traditional problem of evil: if God the Creator exists, and is good, then why is his creation partly evil? The traditional answer to this question was that God created us with a free will, and that evil is a result of the misuse of that freedom.

Descartes' solution to the problem of error

Descartes' first response to the problem is one of creaturely humility: God's purposes are impenetrable to us, and if we were less limited in outlook, we might see that our faults 'have a place in the universal scheme of things'. Descartes' second, and most important, response is in his theory of judgement.

Errors are mistaken judgements. When we enquire closely into the nature of judgement, we find that it involves the two faculties of the *intellect* and the *will* (56-58). Both are faculties of the self or soul whose existence is proved in the Second Meditation; and the activities of *perceiving ideas*, and the activities of *willing*, both count broadly as activities of *thinking*, in Descartes' sense.

The activity of the intellect is limited. '[All] the intellect does is to enable me to perceive the ideas which are subjects for possible judgements; and when regarded strictly in this light, it turns out to contain no error'. The intellect does not, on its own, declare certain propositions to be true or false. It simply puts forward and considers ideas or propositions without giving a verdict on those ideas or propositions. The intellect alone does not make judgements. And error is false judgement. Judgements are made when the ideas put forward by the intellect are *affirmed* or *denied* by an act of the will. Affirmation and denial are mental acts, performed not by the intellect but by the will. Error arises when the will affirms ideas that are not clear and distinct, and the will thereby makes a false judgement.

On this picture, the intellect is like a rather disorganized and un-opinionated lawyer, who presents evidence in a somewhat indiscriminate way: some of the ideas presented are clear and distinct; some of the

ideas are unclear and indistinct; there are great gaps in the evidence due to the ignorance of the intellect; and the intellect does not, on its own, bring a verdict on any of the ideas it surveys or proposes. The will is like a judge who considers the evidence put forward so indiscriminately by the intellect, and brings a verdict on it. For example, the intellect may non-committally propose the idea that a triangle has three sides. The will gives its verdict. 'Yes, that idea is a good one. It is clear and distinct. I shall affirm it.' In this way, judgements involve the co-operative activity of intellect and will, but it is the will that (so to speak) makes the decisions. (There are problems with this way of speaking: to decide is to use one's will, but there is something odd about saying that the will decides. We will not address these problems though.)

This is possible because God made me with a *finite* intellect, and an *infinite* will. The second Meditation had concluded that the self is in some way finite: and in this Meditation we learn that it is finite with respect to the intellect. The intellect has limits: limits to its scope (it does not have ideas about everything); and limits to its acuity (not all of its ideas are clear and distinct). The will, on the other hand, is infinite:

It is only the will, or freedom of choice, which I experience within me to be so great that the idea of any greater faculty is beyond my grasp; so much so that it is above all in virtue of the will that I understand myself to bear in some way the image and likeness of God. For although God's will is incomparably greater than mine, both in virtue of the knowledge and power that accompany it and make it more firm and efficacious, and also in virtue of its object, in that it ranges over a greater number of items, nevertheless it does not seem any greater than mine when considered as will in the essential and strict sense. This is because the will simply consists in our ability to do or not do something (that is, to affirm or deny, to pursue or avoid); or rather it consist simply in the fact that when the intellect puts something forward for affirmation or denial or for pursuit or avoidance, our

inclinations are such that we do not feel we are determined by any external force.

We might think that the will is not infinite, since there are a great many things we cannot choose to affirm, or do. Perhaps I cannot choose to affirm propositions about different orders of mathematical infinity, because I have no ideas about them. Perhaps I cannot choose to fly to the moon. Aren't these limitations on the will? Descartes would reply no, these are limitations on my intellect, and on my power, but not on my will, the faculty of choosing. Notice the contrast above with God, whose infinite will is conjoined with 'knowledge and power' that make his will more 'efficacious' than ours. God's intellect proposes ideas about everything, and all clear and distinct. That is why he can use his will to choose to affirm true judgements about everything. God is all powerful. That is why he can use his will to choose to act in any way that he intends to. We lack God's intellect and power. But our wills are equally infinite. Our will is not limited in itself: the constraints on choice come not from the will but from limited intellect and power. I can choose to fly to the moon: but, unless I improve my power, by means of rockets and NASA sponsorship, my choice will not be 'efficacious'. That is a limit on the power, not the choosing: or so Descartes would like to argue.

The conjunction of finite intellect with infinite will provides the freedom to err. The intellect does not provide me with ideas that are all clear and distinct, and the will is free to affirm or deny any of them. Error can be avoided if I refrain from affirming ideas that are not clear and distinct. Error, like sin, is a result of man's abuse of his free will. Human error is thus compatible with God's not being a deceiver, just as human sin is compatible with the goodness of God.

Belief and the will

According to Descartes, belief is an idea put forward by the intellect and affirmed by the will. What is striking about this picture is that belief involves the will in just the same way that practical action involves the

will. I may choose to act in a certain way: I may choose to donate to Community Aid Abroad; I may choose to steal a lollipop from a baby. I may choose to act rightly; or I may choose to act wrongly. Similarly, I may choose to believe a certain way: I may choose to believe that 2 plus 3 make 5; I may choose to believe that matter is better known than mind. I may choose to believe rightly; or I may choose to believe wrongly. Belief is here treated as a kind of action. And truth is here treated as a kind of goodness. One of the central questions about Descartes' account is whether this analogy between belief and action holds. Many philosophers deny that belief and action are alike, for reasons having to do with 'direction of fit'. Bernard Williams, for example, says that we cannot simply believe at will in the way we can act at will.

[I]t is not a contingent fact that I cannot bring it about, just like that, that I believe something...Why is this? One reason is connected with the characteristic of beliefs that they aim at truth. If I could acquire a belief at will, I could acquire it whether it was true or not; moreover, I would know that I could acquire it whether it was true or not. If in full consciousness I could will to acquire a 'belief' irrespective of its truth, it is unclear that before the event I could seriously think of it as a belief, i.e. as something purporting to represent reality. ('Deciding to Believe', *Problems of the Self*, Cambridge University Press, 1973, 148)

Descartes says we can choose to believe. How? Surely Descartes' own commitment to finding *indubitable* beliefs is a commitment to finding beliefs that I cannot resist. But if I cannot resist these beliefs, in what sense do I 'choose' to affirm them? Examples of beliefs that Descartes has so far argued to be indubitable are the following. 'I think'. 'I exist'. 'The essence of matter is to be extended.' 'I am essentially a thinking thing'. 'God exists.' 'God is not a deceiver.' Whether we find all these propositions to be equally irresistible is not the point. Descartes says they cannot be doubted. But if they cannot be doubted, how do I 'choose' to affirm them? Doesn't choice imply that I could have done otherwise?

Perhaps we could say in Descartes' favour that there are indeed circumstances in which a person can choose to believe. In his Replies to Objections, Descartes says

that sometimes you can believe something just *because you want to believe it*. You can sometimes believe something for reasons that are independent of the *truth* of the belief, or the *evidence* you have for it, or the *clarity* with which you understand it. You can believe something for pragmatic reasons. You believe something, because it is easy, or comfortable, or pleasurable to believe it. Descartes gives two examples. One is a belief that the mind is an extended, or material, thing, a belief which you persist in because it is familiar and comfortable, even though you have no clear understanding of it: '*you simply want to believe it, because you have believed it before, and do not want to change your view*'. Another is a belief that a poisoned but pleasant-smelling apple is nutritious: '*you understand that its smell, colour and so on, are pleasant, but this does not mean that you understand that this particular apple will be beneficial to eat; you judge that it will because you want to believe it*'. Here there are certain advantages of comfort and pleasure to having these (false) beliefs. You believe them not because they are true, or clearly understood: you believe them because you want to. Descartes gives these examples to illustrate that one can indeed will to believe, that the scope of the will is greater than that of the intellect, and that this can lead to error.

Other examples of believing something because you want to, are given by cases of self-deception. The woman who wants to believe that her husband is faithful, can perhaps choose to believe it: she believes that he is faithful because she wants to, not because she has evidence that he is. It is useful to believe it, whether or not it is true. Or perhaps (as imagined earlier) she can at least choose to believe that she believes it, even if deep down she doesn't. How we are to understand cases of self-deception though is a difficult question, about which philosophers are still not agreed.

Later in this course we will consider some other cases of deciding to believe. One is 'Pascal's Wager', named after the French philosopher who described it and (perhaps) acted by it. If I think there is a *chance* that there is a God who condemns atheists to hell, I can prudently choose to believe in God. I might reason like this. If there is a God, and I don't believe in him, I

will go to hell. If there is a God and I do believe in him, I won't go to hell. If there isn't a God, and I don't believe in him, I won't go to hell. If there isn't a God and I do believe in him, I won't go to hell either. The worst case scenario is the first. Not believing in God is riskier than believing in God. If I believe in God, I'm fine no matter what. So I should believe in God. Notice that this argument says: believe 'God exists', because that would be useful. It does not say: believe 'God exists' because that would be true, or there is good evidence for thinking it true. The argument offers a pragmatic reason, not a theoretical one. Now, I can't just believe it at the drop of a hat, faced with a pragmatic reason of this kind. I must take things more slowly. I gradually adopt the practices of people who do believe in God, first as a kind of pretence. I gradually find that I have achieved the necessary belief, and thereby saved myself from the risk of hell. (Is self-deception involved in Pascal's Wager? Is the wagerer like the woman in the last example, believing something because it is useful or comfortable, not because it is true?)

Another kind of case is presented by self-fulfilling beliefs. Suppose I am standing by the bank of a stream, and I want to leap across. The gap looks too big to jump. But perhaps I can do it. I don't have any evidence either way. It looks just on the limit. 'You can do it!' I tell myself. I make myself believe I can do it. I decide to believe I can do it. And I can do it! Deciding to believe gives me the confidence to make the leap. My belief makes itself true.⁶ Of course there are limits here on what you could decide to believe, in cases like these. One meter, yes, perhaps; five meters, no.

It seems that you cannot believe something in the teeth of overwhelming evidence against it. The clearest cases where you seem to be able to believe something because you want to are cases where the evidence does not compel you either way. When belief is not compelled by evidence or argument, there is sometimes scope for choice. We can sometimes believe what we want to

⁶This example is from William James, 'The Will to Believe', in *The Will to Believe and Other Essays in Popular Philosophy*, (Longman's, Green and Co. 1891).

believe, with sometimes good, sometimes sorry consequences. For an example of the latter, take this report about the burning of a town in Kashmir, in which 1500 houses and a sacred shrine were destroyed.

[W]ho to believe...? The militants say Indian troops are responsible for the fires. The government says they were started by the rebels....Either way, it is highly unlikely that any credible report will ever emerge, leaving ordinary people to *believe whichever side they want* and deepening the already significant divide between the Muslims of India's only Muslim-majority state and almost everybody else in the Hindu-dominated India. Reconciliation seems as far away as ever. (Moore and Anderson, *Guardian Weekly*, 11 June 1995)

Implications for Descartes' account of judgement

What implications would it have for Descartes' theory, if the cases where we are able to choose to believe are cases where evidence or argument does not compel us firmly in one direction or the other? The clearest cases seem to involve a certain kind of irrationality: believing something in teeth of some evidence against it (the self-deceived wife), or believing something in the absence of evidence for it. The clearest cases of willed beliefs are examples of bad beliefs: beliefs that are bad by Descartes' own lights. Descartes has argued that we should believe only what we have compelling reason to believe: we should believe only what is perceived by the intellect to be clear and distinct. We should resist believing anything that is not 'clear and distinct'. So the freely chosen beliefs of these examples are not good beliefs.

The implications for Descartes' theory are mixed. Descartes says that his theory about belief and the will can perform two tasks: it can account for error, and it can account for the nature of judgement in general. The first claim is plausible, in part. When we believe something for pragmatic reasons, because we want to believe it, because it is comfortable or pleasant or useful to believe it, we can indeed be led into error, just as Descartes says. Error can arise from deciding to

believe. Error can arise from the misuse of the will. But it is not likely that *all* errors arise this way. (Can you think of some that do not?) And as for the second claim, it is not plausible that Descartes' theory can account for the nature of judgement in general.

Belief, in general, does not seem to be under the control of the will. It would be nice to believe that the sun is shining, that there are no nuclear weapons, that I have a million dollars in the bank. It would be nice if I could just decide to believe it. It can be nice to have false beliefs. Sometimes I can manage to believe things, just because it would be nice to believe them. Usually, though, I can't. Bad beliefs cannot just be chosen. On Descartes' account of judgement, it is hard to see why not. Good beliefs are not just chosen either. Beliefs that are irresistible, indubitable, are the best beliefs (on Descartes' criteria), and at the same time the least open to choice. Do I decide to believe that I exist? Do I decide to believe I am thinking? Do I decide to believe that 2 plus 3 make 5? I cannot help believing them. The best beliefs are the least subject to the will.

Descartes does address this issue. He says,

In order to be free, there is no need for me to be inclined both ways; on the contrary, the more I incline in one direction...because I clearly understand that reasons of truth and goodness point that way...the freer is my choice.

Recall that Descartes says the will is involved both in action and belief. Wrong action (sin) is like wrong belief (error). I (and not God) am responsible for both, and both involve a misuse of the will. Descartes wants to draw a very close analogy between believing and acting, and it emerges clearly in the passage just quoted. He is talking about freedom in general, as it applies to both action and belief. He says, when I am very strongly inclined in one direction to believe or to act, because I clearly understand that *reasons of truth* (in the case of belief) *and goodness* (in the case of action) point that way, I am free. Notice the assimilation: 'reasons of truth and goodness'. I perceive that some action is good, and I decide to do it. I perceive that some proposition is true, so I

decide to believe it. This is a plausible description of action. Because Descartes thinks belief is very much like action, he sees it as a plausible description of belief as well.

Some questions to consider about Meditation IV

(1) Can you find a way of making sense of Descartes' claim that the will is infinite?

(2) Can you think of any cases where a person cannot help believing something false? If so, this would be an apparent counter-example to Descartes' claim that error is always something I can in principle avoid. Would that show that error is not entirely the responsibility of the individual misuse of the will—that God is responsible for it?

(3) Can you think of cases other than those given above, where it is plausible to say that someone decides to believe? How rational are those cases?

(4) How plausible is Descartes' analogy between belief and action? If I perceive that some action is good (e.g. donating to a charity), I can decide to do it. I can also decide not to do it, and thereby fail to do something good, or (worse) do something bad. If I perceive that some proposition is true (e.g. 2 plus 3 make 5) do I similarly decide to believe it? Surely not. Once I perceive that it is true, I instantly believe it. There is a gap between perceiving that some action is good, and doing it. There is no gap between perceiving that some proposition is true, and believing it.

Some philosophers have denied that there is a gap between perceiving that some action is good, and doing it. Plato, for example, thought that if you perceive some action to be good, and fail to do it, that shows that you have not *fully* perceived that it is good. It shows that you are still *ignorant*, in some way. You will come across this influential view if you study Plato, and if you study moral philosophy. If this view were correct, then action and belief would be analogous, as Descartes claims. There would be no gap between

perceiving an action to be good and doing it; or between perceiving a proposition to be true, and believing it. There would still be unresolved questions about the role of freedom here, however.

Perhaps we should conclude that Descartes' theory of judgement is enormously interesting and ingenious, but that its most plausible application is for some irrational beliefs, not for beliefs in general—and not, in particular, for the beliefs that are most central to his project, namely beliefs that are rational, compelling, and indubitable.

FIFTH MEDITATION

The essence of material things, and the existence of God considered a second time

We have seen that Descartes carefully distinguishes questions about a thing's existence from questions about its essence, and answers these questions separately. With respect to the 'I' of the Second Meditation, Descartes argued, first, that the self exists; and second, that its essence is to be a thinking thing. With respect to the wax, in the Second Meditation, Descartes argued that essence of matter (of which the wax is an example) is simply to be extended and changeable. With regard to God, in the Third Meditation, Descartes argued first that the essence of God is of a being who is supremely perfect, infinite, eternal, immutable, independent, powerful, and so forth. The idea of God captures the essential nature of God. Descartes then argued that God exists, by arguing that the idea of God that captures this essence must have God himself as its cause.

In the Fifth Meditation Descartes returns again to the topics of matter, and God. Notice the title: 'The essence of material things, and the existence of God considered a second time'. As in the Second Meditation, Descartes considers the essence of matter, without yet addressing the question of whether material things exist. As in the Third Meditation, Descartes considers both the essence and existence of God, but with a new twist. Descartes argues that the essence of God cannot be known without knowing that God exists: God is a being whose essence implies his existence. This is the Ontological Argument for God's existence.

The essence of matter

Descartes promises in the title that he will tell us the essence of material things. He asks 'whether any certainty can be achieved regarding material objects', and the certainties he proceeds to discover in this Meditation concern geometry. He has a distinct idea of

continuous quantity: something extended in space that can be measured in length, breadth, depth. He can clearly imagine 'various sizes, shapes, positions and local motions'. All of these ideas of extension are amenable to mathematical treatment. Various properties can be deduced from the concepts of these various shapes.

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.

Descartes concludes that one can indeed achieve a kind of certainty with regard to material things. Mathematics and geometry provide certainties that pass the test of clarity and distinctness. Descartes endorses his early pre-reflective belief in the certainties of mathematics:

The most certain truths of all were the kind which I recognized clearly in connection with shapes, or numbers or other items relating to arithmetic or geometry, or in general to pure and abstract mathematics.

What has Descartes promised? Certainties regarding material objects. What has he delivered? Certainties regarding geometry, and abstract mathematics. He believes he has delivered exactly what he has promised, since *geometry describes the essence of matter*. The essence of matter is to be extended, as we know from the wax passage in Meditation II. Geometry describes all the truths about extension. Geometry is the science of space. Matter and space are one and the same, on Descartes' theory of matter.

Notice that there is nothing *from the senses* in this description of matter's essence. It is wholly abstract, wholly intellectualized. There is no talk of colour, or smell, or resistance, no talk of gravitational or magnetic force. Where will these fit in, on a purely geometrical conception of matter? The answer is, they won't. Descartes' conception of the essence of matter provides a graphic illustration of his rationalism: the properties of matter are the properties that extended substance can be *proved* to possess.

The Ontological Argument

These reflections about the truths derivable from mathematical concepts lead Descartes to consider again the concept of God, and to ask what truths may be derivable from that concept. The concept of God is the concept of 'a supremely perfect being'. The essence of God includes every possible perfection. Existence itself is a perfection. A being that exists is more perfect than a being that does not exist. So the essence of God implies his existence.

From the fact that I cannot think of God except as existing, it follows that existence is inseparable from God, and hence that he really exists.

This proof of God's existence does not depend on any claims about causality: it does not depend, for example, on the Principle of Causal Adequacy described in the Third Meditation. God's existence is deduced from his essence as directly as the properties of a triangle are deduced from its essence:

it is quite evident that existence can no more be separated from the essence of God than the fact that its three angles equal two right angles can be separated from the essence of a triangle.

For most things, we must distinguish between the existence and the essence of the thing. But since God is the supremely perfect being, and since existence is a perfection, God's existence belongs to his essence. That, briefly stated, is the Ontological Argument; we shall be attending to St. Anselm's version of it in more detail later on.

The Cartesian Circle

Descartes concludes the Fifth Meditation by saying:

I see plainly that the certainty and truth of all knowledge depends uniquely on my awareness of the true God, to such an extent that I was incapable of perfect knowledge about anything else until I became aware of him. And now it is possible for me to achieve full and

certain knowledge of countless matters, both concerning God himself and other things whose nature is intellectual, and also concerning the whole of that corporeal nature which is the subject-matter of pure mathematics.

This is a puzzling passage. The idea seems to be that it is only because I know that God is not a deceiver that I can trust the clarity and distinctness of the ideas presented by my intellect. Knowledge of *everything* depends on knowledge of God. This raises the famous problem of the Cartesian Circle, and there are two aspects to the problem.

The first is that knowledge of the existence and essence of the self, the essence of matter, the essence of God, all depend on knowledge of a non-deceiving God. If that is so, how was thinker entitled to reach conclusions about these topics prior to knowledge of a non-deceiving God? This aspect of the problem was put by Mersenne:

[Y]ou say that you are not certain of anything, and cannot know anything clearly and distinctly until you have achieved clear and certain knowledge of the existence of God. It follows from this that you do not yet clearly and distinctly know that you are a thinking thing, since, on your own admission, that knowledge depends on the clear knowledge of an existing God; and this you have not yet proved in the passage where you draw the conclusion that you clearly know what you are.

The second aspect of the problem is that knowledge of God *itself* depends on knowledge of God. This aspect of the problem is put by Arnauld:

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

But we can be sure that God exists only because we clearly and distinctly perceive this. Hence, before we can be sure that God exists, we ought to be able to be sure that whatever we perceive clearly and evidently is true.

Some questions to consider about Meditation V

(1) What, if anything, is missing in Descartes' conception of the essence of matter? The denial of sensory properties to matter, implicit in Meditation V, anticipates a thesis in Meditation IV about primary and secondary qualities (Locke's label for the distinction).

(2) What, if anything, is wrong with the Ontological Argument, as Descartes presents it? One of his critics, Gassendi, took objection to the idea that existence is a perfection. He said it is not a perfection, but rather it is 'that without which no perfections can be present'. Gassendi is willing to grant, for the sake of argument, that the concept of a supremely perfect being 'carries the implication of existence in virtue of its very title', but he insists that this is a relation between concepts which implies nothing 'actual in the real world'. He jokes that the concept of an 'existing lion' essentially implies existence: but that does not mean there is an existing lion. Similarly the concept of an existing God essentially implies existence: but that does not mean that God exists.

SIXTH MEDITATION

The existence of material things, and the real distinction between mind and body

It is only in this final Meditation that Descartes at last puts to rest the sceptical doubt about the material world that he had raised in the First Meditation. By the end of Meditation V, Descartes has partly rebuilt the edifice of knowledge, if the arguments succeed. There is knowledge of the self, its existence and essence; knowledge of God, his essence and existence; and knowledge of matter, in so far as its essence is described by the intellectual science of geometry. What remains to be established is knowledge of the existence of matter.

The thinker begins by reflecting on the knowledge he has acquired of the essence of matter. The fact that I have a clear and distinct conception of matter as the subject matter of pure mathematics tells me that matter is at least capable of existing: there is no contradiction in the idea of matter. He then considers the fact that he is able to imagine things of all kinds, including material things. My faculty of imagination seems to be not purely a faculty of myself as thinking thing, but 'an application of the cognitive faculty to a body which is intimately present to it, and which therefore also exists'.

Imagining something is different to conceiving it in the intellect. Try to imagine a figure with six sides, a hexagon. Can you do it? Most people are able to form a mental image of a six-sided figure. A different question: How many angles does a hexagon have? Some people may answer this simple question by simply reporting directly from their concept of a hexagon. Others may consult their mental image, and count the angles on the imagined shape. Now try to imagine a chiliagon, a figure with a thousand sides. Can you do it? Perhaps you think you can: a shape with lots of tiny sides. Well, now imagine a shape just like a chiliagon with one less side. Is it any different? Probably not. The imagination doesn't have a fine enough resolution to provide a determinate image of a chiliagon.

Nevertheless, there is still the *concept* of a chiliagon, provided by the intellect: and from the concept we could deduce all kinds of geometrical truths, if we wanted to. This example is given by Descartes to illustrate his point that the imagination is something different to the intellect.

Descartes thinks that the fact that our ability to imagine things is somehow explained by the association of the mind with a body that is intimately connected to it. However, the argument is not very clear, and Descartes himself takes it to be inconclusive.

The next step is to remind the reader of the passage from the naivety of common sense to the deepest scepticism, and the reader is reminded of the arguments of the First Meditation, and indeed of the conclusions of subsequent Meditations. This long section of the final Meditation is very useful in helping to grasp Descartes' own understanding of his project of methodological doubt and his progress so far.

After this long explanation, the reader is suddenly confronted with an argument that is presented with a compression that is quite astonishing, given its importance, and this is an argument for a thesis for which Descartes is very famous: the real distinction between mind and body.

The argument for dualism

First, have a look at the conclusion of this argument. 'I am really distinct from my body, and can exist without it'. The thinking self, whose existence was proved in the Second Meditation, is wholly distinct from the body. It is a thinking thing, a substance, which can exist without the body, the extended substance, with which it happens to be contingently associated. Descartes is not offering an argument for the immortality of the soul, but he does say in his Synopsis that his argument paves the way for that conclusion. The conclusion that the mind is wholly distinct from the body is of enormous significance to the philosophy of mind, both in Descartes' own time, and since.

The argument proceeds something like this. If I can clearly and distinctly understand A apart from B, and

vice versa, then A and B are metaphysically distinct, and could exist apart. I can clearly and distinctly understand my mind apart from my body: my mind, but not my body, is essentially a thinking thing. And I can clearly and distinctly understand my body apart from my mind: my body, but not my mind, is essentially an extended non-thinking thing. Therefore my mind and body are metaphysically distinct and could exist apart.

The first premise does not capture quite what Descartes actually says, which is:

... the fact that I can clearly and distinctly understand one thing apart from another is enough to make me certain that the two things are distinct, since they are capable of being separated, at least by God.

But the mention of God can be taken as a metaphor about possibility, which could be agreed to even by an atheist, which is why the principle was rendered in a more neutral way above. If I can clearly and distinctly understand A apart from B, and vice versa, then A and B are metaphysically distinct, and could exist apart. Notice that this is a classic example of a rationalist principle. The reasoning moves from facts about the intelligibility of certain concepts to facts about the metaphysics of the world. It moves straightforwardly from facts about concepts to facts about the world. Remember that this kind of move was just what annoyed Gassendi about Descartes' Ontological Argument for God (the concept of God implies the concept of existence, therefore God exists).

This should be distinguished from an alternative, and poor, interpretation of this argument, known as the Argument from Doubt. I can doubt that my body exists. I cannot doubt that my mind exists. Therefore my mind and my body are not identical. Descartes is certainly committed to the premises of this argument: but that does not mean he thinks that they support the conclusion. On this interpretation, the argument looks very weak. Consider analogous arguments, made in contexts involving ignorance. I can doubt that Clark Kent can fly. I cannot doubt that Superman can fly. Therefore Superman is not Clark Kent. Perhaps the relation of mind to body is like the relation of Superman to Clark Kent, namely the relation of *identity*.

Clark is Superman, but we don't know it. The mind is the body, but we don't know it. (Notice that in criticizing the argument this way, we are not showing exactly what is wrong with Descartes' argument. We are using the argumentative strategy of *reductio ad absurdum*: the strategy of showing that a proposition, or an argument, has absurd consequences. It is often much easier to show that an argument has absurd consequences, than to show exactly where it goes wrong.)

Perception and the existence of material things

The thinker now turns his attention to a mode of thinking which was threatened by the early sceptical arguments he has reviewed, namely, sensory perception. Perception yields ideas which seem to be ideas of existing material things. Perception provides the hope for discovering not just the essence of matter, but its existence. The argument is couched in the scholastic terminology of active and passive faculties. This terminology is awkward, but not unclear: for 'passive faculty' read 'something that is able to be affected'; for 'active faculty', read 'something that is able to affect'; the terminology can then be discarded without much harm.

The argument focuses on the question: what is the cause of my ideas of material things? and then proceeds something like this. I have ideas of material things. These ideas must have a cause at least as real as the ideas themselves. (This is the Principle of Causal Adequacy familiar from the Third Meditation.) These ideas must be caused by either myself, God, or material things. They cannot be caused by myself: for they 'are produced without my co-operation and often even against my will'. They cannot be caused by God: for then God would be a deceiver. The ideas must therefore be caused by material things. Therefore material things exist.

Descartes focuses his attention once more on the sceptical hypothesis that these ideas of material things could be caused by dreams. Given the importance he assigned the argument in the First Meditation, and given its relevance to the plausibility of the preceding argument, Descartes deals with the problem rather

briefly. He gives the common sense answer to the dreaming hypothesis: waking life has a *coherence* that dreaming lacks, so that when I am awake I can indeed know that I am awake. The hypothesis that I am always dreaming is refuted by the knowledge that God would not permit me to be systematically deceived.

Primary and Secondary Qualities: Revenge of the Demon?

The meditative progress of the Meditations has come full circle. The thinker began as a naive believer in the existence of familiar material things: a bright fire, a snug dressing gown, crisp white sheets of paper. Recalling his pre-reflective period, Descartes says he had sensations of bodies,

sensations of their hardness and heat, and of the other tactile qualities ... I had sensations of light, colours, smells, tastes and sounds, the variety of which enabled me to distinguish the sky, the earth, the seas, and all other bodies.

All belief in familiar material things has been suspended for the course of the first five meditations. In the Sixth and final Meditation, knowledge is at last restored. Some things have changed, to be sure. In particular, the meditator has reached a certain conclusion about the hierarchy of knowledge:

the arguments which lead us to knowledge of our minds and of God...are the most certain and evident of all possible objects of knowledge for the human intellect.

However the beliefs 'that there really is a world, and that human beings have bodies', beliefs which Descartes admits 'no sane person has ever seriously doubted'—these beliefs, surely, are restored to their former selves.

Not quite. The thinker has indeed argued for the existence of the material world, but the conclusion to that argument was qualified. Although material things exist,

they may not all exist in a way that exactly corresponds with my sensory grasp of them, for in many cases the grasp of the senses is very obscure and confused. But at least they possess all the properties which I clearly and distinctly understand, that is, all

those which, viewed in general terms, are comprised within the subject-matter of pure mathematics.

Long before this Meditation VI, we have encountered Descartes' opinion about the essence of material things. The argument about the wax in Meditation II showed that the essence of matter was to be extended. The argument of the Fourth Meditation made the same point, and added that this essential nature was perfectly described by the science of geometry. The properties belonging to corporeal things are purely mathematical or geometrical: extension, shape, size, motion. It is time now to spell out some implications of this.

Colour, taste, heat are not properties of corporeal things, but rather effects produced in us by things that are not themselves colored, hot, etc—in the same way that pain is clearly an effect on us rather than a property of things. There is nothing in material things that *resembles* colour, bitterness, sweetness, heat, pain. The material things that cause the various perceptions 'possess differences corresponding to them, though...not resembling them'. All the vivid sensations encountered by his naive self, sensations of their hardness and heat, of light, colours, smells, tastes and sounds—the blue of the sky, the rich smell of the earth, the tang of the sea—these sensed qualities resemble nothing in the world. The material world whose existence he has triumphantly proven is a world devoid of the sensory qualities of colour, taste, smell, and sound. It is a world whose qualities are not qualitative, but quantitative: extension, and its modes of shape and size and motion.

This distinction is now known as the distinction between primary and secondary qualities.⁷ What is Descartes' reason for holding the distinction? It seems to have two sources, one from philosophy, one from science. The philosophical motive is already evident. It is the rationalist requirement that properties of things are given by what we can clearly and distinctly conceive. The essence of matter will be those properties that we can clearly and distinctly conceive. We can

⁷For its most famous exposition, see John Locke, *Essay Concerning Human Understanding* II. viii. (1689).

clearly and distinctly conceive extension and its modes: we have a mathematical theory of space. We have no equivalent for the sensory properties.

The scientific motive is different. It is not spelled out in the *Meditations*, but it is one that can be shared by rationalist and empiricist philosophers alike. It is a way of thinking about the world which came with the scientific revolution, in which Descartes himself was a participant. It says: the genuine properties of matter are the properties ascribed to matter by science. Physics, in the time of Descartes, was only in its infancy, but already a revolution had begun. It began to seem to them that so much more can be explained when one views matter as simply extended stuff in motion. It becomes possible to think of the material world in a unified way. The behaviour of things is not explained by idiosyncratic substantial forms that have nothing to do with each other (fire aims upward, earth aims downward), but by universal laws governing all matter in motion, whether fire or earth. The genuine properties of things are not the idiosyncratic sensory properties that have nothing to do with each other (fire is warm, fire is red): again there is the one reality responsible for both sensations, namely matter in motion. The motion of parts is too small for us to detect as motion. We see the motion as colour. We feel the motion as heat. The behaviour of all the bodies in the world, including our own sensory organs, can be explained in the one unified science. Physics has changed in its details since the time of Descartes, but the central point is still the same. The world as physics describes it is not the world as it is sensed.

The demon hypothesis of the First Meditation implied that things might be very different to how they appear. Descartes' Sixth Meditation says that things are, yet again, very different to how they appear. To be sure, the physical world matches our perception of it, in so far as our perception is of extension, shape, size, motion. But the naïf of the First Meditation will never return to his comfortable common sense world of the blue skies, the dark earth, the tang of the ocean. The world to which he is reinstated is a world devoid of sensory properties, of colour and taste and smell. His banishment from the familiar world of the senses is not,

this time, at the hands of the malicious demon, but at the hands of the well-meaning hero: the rationalist philosopher, and scientist, Descartes himself—through which the demon wreaks his vicarious revenge.

Some questions to consider about Meditation VI

(1) Descartes argues that the mind and body are metaphysically distinct, and could exist apart. How plausible is the principle on which the argument rests? The principle, recall, is this. If I can clearly and distinctly understand A apart from B, and vice versa, then A and B are metaphysically distinct, and could exist apart. What is it to 'understand A apart from B'? Perhaps it is to be able to grasp the concept of A without needing to think of B. If you are not sure whether the principle is correct, test it by seeing if you can find a counter-example. To find a counter-example you would need to find an A and a B, such that you can clearly and distinctly understand A apart from B, and vice versa, and yet A and B are not metaphysically distinct, cannot exist apart.

Among the Greek philosophers were the harmony theorists, disciples of Pythagoras, who said that a human being is like a musical instrument, a lyre, a kind of guitar. They said that the harmony of the lyre is a very beautiful and complex thing, but it depends for its existence on a certain arrangement of wood and strings. They said that the soul is like the harmony of the lyre. The soul is a very beautiful and complex thing, but it depends for its existence on a body. Their view, the harmony theory, contradicts Descartes' conclusion about the metaphysical distinctness of mind and body. Modern day theories of the mind tend to have more in common with this ancient theory of the soul than with Descartes' dualism.

Can you imagine how these philosophers might respond to Descartes' argument? They might think that a musical instrument, a lyre or guitar, provided just the sort of counterexample we were looking for. They might begin with some conceptual analysis. What is a guitar, essentially? A guitar is essentially something that is capable of making music, when played. If you couldn't

play music on it, it wouldn't be a guitar. What is a piece of wood, essentially? A piece of wood is essentially something that came from a tree. If it didn't come from a tree, it wouldn't be a piece of wood.

Now apply Descartes' argument to their example. If I can clearly and distinctly understand A apart from B, and vice versa, then A and B are metaphysically distinct, and could exist apart. I can clearly and distinctly understand the concept of a guitar: a guitar is essentially something that is capable of making music, when played. I can clearly and distinctly understand the concept of a piece of wood. It is essentially something that came from a tree. I can grasp the concept of a guitar without thinking of a piece of wood. I can grasp the concept of a piece of wood without thinking of a guitar. Conclusion: the guitar and the piece of wood are metaphysically distinct, and could exist apart.

The conclusion is false. The guitar and the piece of wood are not metaphysically distinct. They cannot exist apart. The guitar is the wood. When the wood is smashed, the guitar is smashed. There is no chance that the guitar will leave the wood, and float away to guitar heaven. The end of the wood is the end of the guitar.

What implications does this have for Descartes' argument? When we find that an argument yields a conclusion that is false, we know that at least one of the premises are false. The premise about the concepts of guitar and wood seem reasonable. We can conclude that the culprit is Descartes' principle that conceptual distinctness implies metaphysical distinctness. The guitar and the wood are conceptually distinct: but they are not metaphysically distinct. We have found in the harmony theory a counter-example to Descartes' principle. This does not prove that a human being is like a musical instrument. It does not prove that harmony theory is correct. It does not prove that Descartes' dualism is false. What it shows is that Descartes' argument does not support his conclusion. It is an open question whether some other argument will. (You will find the harmony theory discussed, and criticized, by Plato in his dialogue *The Phaedo*.)

(2) What implications does the primary/secondary quality doctrine have for Descartes' proposed solution to the problem of error? If the doctrine is true, then it seems we are in serious error if we mistake secondary qualities for primary. Descartes has a response to this. He repeats that the senses themselves are not responsible for error, but rather a habit of making ill-considered judgments, which we can refrain from making. And he concedes that certain illusions (e.g. of the amputee) are the inevitable result of our mixed nature as 'combination of mind and body'. He insists that the senses as they are fulfill their practical function very well, of helping one to avoid harm. How adequate do you find that response?

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