

First Meditation: On what can be called into doubt

Some years ago I was struck by how many false things I had believed, and by how doubtful was the structure of beliefs that I had based on them. I realized that if I wanted to establish anything in the sciences that was stable and likely to last, I needed—just once in my life—to demolish everything completely and start again from the foundations. It looked like an enormous task, and I decided to wait until I was old enough to be sure that there was nothing to be gained from putting it off any longer. I have now delayed it for so long that I have no excuse for going on *planning* to do it rather than getting to work. So today I have set all my worries aside and arranged for myself a clear stretch of free time. I am here quite alone, and at last I will devote myself, sincerely and without holding back, to demolishing my opinions.

I can do this without showing that all my beliefs are false, which is probably more than I could ever manage. My reason tells me that as well as withholding assent from propositions that are obviously false, I should also withhold it from ones that are not completely certain and indubitable. So all I need, for the purpose of rejecting all my opinions, is to find in each of them at least *some* reason for doubt. I can do this without going through them one by one, which would take forever: once the foundations of a building have been undermined, the rest collapses of its own accord; so I will go straight for the basic principles on which all my former beliefs rested.

Whatever I have accepted until now as most true has come to me through my senses. But occasionally I have found that they have deceived me, and it is unwise to trust

completely those who have deceived us even once.

[The next paragraph presents a series of considerations back and forth. It is set out here as a discussion between two people, but that isn't how Descartes presented it.]

Hopeful: Yet although the senses sometimes deceive us about objects that are very small or distant, that doesn't apply to my belief that I am here, sitting by the fire, wearing a winter dressing-gown, holding this piece of paper in my hands, and so on. It seems to be quite impossible to doubt beliefs like these, which come from the senses. Another example: how can I doubt that these hands or this whole body are mine? To doubt such things I would have to liken myself to brain-damaged madmen who are convinced they are kings when really they are paupers, or say they are dressed in purple when they are naked, or that they are pumpkins, or made of glass. Such people are insane, and I would be thought equally mad if I modelled myself on them.

Doubtful (sarcastically): What a brilliant piece of reasoning! As if I were not a man who sleeps at night and often has all the same experiences while asleep as madmen do when awake—indeed sometimes even more improbable ones. Often in my dreams I am convinced of just such familiar events—that I am sitting by the fire in my dressing-gown—when in fact I am lying undressed in bed!

Hopeful: Yet right now my eyes are certainly wide open when I look at this piece of paper; I shake my head and it isn't asleep; when I rub one hand against the other, I do it deliberately and know what I am doing. This wouldn't all happen with such clarity to someone asleep.

Doubtful: Indeed! As if I didn't remember other occasions when I have been tricked by exactly similar thoughts while asleep! As I think about this more carefully, I realize that there is never any reliable way of distinguishing being awake from being asleep. This discovery makes me feel dizzy, [joke:] which itself reinforces the notion that I may be asleep!

Suppose then that I am dreaming—it isn't true that I, with my eyes open, am moving my head and stretching out my hands. Suppose, indeed that I don't even *have* hands or any body at all. Still, it has to be admitted that the visions that come in sleep are like paintings: they must have been made as copies of real things; so at least these general *kinds* of things— eyes, head, hands and the body as a whole—must be real and not imaginary. For even when painters try to depict sirens and satyrs with the most extraordinary bodies, they simply jumble up the limbs of different kinds of real animals, rather than inventing natures that are entirely new. If they do succeed in thinking up something completely fictitious and unreal—not remotely like anything ever seen before—at least the colours used in the picture must be real. Similarly, although these general kinds of things— eyes, head, hands and so on—could be imaginary, there is no denying that certain even simpler and more universal kinds of things are real. These are the elements out of which we make all our mental images of things—the true and also the false ones.

These simpler and more universal kinds include *body*, and *extension*; the *shape* of extended things; their *quantity*, *size* and *number*; the *places* things can be in, the *time* through which they can last, and so on.

So it seems reasonable to conclude that physics, astronomy, medicine, and all other sciences dealing with things that have complex structures are doubtful; while arithmetic, geometry and other studies of the simplest and most general

things—whether they really exist in nature or not—contain something certain and indubitable. For whether I am awake or asleep, two plus three makes five, and a square has only four sides. It seems impossible to suspect that such obvious truths might be false.

However, I have for many years been sure that there is an all-powerful God who made me to be the sort of creature that I am. How do I know that he hasn't brought it about that there is no earth, no sky, nothing that takes up space, no shape, no size, no place, while making sure that all these things appear to me to exist? Anyway, I sometimes think that others go wrong even when they think they have the most perfect knowledge; so how do I know that I myself don't go wrong every time I add two and three or count the sides of a square? Well, you might say, God would not let me be deceived like that, because he is said to be supremely good. But, I reply, if God's goodness would stop him from letting me be deceived all the time, you would expect it to stop him from allowing me to be deceived even occasionally; yet clearly I sometimes *am* deceived.

Some people would deny the existence of such a powerful God rather than believe that everything else is uncertain. Let us grant them—for purposes of argument—that there is no God, and theology is fiction. On their view, then, I am a product of fate or chance or a long chain of causes and effects. But the *less* powerful they make my original cause, the *more* likely it is that I am so imperfect as to be deceived all the time—because deception and error seem to be imperfections. Having no answer to these arguments, I am driven back to the position that doubts can properly be raised about any of my former beliefs. I don't reach this conclusion in a flippant or casual manner, but on the basis of powerful and well thought-out reasons. So in future, if I want to discover any certainty, I must withhold my assent

from these former beliefs just as carefully as I withhold it from obvious falsehoods.

It isn't enough merely to have noticed this, though; I must make an effort to remember it. My old familiar opinions keep coming back, and against my will they capture my belief. It is as though they had a *right* to a place in my belief-system as a result of long occupation and the law of custom. These habitual opinions of mine are indeed highly probable; although they are in a sense doubtful, as I have shown, it is more reasonable to believe than to deny them. But if I go on viewing them in that light I shall never get out of the habit of confidently assenting to them. To conquer that habit, therefore, I had better switch right around and pretend (for a while) that these former opinions of mine are utterly false and imaginary. I shall do this until I have something to counter-balance the weight of old opinion, and the distorting influence of habit no longer prevents me from judging correctly. However far I go in my distrustful attitude, no actual harm will come of it, because my project won't affect how I •act, but only how I •go about acquiring knowledge.

So I shall suppose that some malicious, powerful, cun-

ning demon has done all he can to deceive me—rather than this being done by God, who is supremely good and the source of truth. I shall think that the sky, the air, the earth, colours, shapes, sounds and all external things are merely dreams that the demon has contrived as traps for my judgment. I shall consider myself as having no hands or eyes, or flesh, or blood or senses, but as having falsely believed that I had all these things. I shall stubbornly persist in this train of thought; and even if I can't learn any truth, I shall at least do what I *can* do, which is to be on my guard against accepting any falsehoods, so that the deceiver—however powerful and cunning he may be—will be unable to affect me in the slightest. This will be hard work, though, and a kind of laziness pulls me back into my old ways. Like a prisoner who dreams that he is free, starts to suspect that it is merely a dream, and wants to go on dreaming rather than waking up, so I am content to slide back into my old opinions; I fear being shaken out of them because I am afraid that my peaceful sleep may be followed by hard labour when I wake, and that I shall have to struggle not in the light but in the imprisoning darkness of the problems I have raised.

Second Meditation:

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

Yesterday's meditation raised doubts—ones that are too serious to be ignored—which I can see no way of resolving. I feel like someone who is suddenly dropped into a deep

whirlpool that tumbles him around so that he can neither stand on the bottom nor swim to the top. However, I shall force my way up, and try once more to carry out the project

that I started on yesterday. I will set aside anything that admits of the slightest doubt, treating it as though I had found it to be outright false; and I will carry on like that until I find something certain, or—at worst—until I become certain that there is no certainty. Archimedes said that if he had one firm and immovable point he could lift the world with a long enough lever; so I too can hope for great things if I manage to find just one little thing that is solid and certain.

I will suppose, then, that everything I see is fictitious. I will believe that my memory tells me nothing but lies. I have no senses. Body, shape, extension, movement and place are illusions. So what remains true? Perhaps just the one fact that nothing is certain!

[This paragraph is presented as a further to-and-fro argument between two people. Remember that this isn't how Descartes wrote it.]

Hopeful: Still, how do I know that there isn't something—not on that list—about which there is no room for even the slightest doubt? Isn't there a God (call him what you will) who gives me the thoughts I am now having?

Doubtful: But why do I think this, since I might myself be the author of these thoughts?

Hopeful: But then doesn't it follow that I am, at least, *something*?

Doubtful: This is very confusing, because I have just said that I have no senses and no body, and I am so bound up with a body and with senses that one would think that I can't exist without them. Now that I have convinced myself that there is nothing in the world—no sky, no earth, no minds, no bodies—does it follow that I don't exist either?

Hopeful: No it does not follow; for if I *convinced myself of something* then I certainly *existed*.

Doubtful: But there is a supremely powerful and cunning deceiver who deliberately deceives me all the time!

Hopeful: Even then, if he is deceiving me I undoubtedly

exist: let him deceive me all he can, he will never bring it about that *I am nothing* while *I think I am something*. So after thoroughly thinking the matter through I conclude that this proposition, *I am, I exist*, must be true whenever I assert it or think it.

But this 'I' that must exist—I still don't properly understand what it is; so I am at risk of confusing it with something else, thereby falling into error in the very item of knowledge that I maintain is the most certain and obvious of all. To get straight about what this 'I' is, I shall go back and think some more about what I believed myself to be before I started this meditation. I will eliminate from those beliefs anything that could be even slightly called into question by the arguments I have been using, which will leave me with only beliefs about myself that are certain and unshakable.

Well, then, what did I think I was? A man. But what is a man? Shall I say 'a rational animal'? No; for then I should have to ask what an animal is, and what rationality is—each question would lead me on to other still harder ones, and this would take more time than I can spare. Let me focus instead on the beliefs that spontaneously and naturally came to me whenever I thought about what I was. The first such belief was that I had a face, hands, arms and the whole structure of bodily parts that corpses also have—I call it *the body*. The next belief was that I ate and drank, that I moved about, and that I engaged in sense-perception and thinking; these things, I thought, were done by *the soul*. [In this work 'the soul' = 'the mind'; it has no religious implications.] If I gave any thought to what this soul was like, I imagined it to be something thin and filmy—like a wind or fire or ether—permeating my more solid parts. I was more sure about the body, though, thinking that I knew exactly what sort of thing it was. If I had tried to put my conception of the body into words, I would have said this:

By a 'body' I understand whatever has a definite shape and position, and can occupy a region of space in such a way as to keep every other body out of it; it can be perceived by touch, sight, hearing, taste or smell, and can be moved in various ways.

I would have added that a body can't start up movements by itself, and can move only through being moved by other things that bump into it. It seemed to me quite out of character for a body to be able to •initiate movements, or to be able to •sense and think, and I was amazed that certain bodies—namely, human ones—*could* do those things.

But now that I am supposing there is a supremely powerful and malicious deceiver who has set out to trick me in every way he can—*now* what shall I say that I am? Can I *now* claim to have any of the features that I used to think belong to a body? When I think about them really carefully, I find that they are all open to doubt: I shan't waste time by showing this about each of them separately. Now, what about the features that I attributed to the soul? Nutrition or movement? Since now I am pretending that I don't have a body, these are mere fictions. Sense-perception? One needs a body in order to perceive; and, besides, when dreaming I have seemed to perceive through the senses many things that I later realized I had not perceived in that way. Thinking? At last I have discovered it—thought! This is the one thing that can't be separated from me. I am, I exist—that is certain. But for how long? For as long as I am thinking. But perhaps no longer than that; for it *might* be that if I stopped thinking I would stop existing; and I have to treat that possibility as though it were actual, because my present policy is to reject everything that isn't necessarily true. Strictly speaking, then, I am simply a thing that thinks—a mind, or soul, or intellect, or reason, these being words whose meaning I have only just come to know. Still, I am a real, existing thing. What kind of

a thing? I have answered that: a thinking thing.

What else am I? I will use my imagination to see if I am anything more. I am not that structure of limbs and organs that is called a human body; nor am I a thin vapour that permeates the limbs—a wind, fire, air, breath, or whatever I imagine; for I have supposed all these things to be nothing because I have supposed all bodies to be nothing. Even if I go on supposing *them* to be nothing, I am still something. But these things that I suppose to be nothing because they are unknown to me—might they not in fact be identical with the *I* of which I am aware? I don't know; and just now I shan't discuss the matter, because I can form opinions only about things that I know. I know that I exist, and I am asking: what is this *I* that I know? My knowledge of it can't depend on things of whose existence I am still unaware; so it can't depend on anything that I invent in my imagination. The word 'invent' points to what is wrong with relying on my imagination in this matter: if I used imagination to show that I was something or other, that would be mere invention, mere story-telling; for imagining is simply contemplating the shape or image of a bodily thing. [Descartes here relies on a theory of his about the psychology of imagination.] That makes imagination suspect, for while I know for sure that I exist, I know that everything relating to the nature of body—including imagination—could be mere dreams; so it would be silly for me to say 'I will use my imagination to get a clearer understanding of what I am'—as silly, indeed, as to say 'I am now awake, and see some truth; but I shall deliberately fall asleep so as to see even more, and more truly, in my dreams!' If my mind is to get a clear understanding of its own nature, it had better not look to the imagination for it.

Well, then, what am I? A thing that thinks. What is that? A thing that doubts, understands, affirms, denies, wants, refuses, and also imagines and senses.

That is a long list of attributes for me to have—and it really is I who have them all. Why should it not be? Isn't it one and the same 'I' who now

doubts almost everything,
 understands some things,
 affirms this one thing—namely, that I exist and think,
 denies everything else,
 wants to know more,
 refuses to be deceived,

imagines many things involuntarily, and

is aware of others that seem to come from the senses?

Isn't all this just as true as the fact that I exist, even if I am in a perpetual dream, and even if my creator is doing his best to deceive me? Which of all these activities is distinct from my thinking? Which of them can be said to be separate from myself? The fact that it is I who doubt and understand and want is so obvious that I can't see how to make it any clearer. But the 'I' who *imagines* is also this same 'I'. For even if (as I am pretending) none of the things that I imagine really exist, I *really do imagine them*, and this is part of my thinking. Lastly, it is also this same 'I' who senses, or is aware of bodily things seemingly through the senses. Because I may be dreaming, I can't say for sure that I now see the flames, hear the wood crackling, and feel the heat of the fire; but I certainly *seem* to see, to hear, and to be warmed. This cannot be false; what is called 'sensing' is strictly just this *seeming*, and when 'sensing' is understood in this restricted sense of the word it too is simply thinking.

All this is starting to give me a better understanding of what I am. But I still can't help thinking that bodies—of which I form mental images and which the senses investigate—are much more clearly known to me than is this puzzling 'I' that can't be pictured in the imagination. It would be surprising if this were right, though; for it

would be surprising if I had a clearer grasp of things that I realize are doubtful, unknown and foreign to me—namely, bodies—than I have of what is true and known—namely my own self. But I see what the trouble is: I keep drifting towards that error because my mind likes to wander freely, refusing to respect the boundaries that truth lays down. Very well, then; I shall let it run free for a while, so that when the time comes to rein it in it won't be so resistant to being pulled back.

Let us consider the things that people ordinarily think they understand best of all, namely the bodies that we touch and see. I don't mean bodies in general—for our general thoughts are apt to be confused—but one particular body: this piece of wax, for example. It has just been taken from the honeycomb; it still tastes of honey and has the scent of the flowers from which the honey was gathered; its colour, shape and size are plain to see; it is hard, cold and can be handled easily; if you rap it with your knuckle it makes a sound. In short, it has everything that seems to be needed for a body to be known perfectly clearly. But as I speak these words I hold the wax near to the fire, and look! The taste and smell vanish, the colour changes, the shape is lost, the size increases; the wax becomes liquid and hot; you can hardly touch it, and it no longer makes a sound when you strike it. But is it still the same wax? Of course it is; no-one denies this. So what was it about the wax that I understood so clearly? Evidently it was not any of the features that the senses told me of; for all of them—brought to me through taste, smell, sight, touch or hearing—have now altered, yet it is still the same wax.

Perhaps what I now think about the wax indicates what its nature was all along. If that is right, then the wax was not the sweetness of the honey, the scent of the flowers, the whiteness, the shape, or the sound, but was rather *a body*

that recently presented itself to me in those ways but now appears differently. But what exactly is this thing that I am now imagining? Well, if we take away whatever doesn't belong to the wax (·that is, everything that the wax *could* be without·), what is left is merely *something extended, flexible and changeable*. What do 'flexible' and 'changeable' mean here? I can imaginatively picture this piece of wax changing from round to square, from square to triangular, and so on. But that isn't what changeability is. In knowing that the wax is changeable I understand that it can go through *endlessly many* changes of that kind, far more than I can depict in my imagination; so it isn't my imagination that gives me my grasp of the wax as flexible and changeable. Also, what does 'extended' mean? Is the wax's extension also unknown? It increases if the wax melts, and increases again if it boils; the wax can be extended in many more ways (·that is, with many more shapes·) than I will ever bring before my imagination. I am forced to conclude that the nature of this piece of wax isn't revealed by my imagination, but is perceived by the mind alone. (I am speaking of •this particular piece of wax; the point is even clearer with regard to •wax in general.) This wax that is perceived by the mind alone is, of course, the same wax that I see, touch, and picture in my imagination—in short the same wax I thought it to be from the start. But although my perception of it *seemed* to be a case of vision and touch and imagination, it isn't so and it never was. Rather, it is purely a scrutiny by the mind alone—formerly an imperfect and confused one, but now vivid and clear because I am now concentrating carefully on what the wax consists in.

As I reach this conclusion I am amazed at how prone to error my mind is. For although I am thinking all this out within myself, silently, I do it with the help of words, and I am at risk of being led astray by them. When the wax is

in front of us, we say that we *see* it, not that we *judge* it to be there from its colour or shape; and this might make me think that knowledge of the wax comes from what the eye sees rather than from the perception of the mind alone. But ·this is clearly wrong, as the following example shows·. If I look out of the window and see men crossing the square, as I have just done, I say that I *see* the men themselves, just as I say that I see the wax; yet do I see any more than hats and coats that could conceal robots? I *judge* that they are men. Something that I thought I saw with my eyes, therefore, was really grasped solely by my mind's faculty of judgment [= 'ability or capacity to make judgments'].

However, someone who wants to know more than the common crowd should be ashamed to base his doubts on ordinary ways of talking. Let us push ahead, then, and ask: *When* was my perception of the wax's nature more perfect and clear? Was it •when I first looked at the wax, and thought I knew it through my senses? Or is it •now, after I have enquired more carefully into the wax's nature and into how it is known? It would be absurd to hesitate in answering the question; for what clarity and sharpness was there in my earlier perception of the wax? Was there anything in it that •a lower animal couldn't have? But when I consider the wax apart from its outward forms—take its clothes off, so to speak, and consider it naked—then although my judgment may still contain errors, at least I am now having a perception of a sort that requires •a human mind.

But what am I to say about this mind, or about myself? (So far, remember, I don't admit that there is anything to me *except* a mind.) What, I ask, is this 'I' that seems to perceive the wax so clearly? Surely, I am aware of •my own self in a truer and more certain way than I am of •the wax, and also in a much more distinct and evident way. What leads me to think that •the wax exists—namely, that I see it—leads much

more obviously to the conclusion that •I exist. What I see might not really be the wax; perhaps I don't even have eyes with which to see anything. But when I *see* or *think I see* (I am not here distinguishing the two), it is simply not possible that I who am now thinking am not *something*. Similarly, that •*I exist* follows from the other bases for judging that •*the wax exists* - that I touch it, that I imagine it, or any other basis—and similarly for my bases for judging that anything else exists outside me. As I came to perceive the wax more distinctly by applying not just sight and touch but other considerations, all this too contributed to my knowing myself even more distinctly, because whatever goes into my perception of •the wax or of any other body must do even more to establish the nature of •my own mind. What comes to my mind from bodies, therefore, helps me to know my

mind distinctly; yet all of that pales into insignificance—it is hardly worth mentioning—when compared with what my mind contains *within itself* that enables me to know it distinctly.

See! With no effort I have reached the place where I wanted to be! I now know that even bodies are perceived not by the senses or by imagination but by the intellect alone, not through their being touched or seen but through their being understood; and this helps me to know plainly that I can perceive my own mind more easily and clearly than I can anything else. Since the grip of old opinions is hard to shake off, however, I want to pause and meditate for a while on this new knowledge of mine, fixing it more deeply in my memory.