

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

The remaining task is to consider whether material things exist. Insofar as they are the subject matter of pure mathematics, I perceive them clearly and distinctly; so I at least know that they *could* exist, because anything that I perceive in that way could be created by God.

(The only reason I have ever accepted for thinking that something could *not* be made by him is that there would be a contradiction in my perceiving it distinctly.) My faculty of imagination, which I am aware of using when I turn my mind to material things, also suggests that they really exist. For when I think harder about what imagination is, it seems to be simply an application of the faculty of *knowing* to a body that is intimately present to it – and that has to be a body that exists.

To make this clear, I will first examine how imagination differs from pure understanding.

When I imagine a triangle, for example, I don't merely understand that it is a three-sided figure, but I also see the three lines with my mind's eye as if they were present to me; that is what imagining is. But if I think of a chiliagon, although I understand quite well that it is a figure with a thousand sides, I don't imagine the thousand sides or see them as if they were present to me. When I think of a body, I usually form some kind of image; so in thinking of a chiliagon I may construct in my mind – strictly speaking, in my imagination – a confused representation of some figure. But obviously it won't be a chiliagon, for it is the very same image that I would form if I were thinking of, say, a figure with ten thousand sides. So it wouldn't help me to recognize the properties that distinguish a chiliagon from other many-sided figures. In the case of a pentagon, the situation is different. I can of course *understand* this figure without the help of the imagination (just as I can understand a chiliagon); but I can also *imagine* a pentagon, by applying my mind's eye to its five sides and the area they enclose. This imagining, I find, takes more mental effort than understanding does; and that is enough to show that imagination is different from pure understanding.

Being able to imagine isn't essential to me, as being able to understand is; for even if I had no power of imagination I would still be the same individual that I am. This seems to imply that my power of imagining depends on something other than myself; and I can easily understand that if there is such a thing as *my body* – that is, if my mind is joined to a certain body in such a way that it can contemplate that

body whenever it wants to – then it *might* be this very body that enables me to imagine corporeal things. So it may be that imagining differs from pure understanding purely like this: when the mind understands, it somehow turns in on itself and inspects one of its own ideas; but when it imagines, it turns away from itself and looks at something in the body (something that conforms to an idea – either one understood by the mind or one perceived by the senses). I can, I repeat, easily see that this might be how imagination comes about if the body exists; and since I can think of no other equally good way of explaining what imagination is, I can conjecture that the body exists. But this is only a probability. Even after all my careful enquiry I still can't see how, on the basis of the idea of corporeal nature that I find in my imagination, to prove for sure that some body exists.

As well as the corporeal nature that is the subject-matter of pure mathematics, I am also accustomed to imagining colours, sounds, tastes, pain and so on – though not so distinctly. Now, I perceive these much better by means of the senses, which is how (helped by memory) they appear to have reached the imagination. So in order to deal with them more fully, I must attend to the senses – that is, to the kind of thinking that I call 'sensory perception'. I want to know whether the things that are perceived through the senses provide me with any sure argument for the existence of bodies.

To begin with, I will (1) go back over everything that I *originally* took to be perceived by the senses, and reckoned to be true; and I will go over my reasons for thinking this. Next, I will (2) set out my reasons for *later* doubting these things. Finally, I will (3) consider what I should *now* believe about them.

(1) First of all then, I perceived by my senses that I had a head, hands, feet and other limbs making up the body that I regarded as part of myself, or perhaps even as my whole self. I also perceived by my senses that this body was situated among many other bodies that could harm or help it; and I detected the favourable effects by a sensation of pleasure and the unfavourable ones by pain. As well as pain and pleasure, I also had sensations of hunger, thirst, and other such appetites, and also of bodily states tending towards cheerfulness, sadness, anger and similar emotions. Outside myself, besides the extension, shapes and movements of bodies, I also had sensations of their hardness and heat, and of the other qualities that can be known by touch. In addition, I had sensations of light, colours, smells, tastes and sounds, and differences amongst these enabled me to sort out the sky, the earth, the seas and other bodies from one another. All I was *immediately* aware of in each case were my ideas, but it was reasonable for me to think that what I was perceiving through the senses were external bodies that caused the ideas. For I found that

these ideas came to me quite without my consent: I couldn't have *that* kind of idea of any object, even if I wanted to, if the object was not present to my sense organs; and I couldn't avoid having the idea when the object *was* present. Also, since the ideas that came through the senses were much more lively and vivid and sharp than ones that I formed voluntarily when thinking about things, and than ones that I found impressed on my memory, it seemed impossible that sensory ideas were coming from within me; so I had to conclude that they came from external things. My only way of knowing about these things was through the ideas themselves, so it was bound to occur to me that the things might resemble the ideas. In addition, I remembered that I had the use of my senses before I ever had the use of reason; and I saw that the ideas that I formed were, for the most part, made up of elements of sensory ideas. This convinced me that I had nothing at all in my intellect that I had not previously had in sensation. As for the body that by some special right I called 'mine': I had reason to think that it belonged to me in a way that no other body did. There were three reasons for this. I could never be separated from it, as I could from other bodies; I felt all my appetites and emotions *in* it and *on account of* it; and I was aware of pain and pleasurable ticklings in parts of this body but not in any other body. But why should that curious sensation of pain give rise to a particular distress of mind; and why should a certain kind of delight follow on a tickling sensation? Again, why should that curious tugging in the stomach that I call 'hunger' tell me that I should eat, or a dryness of the throat tell me to drink, and so on? I couldn't explain any of this, except to say that nature taught me so. For there is no connection (or none that I understand) between the tugging sensation and the decision to eat, or between the sensation of something causing pain and the mental distress that arises from it.

It seems that *nature* taught me to make these judgments about objects of the senses, for I was making them before I had any arguments to support them.

(2) Later on, however, my experiences gradually undermined all my faith in the senses. A tower that had looked round from a distance appeared square from close up; an enormous statue standing on a high column didn't look large from the ground. In countless such cases I found that the judgments of the external senses were mistaken, and the same was true of the internal senses.

What can be more internal than pain? Yet I heard that an amputee might occasionally seem to feel pain in the missing limb. So even in my own case, I had to conclude, it was not quite certain that a particular limb was hurting, even if I felt pain in it. To these reasons for doubting, I recently added two very general ones. The first was that every sensory experience I ever thought I was having while

awake I can also think of myself as having while asleep; and since I don't believe that what I seem to perceive in sleep comes from things outside me, I didn't see why I should be any more inclined to believe this of what I think I perceive while awake. The second reason for doubt was that for all I knew to the contrary I might be so constituted that I am liable to error even in matters that seem to me most true. (I couldn't rule this out, because I did not know – or at least was pretending not to know – who made me.) And it was easy to refute the reasons for my earlier confidence about the truth of what I perceived by the senses. Since I seemed to be naturally drawn towards many things that reason told me to avoid, I reckoned that I should not place much confidence in what I was taught by nature. Also, I decided, the mere fact that the perceptions of the senses didn't depend on my will was not enough to show that they came from outside me; for they might have been produced by some faculty of mine that I didn't yet know.

(3) But now, when I am beginning to know myself and my maker better, although I don't think I should recklessly accept everything I seem to have got from the senses, neither do I think it should all be called into doubt.

First, I know that if I have a clear and distinct thought of something, God could have created it in a way that exactly corresponds to my thought. So the fact that I can clearly and distinctly think of one thing apart from another assures me that the two things are distinct from one another – that is, that they are *two* – since they can be separated by God. Never mind *how* they could be separated; that does not affect the judgment that they are distinct. So my mind is a distinct thing from my body.

Furthermore, my mind is *me*, for the following reason. I know that I exist and that nothing else belongs to my nature or essence except that I am a thinking thing; from this it follows that my essence consists solely in my being a thinking thing, even though there may be a body that is very closely joined to me. I have a clear and distinct idea of myself as something that thinks and isn't extended, and one of body as something that is extended and does not think. So it is certain that I am really distinct from my body and can exist without it.

Besides this, I find that I am capable of certain special kinds of thinking, namely imagination and sensory perception. Now, I can clearly and distinctly understand myself as a whole without these faculties; but I can't understand them without me, that is, without an intellectual substance for them to belong to. A faculty or capacity essentially involves *acts*, so it involves some *thing* that acts; so I see that I differ from my faculties as a thing differs from its properties. Of course there are other faculties – such as those of moving around, changing shape, and so on –

which also need a substance to belong to; but it must be a bodily or extended substance and not a thinking one, because those faculties essentially involve extension but not thought. Now, I have a *passive* faculty of sensory perception, that is, an ability to *receive* and recognize ideas of perceptible objects; but I would have no use for this unless something – myself or something else – had an *active* faculty for *producing* those ideas in the first place. But this faculty can't be in me, since clearly it does not presuppose any thought on my part, and sensory ideas are produced without my cooperation and often even against my will. So sensory ideas must be produced by some substance other than me – a substance that actually *has* (either in a straightforward way or in a higher form) all the reality that is *represented* in the ideas that it produces. Either (a) this substance is a body, in which case it will straightforwardly contain everything that is represented in the ideas; or else (b) it is God, or some creature more noble than a body, in which case it will contain in a higher form whatever is to be found in the ideas. I can reject (b), and be confident that God does not transmit sensory ideas to me either directly from himself or through some creature that does not straightforwardly contain what is represented in the ideas. God has given me no way of recognizing any such 'higher form' source for these ideas; on the contrary, he has strongly inclined me to believe that bodies produce them. So if the ideas were transmitted from a source other than corporeal things, God would be a deceiver; and he is not. So bodies exist. They may not all correspond exactly with my sensory intake of them, for much of what comes in through the senses is obscure and confused. But at least bodies have all the properties that I clearly and distinctly understand, that is, all that fall within the province of pure mathematics.

Those are the clearly understood properties of bodies in general. What about less clearly understood properties (for example light or sound or pain), and properties of particular bodies (for example the size or shape of the sun)? Although there is much doubt and uncertainty about them, I have a sure hope that I can reach the truth even in these matters. That is because God isn't a deceiver, which implies that he has given me the ability to correct any falsity there may be in my opinions. Indeed, everything that I am 'taught by nature' certainly contains some truth. For the term 'nature', understood in the most general way, refers to God himself or to the ordered system of created things established by him. And my own nature is simply the totality of things bestowed on me by God.

As vividly as it teaches me anything, my own nature teaches me that I have a body, that when I feel pain there is something wrong with that body, that when I am hungry or thirsty it needs food and drink, and so on. So I shouldn't doubt that there is some truth in this.

Nature also teaches me, through these sensations of pain, hunger, thirst and so on, that I (a thinking thing) am not merely *in* my body as a sailor is in a ship. Rather, I am *closely joined to it* – intermingled with it, so to speak – so that it and I form a unit. If this were not so, I wouldn't *feel* pain when the body was hurt but would *perceive* the damage in an intellectual way, like a sailor seeing that his ship needs repairs. And when the body needed food or drink I would intellectually understand this fact instead of (as I do) having confused sensations of hunger and thirst. These sensations are confused mental events that arise from the union – the intermingling, as it were – of the mind with the body.

Nature also teaches me that various other bodies exist in the vicinity of my body, and that I should seek out some of these and avoid others. Also, I perceive by my senses a great variety of colours, sounds, smells and tastes, as well as differences in heat, hardness and so on; from which I infer that the bodies that cause these sensory perceptions differ from one another in ways that *correspond to* the sensory differences, though perhaps they don't *resemble* them. Furthermore, some perceptions are pleasant while others are nasty, which shows that my body – or rather my whole self insofar as I am a combination of body and mind – can be affected by the various helpful or harmful bodies that surround it.

However, some of what I thought I had learned from nature really came not from nature but from a habit of rushing to conclusions; and those beliefs could be false. Here are a few examples: that if a region contains nothing that stimulates my senses, then it must be empty; that the heat in a body resembles my idea of heat; that the colour I perceive through my senses is also present in the body that I perceive; that in a body that is bitter or sweet there is the same taste that I experience, and so on; that stars and towers and other distant bodies have the same size and shape that they present to my senses.

To think clearly about this matter, I need to define exactly what I mean when I say that 'nature teaches me' something. I am not at this point taking 'nature' to refer to the totality of what God has given me. From that totality I am excluding things that belong to the mind alone, such as my knowledge that what has been done can't be undone (I know this through the natural light, without help from the body). I am also excluding things that relate to the body alone, such as the tendency bodies have to fall downwards. My sole concern here is with what God has given to me as a combination of mind and body. My 'nature', then, in this limited sense, does indeed teach me to avoid what hurts and to seek out what gives pleasure, and so on. But it doesn't appear to teach us to rush to conclusions about things located outside us without pausing to think about the question; for knowledge of the truth

about such things seems to belong to the mind alone, not to the combination of mind and body. So, although a star has no more effect on my eye than a candle's flame, my thinking of the star as no bigger than the flame does not come from any positive 'natural' inclination to believe this; it's just a habit of thought that I have had ever since childhood, with no rational basis for it. Similarly, although I feel heat when I approach a fire and feel pain when I go too near, there is no good reason to think that something in the fire resembles the heat, or resembles the pain. There is merely reason to suppose that something or other in the fire causes feelings of heat or pain in us. Again, even when a region contains nothing that stimulates my senses, it does not follow that it contains no bodies. I now realize that in these cases and many others I have been in the habit of misusing the order of nature. The right way to use the sensory perceptions that nature gives me is as a guide to what is beneficial or harmful for my mind-body complex; and they are clear and distinct enough for *that*. But it is a misuse of them to treat them as reliable guides to the essential nature of the bodies located outside me, for on that topic they give only very obscure information.

I have already looked closely enough at how I may come to make false judgments, even though God is good. Now it occurs to me that there is a problem about mistakes I make regarding the things that nature tells me to seek out or avoid, and also regarding some of my internal sensations. Some cases of this are unproblematic. Someone may be tricked into eating pleasant-tasting food that has poison concealed in it; but here nature urges the person towards the pleasant food, not towards the poison, which it doesn't know about. All this shows is that the person's nature doesn't know everything, and that is no surprise.

Other cases, however, raise problems. They are ones where nature urges us towards something that harms us and this can't be explained through nature's not knowing something.

Sick people, for example, may want food or drink that is bad for them. 'They go wrong because they are ill' – true, but the difficulty remains. A sick man is one of God's creatures just as a healthy one is, and in each case it seems a contradiction to suppose that God has given him a nature that deceives him. A badly made clock conforms to the laws of its nature in telling the wrong time, just as a well made and accurate clock does; and we might look at the human body in the same way. We could see it as a kind of machine made up of bones, nerves, muscles, veins, blood and skin in such a way that, even if there were no mind in it, it would still move exactly as it now does in all the cases where movement isn't under the control of the will or, therefore, of the mind. If such a body suffers from dropsy, for example,

and is affected by the dryness of the throat that normally produces in the mind a sensation of thirst, that will affect the nerves and other bodily parts in such a way as to dispose the body to take a drink, which will make the disease worse. Yet this is as *natural* as a healthy body's being stimulated by a similar dryness of the throat to take a drink that is good for it. In a way, we might say, it is *not* natural. Just as we could say that a clock that works badly is 'departing from its nature', we might say that the dropsical body that takes a harmful drink is 'departing from its nature', that is, from the pattern of movements that usually occur in human bodies. But that involves using 'nature' as a way of comparing one thing with another – a sick man with a healthy one, a badly made clock with an accurate one – whereas I have been using 'nature' not to make comparisons but to speak of what can be found in the things themselves; and this usage is legitimate.

When we describe a dropsical body as having 'a disordered nature', therefore, we are using the term 'nature' merely to compare sick with healthy. What has gone wrong in the mind-body complex that suffers from dropsy, however, is not a mere matter of comparison with something else. There is here a real, intrinsic error of nature, namely that the body is thirsty at a time when drink will cause it harm. We have to enquire how it is that the goodness of God does not prevent nature from deceiving us in this way. This enquiry will fall into four main parts.

There is a great difference between the mind and the body. Whereas every body is by its nature divisible, the mind can't be divided. For when I consider the mind, or consider myself insofar as I am merely a thinking thing, I can't detect any parts within myself; I understand myself to be something single and complete. The whole mind seems to be united to the whole body, but not by a uniting of parts to parts, as the following consideration shows. If a foot or arm or any other part of the body is cut off, nothing is thereby taken away from the mind. As for the faculties of willing, of understanding, of sensory perception and so on, these are not *parts* of the mind, since it is one and the same mind that wills, understands and perceives. They are (I repeat) not *parts* of the mind, because they are *properties* or *powers* of it. By contrast, any corporeal thing can easily be divided into parts in my thought; and this shows me that it is really divisible. This one argument would be enough to show me that the mind is completely different from the body, even if I did not already know as much from other considerations. The mind isn't immediately affected by all parts of the body but only by the brain – or perhaps just by the small part of it which is said to contain the 'common sense'. [Descartes is referring to the pineal gland. The 'common sense' was a supposed faculty, postulated by Aristotle, whose role was to integrate the data from the five specialized senses.] The signals that reach the mind depend upon what state this part of the brain is in, irrespective

of the condition of the other parts of the body. There is abundant experimental evidence for this, which I needn't review here.

Whenever any part of the body is moved by another part that is some distance away, it can be moved in the same fashion by any of the parts that lie in between, without the more distant part doing anything. For example, in a cord ABCD, if one end D is pulled so that the other end A moves, A could have been moved in just the same way if B or C had been pulled and D had not moved at all. Similarly, when I feel a pain in my foot, this happens by means of nerves that run from the foot up to the brain. When the nerves are pulled in the foot, they pull on inner parts of the brain and make them move; and nature has laid it down that this motion should produce in the mind a sensation of *pain as though occurring in the foot*. But since these nerves stretch from the foot to the brain through the calf, the thigh, the lumbar region, the back and the neck, that same sensation of 'pain in the foot' can come about when one of the intermediate parts is pulled, even if nothing happens in the foot. This presumably holds for any other sensation.

One kind of movement in the part of the brain that immediately affects the mind always produces just one kind of sensation; and it would be best for us if it were always the kind that would contribute the most to keeping us alive and well. Experience shows that the sensations that nature has given us are all of just such kinds; so everything about them bears witness to the power and goodness of God. For example, when the nerves in the foot are set in motion in a violent and unusual manner, this motion reaches the inner parts of the brain via the spinal cord, and gives the mind its signal for having a sensation of a pain as occurring in the foot. This stimulates the mind to do its best to remove the cause of the pain, which it takes to be harmful to the foot. God could have made our nature such that this motion in the brain indicated something else to the mind – for example, making the mind aware of the actual motion occurring in the brain, or in the foot, or in any of the intermediate regions. But nothing else would have been so conducive to the continued well-being of the body. In the same way, when we need drink a certain dryness arises in the throat; this moves the nerves of the throat, which in turn move the inner parts of the brain. That produces in the mind a sensation of thirst, because the most useful thing for us to know at this point is that we need drink in order to stay healthy. Similarly in the other cases.

All of this makes it clear that, despite God's immense goodness, the nature of man as a combination of mind and body is such that it is bound to mislead him from time to time. For along the route of the nerves from the foot to the brain, or even in the brain itself, something may happen that produces the same motion that is

usually caused by injury to the foot; and then pain will be felt as if it were in the foot. This deception of the senses is natural, because a given kind of motion in the brain must always produce the same kind of sensation in the mind; and, given that this kind of motion usually originates in the foot, it is reasonable that it should produce a sensation indicating a pain in the foot. Similarly with dryness of the throat: it is much better that it should mislead on the rare occasion when the person has dropsy than that it should always mislead when the body is in good health. The same holds for the other cases.

This line of thought greatly helps me to be aware of all the errors to which my nature is liable, and also to correct or avoid them. For I know that so far as bodily well-being is concerned my senses usually tell the truth. Also, I can usually employ more than one sense to investigate the same thing; and I can get further help from my memory, which connects present experiences with past ones, and from my intellect, which has by now examined all the sources of error. So I should have no more fears about the falsity of what my senses tell me every day; on the contrary, the exaggerated doubts of the last few days should be dismissed as laughable. This applies especially to the chief reason for doubt, namely my inability to distinguish dreams from waking experience.

For I now notice that the two are vastly different, in that dreams are never linked by memory with all the other actions of life as waking experiences are. If, while I am awake, anyone were suddenly to appear to me and then disappear immediately, as happens in sleep, so that I couldn't see where he had come from or where he had gone to, I could reasonably judge that he was a ghost or an hallucination rather than a real man. But if I have a firm grasp of when, where and whence something comes to me, and if I can connect my perception of it with the whole of the rest of my life without a break, then I am sure that in encountering it I am not asleep but awake. And I ought not to have any doubt of its reality if that is unanimously confirmed by all my senses as well as my memory and intellect. From the fact that God isn't a deceiver it follows that in cases like this I am completely free from error. But since everyday pressures don't always allow us to pause and check so carefully, it must be admitted that human life is vulnerable to error about particular things, and we must acknowledge the weakness of our nature.