

Selections from Descartes' *Principles of Philosophy* (1644)

1. That the enquirer after truth should, once in their life, doubt everything as much as they can.

We are diverted from true knowledge by many preconceptions which we have accumulated since birth. This is because we were born without speech, and we made various judgments about sensible things before our reason was fully developed. It seems that the only way we can free ourselves from these preconceptions is this: that just once in our lives, we should make a concerted effort to doubt every previous belief in which we find so much as the slightest hint of uncertainty.

4. Why we can have doubts about sensible things.

So now let us embark on our enquiry into what is true (but only what is true). To begin with, it can be doubted whether any sensible or imaginable things exist. The first reason is that we sometimes notice that our senses deceive us, and it is wise never to put too much trust in what has let us down, even if on only one occasion. The second reason is that in our dreams we regularly seem to sense or imagine many things which are completely non-existent, and there are no obvious signs which would enable someone having such doubts to distinguish between sleeping and waking with any certainty.

7. That we cannot doubt that we exist while we are doubting; and this is the first thing we know when philosophising in the right order.

So, if we reject everything we can doubt in any way, and even imagine it all to be false, we can readily suppose that there is no God, no sky, and no bodies — and even that we ourselves have no hands, no feet, and indeed no body at all. However, this does not allow us to suppose that we who are thinking such things are nothing, since it is a contradiction to believe that something which thinks does not exist at the very time when it is thinking. So the knowledge that I think therefore I am is the first and most certain of all items of knowledge which anyone will arrive at if they philosophise in the right order.

8. This enables us to recognise the distinction between soul and body, or between thinking thing and corporeal thing.

This is also the best approach for understanding the nature of mind, and its distinction from body. Let us introspect about who we are — we who are supposing that everything distinct from ourselves is illusory. It will be transparently obvious that our nature contains no extension, no shape, no motion, nor any such thing which could be ascribed to body. All we shall find is thought. Consequently, we know thought before, and more certainly than, we know any corporeal thing, since we have already perceived it, while still doubting about everything else.

9. What thought is.

By the word 'thought', I mean everything which happens in us while we are conscious, in so far as there is consciousness of it in us. So in this context, thinking includes sensing as well as understanding, willing, and imagining. If I say, 'I see therefore I am,' or 'I walk therefore I am,' and mean by that the seeing or walking which is performed by the body, the conclusion is not absolutely certain. After all, when I am

asleep I can often think I am seeing or walking, but without opening my eyes or moving, — and perhaps even without my having any body at all. On the other hand, the conclusion is obviously certain if I mean the sensing itself, or the consciousness that I am seeing or walking, since the conclusion then refers to the mind. And it is only the mind which senses, or thinks about its seeing or walking.

45. What is a clear perception, and what is a distinct one.

Throughout their whole lives, very many people never perceive anything correctly enough to make a sure judgment about it. For if a perception is to support a sure and indubitable judgment, it must not only be clear, but also distinct. I call an idea ‘clear’ when it is present and fully revealed to the mind attending to it, just as we say we see something clearly when it is present to the observing eye, and affects it strongly and fully enough. I call an idea ‘distinct’ when, as well as being clear, it is so separated and demarcated from all other ideas, that it contains in itself absolutely nothing which is not clear.

46. Using the example of pain, it is shown that a perception can be clear without being distinct, but not distinct without being clear.

While someone is suffering from great pain, there is in them a very clear perception of pain. However, it is not always distinct, because people commonly think that there is something in the painful part which is similar to the sensation of pain; and they confuse their obscure judgment about the nature of the former with the sensation, which is all that they perceive clearly. This is how a perception can be clear without being distinct, although it can never be distinct without being clear.

48. That everything we perceive is considered either as things or their affections, or as eternal truths.

Whatever may be perceived by us, we consider either as things or their various affections, or as eternal truths having no existence outside our thought. Of those which we consider as things, the most general are substance, duration, order, number, and any others of the same sort which apply to all genera of things. However, I recognise only two highest genera of things. One is the genus of things pertaining to the understanding or thought — that is, to the mind, or thinking substance. The other is the genus of material things, or things pertaining to extended substance, or body. Perception, volition, and all the modes of perceiving and willing, are attributed to thinking substance; and to extended substance, size (or extension itself in length, breadth, and depth), shape, motion, position, the divisibility of its parts, and the such like. But we also experience within ourselves certain other things, which should not be attributed to the mind alone, or to the body alone, and which (as I shall show below in the appropriate places) arise from the close and intimate union of our mind with the body. These are the appetites of hunger, thirst, etc.; and likewise the arousing of emotions (or passions of the soul), which do not consist in thinking alone, such as arousal to anger, happiness, sadness, love, etc.; and finally all sensations, such as of pain, pleasure, light and colour, sounds, smells, tastes, heat, hardness, and other tactile qualities.

51. What substance is, and that this term is applied to God and created beings in different senses.

As for what we view as things or modes of things, it is worthwhile considering each one separately. The only meaning we can give to ‘substance’ is that it is a thing which exists in such a way that it does not

need anything else in order for it to exist. There is only one substance we can make sense of as existing independently of absolutely everything else, namely God. By contrast, we perceive that all other substances can exist only through the co-operation of God. Consequently, the term 'substance' cannot be applied to God and other things univocally (in the usual scholastic terminology) — in other words, it is impossible to have a distinct understanding of any sense of the term which is common both to God and to created beings.

52. That the term 'substance' applies to mind and body in the same sense, and how substance is known.

However, we can use a unitary concept of substance for understanding created bodily substance and created mind (or thinking substance), in that they are things which need nothing other than God in order to exist. However, we cannot initially recognise that something is a substance simply from the fact that it is an existing thing, because this in itself alone does not affect us. However, we can easily recognise it from any of its attributes, by virtue of the common notion that absence of attributes (or properties or qualities) is equivalent to absence of being. So from the fact that we perceive the presence of an attribute, we conclude that there must necessarily also be present some existing thing, or substance, to which it can be attributed.

53. That each substance has one distinctive attribute — that of mind is thought, and that of body is extension.

Although the presence of substance can be recognized through any attribute, each substance has just one distinctive property, [n.7] which constitutes its nature and essence, and which is the foundation of all its other properties. So, extension in length, breadth, and depth, constitutes the nature of bodily substance; and thought constitutes the nature of thinking substance. And everything else which can be attributed to body presupposes extension, and is only a mode of that which is extended; [n.8] similarly, all the contents of our minds are merely different modes of thinking. Thus, for example, we can only make sense of shape in that which is extended, or of motion in extended space; and we can only make sense of imagination, or sensation, or willing in a thinking thing. Whereas we can make sense of extension without shape or motion, and of thought without imagination or sensation, and so on. This should be obvious to anyone who considers it carefully.

54. How we can have clear and distinct notions of thinking and bodily substance, and of God.

So we can certainly have two clear and distinct notions or ideas: one of created thinking substance, and one of bodily substance. The way to achieve this is by carefully separating all the attributes of thought from the attributes of extension. In the same way, we can also have a clear and distinct idea of uncreated and independent thinking substance, namely of God. However we must not suppose that it adequately reveals to us everything that there is in God; nor should we pretend that it contains anything which we are not aware of as actually being included in it, and which we do not vividly perceive as belonging to the nature of a totally perfect being. Nobody can deny that we have such an idea of God within ourselves, unless they judge that there is no notion whatever of God in human minds.

60. On distinctions; and firstly, real distinction.

... Strictly speaking, a 'real' distinction is... one between two or more substances. And we perceive that they are really distinct from each other only by virtue of the fact that we can understand the one clearly and distinctly without the other. Acknowledging God, we are certain that he can bring about whatever we understand distinctly. So much so, that, for example, we are certain that it is possible for extended or bodily substance to exist, even though we do not yet know for certain that any such thing actually exists, simply from the fact that we already have an idea of it. Furthermore, if it exists, each and every part of it as defined by our thought is really distinct from the other parts of the same substance. Likewise, it is certain that each one of us is really distinct from every other thinking substance, and from every bodily substance, simply by virtue of the fact that each one of us understands that we are a thinking thing, and can in thought shut out from ourselves every other substance, whether thinking or extended. And even if we suppose that God has joined a bodily substance to such a thinking substance so closely that they could not be joined more closely, and thus welded together something unitary out of these two, nevertheless, they remain really distinct, because, however closely he might have united them, he could not have divested himself of the power he previously had of separating them, or of keeping one of them in existence without the other. And things which God can separate, or preserve separately, are really distinct.

189. What a sensation is, and how it occurs.

It needs to be borne in mind that, even though the human soul informs the whole body, it has its main seat in the brain. This is the only place where it not only understands and imagines, but also has sensations. It has sensations by means of the nerves, which extend like threads from the brain to all other parts of the body. They are connected to them in such a way that hardly any part of the human body can be touched, without the touch moving the ends of some of the nerves distributed throughout it. Their motions are transferred to the other ends of the nerves, which come together in the brain around the seat of the soul (as I have explained in sufficient detail in Chapter 4 of the Dioptrics). Now the motions which the nerves thus set up in the brain affect the soul or mind which is intimately joined to the brain in different ways, depending on the differences in the motions. And these different affections of the mind (or thoughts) which are the immediate consequences of these motions are what we call 'perceptions of the senses', or simply 'sensations' in ordinary language.

196. That the soul has sensations only in so far as it is in the brain.

The soul senses what happens to individual parts of the body by means of the nerves, and there are a number of conclusive proofs that it does so, not in so far as it is in these individual parts of the body, but only in so far as it is in the brain. Firstly, it is proved by the fact that various diseases which affect only the brain, obliterate or distort all sensation. Similarly even sleep, which is only in the brain, daily suspends most of our capacity for sensation, though it is restored when we wake up. The second proof is that, even if the brain is undamaged, we lose the sensation of parts of the body external to it, if there is merely an obstruction of the routes by which the nerves connect them to it. The third proof is that we sometimes feel pain as in a certain part of the body, even though there is no cause of pain in that part

itself, but only in other parts through which the nerves pass en route to the brain. This last can be established by many empirical facts; but one example is enough here. There was a girl who had a seriously diseased hand. Whenever the doctor called, they blindfolded her so that she would not be upset by the sight of his surgical equipment. After a few days, her arm was cut off at the elbow, because of advancing gangrene. They then faked up the missing arm with bandages, so that she was completely unaware of her loss. However, she went on complaining that she could feel various pains in different fingers of her amputated hand. Clearly, this can only be explained by the fact that the nerves which previously went all the way from the brain to the hand, but which now terminated at the elbow, were set in motion in the same way at the elbow, as they must previously have been set in motion in the hand, in order to impress on the soul residing in the brain the sensation of this or that finger being in pain.