

Descartes, *Meditations on First Philosophy* (1641)

[Dedicatory letter to the Sorbonne]

To those most learned and distinguished men, the Dean and Doctors of the sacred Faculty of Theology at Paris, from René Descartes.

I have a very good reason for offering this book to you, and I am confident that you will have an equally good reason for giving it your protection once you understand the principle behind my undertaking; so much so, that my best way of commending it to you will be to tell you briefly of the goal which I shall be aiming at in the book.

2 I have always thought that two topics—namely God and the soul—are prime examples of subjects where demonstrative proofs ought to be given with the aid of philosophy rather than theology. For us who are believers, it is enough to accept on faith that the human soul does not die with the body, and that God exists; but in the case of unbelievers, it seems that there is no religion, and practically no moral virtue, that they can be persuaded to adopt until these two truths are proved to them by natural reason. And since in this life the rewards offered to vice are often greater than the rewards of virtue, few people would prefer what is right to what is expedient if they did not fear God or have the expectation of an after-life. It is of course quite true that we must believe in the existence of God because it is a doctrine of Holy Scripture, and conversely, that we must believe Holy Scripture because it comes from God; for since faith is the gift of God, he who gives us grace to believe other things can also give us grace to believe that he exists. But this argument cannot be put to unbelievers because they would judge it to be circular. Moreover, I have noticed both that you and all other theologians assert that the existence of God is capable of proof by natural reason, and also that the inference from Holy Scripture is that the knowledge of God is easier to acquire than the knowledge we have of many created things—so easy, indeed, that those who do not acquire it are at fault. This is clear from a passage in the Book of Wisdom, Chapter 13: ‘Howbeit they are not to be excused; for if their knowledge was so great that they could value this world, why did they not rather find out the Lord thereof?’ And in Romans, Chapter 1 it is said that they are ‘without excuse’. And in the same place, in the passage ‘that which is known of God is manifest in them’, we seem to be told that everything that may be known of God can be demonstrated by reasoning which has no other source but our own mind. Hence I thought it was quite proper for me to inquire how this may be, and how God may be more easily and more certainly known than the things of this world.

3 As regards the soul, many people have considered that it is not easy to discover its nature, and some have even had the audacity to assert that, as far as human reasoning goes, there are persuasive grounds for holding that the soul dies along with the body and that the opposite view is based on faith alone. But in its eighth session the Lateran Council held under Leo X condemned those who take this position, and expressly enjoined Christian philosophers to refute their arguments and use all their powers to establish the truth; so I have not hesitated to attempt this task as well.

4 In addition, I know that the only reason why many irreligious people are unwilling to believe that God exists and that the human mind is distinct from the body is the alleged fact that no one has hitherto been able to demonstrate these points. Now I completely disagree with this: I think that when properly under-

stood almost all the arguments that have been put forward on these issues by the great men have the force of demonstrations, and I am convinced that it is scarcely possible to provide any arguments which have not already been produced by someone else. Nevertheless, I think there can be no more useful service to be rendered in philosophy than to conduct a careful search, once and for all, for the best of these arguments, and to set them out so precisely and clearly as to produce for the future a general agreement that they amount to demonstrative proofs. And finally, I was strongly pressed to undertake this task by several people who knew that I had developed a method for resolving certain difficulties in the sciences—not a new method (for nothing is older than the truth), but one which they had seen me use with some success in other areas; and I therefore thought it my duty to make some attempt to apply it to the matter in hand.

5 The present treatise contains everything that I have been able to accomplish in this area. Not that I have attempted to collect here all the different arguments that could be put forward to establish the same results, for this does not seem worthwhile except in cases where no single argument is regarded as sufficiently reliable. What I have done is to take merely the principal and most important arguments and develop them in such a way that I would now venture to put them forward as very certain and evident demonstrations. I will add that these proofs are of such a kind that I reckon they leave no room for the possibility that the human mind will ever discover better ones. The vital importance of the cause and the glory of God, to which the entire undertaking is directed, here compel me to speak somewhat more freely about my own achievements than is my custom. But although I regard the proofs as quite certain and evident, I cannot therefore persuade myself that they are suitable to be grasped by everyone. In geometry there are many writings left by Archimedes, Apollonius, Pappus and others which are accepted by everyone as evident and certain because they contain absolutely nothing that is not very easy to understand when considered on its own, and each step fits in precisely with what has gone before; yet because they are somewhat long, and demand a very attentive reader, it is only comparatively few people who understand them. In the same way, although the proofs I employ here are in my view as certain and evident as the proofs of geometry, if not more so, it will, I fear, be impossible for many people to achieve an adequate perception of them, both because they are rather long and some depend on others, and also, above all, because they require a mind which is completely free from preconceived opinions and which can easily detach itself from involvement with the senses. Moreover, people who have an aptitude for metaphysical studies are certainly not to be found in the world in any greater numbers than those who have an aptitude for geometry. What is more, there is the difference that in geometry everyone has been taught to accept that as a rule no proposition is put forward in a book without there being a conclusive demonstration available; so inexperienced students make the mistake of accepting what is false, in their desire to appear to understand it, more often than they make the mistake of rejecting what is true. In philosophy, by contrast, the belief is that everything can be argued either way; so few people pursue the truth, while the great majority build up their reputation for ingenuity by boldly attacking whatever is most sound.

6 Hence, whatever the quality of my arguments may be, because they have to do with philosophy I do not expect they will enable me to achieve any very worthwhile results unless you come to my aid by granting me your patronage. The reputation of your Faculty is so firmly fixed in the minds of all, and the name of the Sorbonne has such authority that, with the exception of the Sacred Councils, no

institution carries more weight than yours in matters of faith; while as regards human philosophy, you are thought of as second to none, both for insight and soundness and also for the integrity and wisdom of your pronouncements. Because of this, the results of your careful attention to this book, if you deigned to give it, would be threefold. First, the errors in it would be corrected—for when I remember not only that I am a human being, but above all that I am an ignorant one, I cannot claim it is free of mistakes. Secondly, any passages which are defective, or insufficiently developed or requiring further explanation, would be supplemented, completed and clarified, either by yourselves or by me after you have given me your advice. And lastly, once the arguments in the book proving that God exists and that the mind is distinct from the body have been brought, as I am sure they can be, to such a pitch of clarity that they are fit to be regarded as very exact demonstrations, you may be willing to declare as much, and make a public statement to that effect. If all this were to happen, I do not doubt that all the errors which have ever existed on these subjects would soon be eradicated from the minds of men. In the case of all those who share your intelligence and learning, the truth itself will readily ensure that they subscribe to your opinion. As for the atheists, who are generally posers rather than people of real intelligence or learning, your authority will induce them to lay aside the spirit of contradiction; and, since they know that the arguments are regarded as demonstrations by all who are intellectually gifted, they may even go so far as to defend them, rather than appear not to understand them. And finally, everyone else will confidently go along with so many declarations of assent, and there will be no one left in the world who will dare to call into doubt either the existence of God or the real distinction between the human soul and body. The great advantage that this would bring is something which you, in your singular wisdom, are in a better position to evaluate than anyone; and it would ill become me to spend any more time commending the cause of God and religion to you, who have always been the greatest tower of strength to the Catholic Church.

Preface to the reader

I briefly touched on the topics of God and the human mind in my *Discourse on the method of rightly conducting reason and seeking the truth in the sciences*, which was published in French in 1637. My purpose there was not to provide a full treatment, but merely to offer a sample, and learn from the views of my readers how I should handle these topics at a later date. The issues seemed to me of such great importance that I considered they ought to be dealt with more than once; and the route which I follow in explaining them is so untrodden and so remote from the normal way, that I thought it would not be helpful to give a full account of it in a book written in French and designed to be read by all and sundry, in case weaker intellects might believe that they ought to set out on the same path.

2 In the *Discourse* I asked anyone who found anything worth criticizing in what I had written to be kind enough to point it out to me. In the case of my remarks concerning God and the soul, **only two objections** worth mentioning were put to me, which I shall now briefly answer before embarking on a more precise elucidation of these topics.

3 The first objection is this. From the fact that the human mind, when directed towards itself, does not perceive itself to be anything other than a thinking thing, it does not follow that its nature or essence consists only in its being a thinking thing, where the word ‘only’ excludes everything else that could be said to belong

to the nature of the soul. My answer to this objection is that in that passage it was not my intention to make those exclusions in an order corresponding to the actual truth of the matter (which I was not dealing with at that stage) but merely in an order corresponding to my own perception. So the sense of the passage was that I was aware of nothing at all that I knew belonged to my essence, except that I was a thinking thing, or a thing possessing within itself the faculty of thinking. I shall, however, show below how it follows from the fact that I am aware of nothing else belonging to my essence, that nothing else does in fact belong to it.

4 The second objection is this. From the fact that I have within me an idea of a thing more perfect than myself, it does not follow that the idea itself is more perfect than me, still less that what is represented by the idea exists. My reply is that there is an ambiguity here in the word ‘idea’. ‘Idea’ can be taken materially, as an operation of the intellect, in which case it cannot be said to be more perfect than me. Alternatively, it can be taken objectively, as the thing represented by that operation; and this thing, even if it is not regarded as existing outside the intellect, can still, in virtue of its essence, be more perfect than myself. As to how, from the mere fact that there is within me an idea of something more perfect than me, it follows that this thing really exists, this is something which will be fully explained below.

5 Apart from these objections, there are two fairly lengthy essays which I have looked at, but these did not attack my reasoning on these matters so much as my conclusions, and employed arguments lifted from the standard sources of the atheists. But arguments of this sort can carry no weight with those who understand my reasoning. Moreover, the judgement of many people is so silly and weak that, once they have accepted a view, they continue to believe it, however false and irrational it may be, in preference to a true and well-grounded refutation which they hear subsequently. So I do not wish to reply to such arguments here, if only to avoid having to state them. I will only make the general point that all the objections commonly tossed around by atheists to attack the existence of God invariably depend either on attributing human feelings to God or on arrogantly supposing our own minds to be so powerful and wise that we can attempt to grasp and set limits to what God can or should perform. So, provided only that we remember that our minds must be regarded as finite, while God is infinite and beyond our comprehension, such objections will not cause us any difficulty.

6 But now that I have, after a fashion, taken an initial sample of people’s opinions, I am again tackling the same questions concerning God and the human mind; and this time I am also going to deal with the foundations of First Philosophy in its entirety. But I do not expect any popular approval, or indeed any wide audience. On the contrary I would not urge anyone to read this book except those who are able and willing to meditate seriously with me, and to withdraw their minds from the senses and from all preconceived opinions. Such readers, as I well know, are few and far between. Those who do not bother to grasp the proper order of my arguments and the connection between them, but merely try to carp at individual sentences, as is the fashion, will not get much benefit from reading this book. They may well find an opportunity to quibble in many places, but it will not be easy for them to produce objections which are telling or worth replying to.

7 But I certainly do not promise to satisfy my other readers straightaway on all points, and I am not so presumptuous as to believe that I am capable of foreseeing all the difficulties which anyone may find. So first of all, in the *Meditations*, I will set out the very thoughts which have enabled me, in my view, to arrive at a certain

and evident knowledge of the truth, so that I can find out whether the same arguments which have convinced me will enable me to convince others. Next, I will reply to the objections of various men of outstanding intellect and scholarship who had these *Meditations* sent to them for scrutiny before they went to press. For the objections they raised were so many and so varied that I would venture to hope that it will be hard for anyone else to think of any point—at least of any importance—which these critics have not touched on. I therefore ask my readers not to pass judgement on the *Meditations* until they have been kind enough to read through all these objections and my replies to them.

Synopsis of the following six Meditations

In the First Meditation reasons are provided which give us possible grounds for doubt about all things, especially material things, so long as we have no foundations for the sciences other than those which we have had up till now. Although the usefulness of such extensive doubt is not apparent at first sight, its greatest benefit lies in freeing us from all our preconceived opinions, and providing the easiest route by which the mind may be led away from the senses. The eventual result of this doubt is to make it impossible for us to have any further doubts about what we subsequently discover to be true.

2 In the Second Meditation, the mind uses its own freedom and supposes the non-existence of all the things about whose existence it can have even the slightest doubt; and in so doing the mind notices that it is impossible that it should not itself exist during this time. This exercise is also of the greatest benefit, since it enables the mind to distinguish without difficulty what belongs to itself, i.e. to an intellectual nature, from what belongs to the body. But since some people may perhaps expect arguments for the immortality of the soul in this section, I think they should be warned here and now that I have tried not to put down anything which I could not precisely demonstrate. Hence the only order which I could follow was that normally employed by geometers, namely to set out all the premisses on which a desired proposition depends, before drawing any conclusions about it. Now the first and most important prerequisite for knowledge of the immortality of the soul is for us to form a concept of the soul which is as clear as possible and is also quite distinct from every concept of body; and that is just what has been done in this section. A further requirement is that we should know that everything that we clearly and distinctly understand is true in a way which corresponds exactly to our understanding of it; but it was not possible to prove this before the Fourth Meditation. In addition we need to have a distinct concept of corporeal nature, and this is developed partly in the Second Meditation itself, and partly in the Fifth and Sixth Meditations. The inference to be drawn from these results is that all the things that we clearly and distinctly conceive of as different substances (as we do in the case of mind and body) are in fact substances which are really distinct one from the other; and this conclusion is drawn in the Sixth Meditation. This conclusion is confirmed in the same Meditation by the fact that we cannot understand a body except as being divisible, while by contrast we cannot understand a mind except as being indivisible. For we cannot conceive of half of a mind, while we can always conceive of half of a body, however small; and this leads us to recognize that the natures of mind and body are not only different, but in some way opposite. But I have not pursued this topic any further in this book, first because these arguments are enough to show that the decay of the body does not imply the destruction of the mind, and are hence enough to give mortals the hope

of an after-life, and secondly because the premisses which lead to the conclusion that the soul is immortal depend on an account of the whole of physics. This is required for two reasons. First, we need to know that absolutely all substances, or things which must be created by God in order to exist, are by their nature incorruptible and cannot ever cease to exist unless they are reduced to nothingness by God's denying his concurrence to them. Secondly, we need to recognize that body, taken in the general sense, is a substance, so that it too never perishes. But the human body, in so far as it differs from other bodies, is simply made up of a certain configuration of limbs and other accidents of this sort; whereas the human mind is not made up of any accidents in this way, but is a pure substance. For even if all the accidents of the mind change, so that it has different objects of the understanding and different desires and sensations, it does not on that account become a different mind; whereas a human body loses its identity merely as a result of a change in the shape of some of its parts. And it follows from this that while the body can very easily perish, the mind is immortal by its very nature.

3 In the Third Meditation I have explained quite fully enough, I think, my principal argument for proving the existence of God. But in order to draw my readers' minds away from the senses as far as possible, I was not willing to use any comparison taken from bodily things. So it may be that many obscurities remain; but I hope they will be completely removed later, in my Replies to the Objections. One such problem, among others, is how the idea of a supremely perfect being, which is in us, possesses so much objective reality that it can come only from a cause which is supremely perfect. In the Replies this is illustrated by the comparison of a very perfect machine, the idea of which is in the mind of some engineer. Just as the objective intricacy belonging to the idea must have some cause, namely the scientific knowledge of the engineer, or of someone else who passed the idea on to him, so the idea of God which is in us must have God himself as its cause.

4 In the Fourth Meditation it is proved that everything that we clearly and distinctly perceive is true, and I also explain what the nature of falsity consists in. These results need to be known both in order to confirm what has gone before and also to make intelligible what is to come later. (But here it should be noted in passing that I do not deal at all with sin, i.e. the error which is committed in pursuing good and evil, but only with the error that occurs in distinguishing truth from falsehood. And there is no discussion of matters pertaining to faith or the conduct of life, but simply of speculative truths which are known solely by means of the natural light.)

5 In the Fifth Meditation, besides an account of corporeal nature taken in general, there is a new argument demonstrating the existence of God. Again, several difficulties may arise here, but these are resolved later in the Replies to the Objections. Finally I explain the sense in which it is true that the certainty even of geometrical demonstrations depends on the knowledge of God.

6 Lastly, in the Sixth Meditation, the intellect is distinguished from the imagination; the criteria for this distinction are explained; the mind is proved to be really distinct from the body, but is shown, notwithstanding, to be so closely joined to it that the mind and the body make up a kind of unit; there is a survey of all the errors which commonly come from the senses, and an explanation of how they may be avoided; and, lastly, there is a presentation of all the arguments which enable the existence of material things to be inferred. The great benefit of these arguments is not, in my view, that they prove what they establish—namely that there really is a world, and that human beings have bodies and so on—since no sane

person has ever seriously doubted these things. The point is that in considering these arguments we come to realize that they are not as solid or as transparent as the arguments which lead us to knowledge of our own minds and of God, so that the latter are the most certain and evident of all possible objects of knowledge for the human intellect. Indeed, this is the one thing that I set myself to prove in these Meditations. And for that reason I will not now go over the various other issues in the book which are dealt with as they come up.

MEDITATIONS ON FIRST PHILOSOPHY

in which are demonstrated the existence of God and the distinction between the human soul and the body

FIRST MEDITATION

What can be called into doubt

Some years ago I was struck by the large number of falsehoods that I had accepted as true in my childhood, and by the highly doubtful nature of the whole edifice that I had subsequently based on them. 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 and likely to last. But the task looked an enormous one, and I began to wait until I should reach a mature enough age to ensure that no subsequent time of life would be more suitable for tackling such inquiries. This led me to put the project off for so long that I would now be to blame if by pondering over it any further I wasted the time still left for carrying it out. So today I have expressly rid my mind of all worries 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 reservation to the general demolition of my opinions.

2 But to accomplish this, it will not be necessary for me to show that all my opinions are false, which is something I could perhaps never manage. Reason now leads me to think that I should hold back my assent from opinions which are not completely certain and indubitable just as carefully as I do from those which are patently false. So, for the purpose of rejecting all my opinions, it will be enough if I find in each of them at least some reason for doubt. And to do this I will not need to run through them all individually, which would be an endless task. Once the foundations of a building are undermined, anything built on them collapses of its own accord; so I will go straight for the basic principles on which all my former beliefs rested.

3 Whatever I have up till now accepted as most true I have acquired either from the senses or through the senses. But 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.

4 Yet 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? Unless perhaps I were to liken myself to madmen, whose brains are so damaged by the persistent vapours of melancholia

that they firmly maintain they are kings when they are paupers, or say they are dressed in purple when they are naked, or that their heads are made of earthenware, or that they are pumpkins, or made of glass. But such people are insane, and I would be thought equally mad if I took anything from them as a model for myself.

5 A brilliant piece of reasoning! As if I were not a man who sleeps at night, and regularly has all the same experiences while asleep as madmen do when awake—indeed sometimes even more improbable ones. How often, asleep at night, am I convinced of just such familiar events—that I am here in my dressing-gown, sitting by the fire—when in fact I am lying undressed in bed! Yet at the moment my eyes are certainly wide awake when I look at this piece of paper; I shake my head and it is not asleep; as I stretch out and feel my hand I do so deliberately, and I know what I am doing. All this would not happen with such distinctness to someone asleep. Indeed! As if I did not remember other occasions when I have been tricked by exactly similar thoughts while asleep! As I think about this more carefully, I see plainly that there are never any sure signs by means of which being awake can be distinguished from being asleep. The result is that I begin to feel dazed, and this very feeling only reinforces the notion that I may be asleep.

6 Suppose then that I am dreaming, and that these particulars—that my eyes are open, that I am moving my head and stretching out my hands—are not true. Perhaps, indeed, I do not even have such hands or such a body at all. Nonetheless, it must surely be admitted that the visions which come in sleep are like paintings, which must have been fashioned in the likeness of things that are real, and hence that at least these general kinds of things—eyes, head, hands and the body as a whole—are things which are not imaginary but are real and exist. For even when painters try to create sirens and satyrs with the most extraordinary bodies, they cannot give them natures which are new in all respects; they simply jumble up the limbs of different animals. Or if perhaps they manage to think up something so new that nothing remotely similar has ever been seen before—something which is therefore completely fictitious and unreal—at least the colours used in the composition must be real. By similar reasoning, although these general kinds of things—eyes, head, hands and so on—could be imaginary, it must at least be admitted that certain other even simpler and more universal things are real. These are as it were the real colours from which we form all the images of things, whether true or false, that occur in our thought.

7 This class appears to include corporeal nature in general, and its extension; the shape of extended things; the quantity, or size and number of these things; the place in which they may exist, the time through which they may endure, and so on.

8 So a reasonable conclusion from this might be that physics, astronomy, medicine, and all other disciplines which depend on the study of composite things, are doubtful; while arithmetic, geometry and other subjects of this kind, which deal only with the simplest and most general things, regardless of whether they really exist in nature or not, contain something certain and indubitable. For whether I am awake or asleep, two and three added together are five, and a square has no more than four sides. It seems impossible that such transparent truths should incur any suspicion of being false.

9 And yet firmly rooted in my mind is the long-standing opinion that there is an omnipotent God who made me the kind of creature that I am. How do I know that he has not brought it about that there is no earth, no sky, no extended thing,

no shape, no size, no place, while at the same time ensuring that all these things appear to me to exist just as they do now? What is more, since I sometimes believe that others go astray in cases where they think they have the most perfect knowledge, may I not similarly go wrong every time I add two and three or count the sides of a square, or in some even simpler matter, if that is imaginable? But perhaps God would not have allowed me to be deceived in this way, since he is said to be supremely good. But if it were inconsistent with his goodness to have created me such that I am deceived all the time, it would seem equally foreign to his goodness to allow me to be deceived even occasionally; yet this last assertion cannot be made.

10 Perhaps there may be some who would prefer to deny the existence of so powerful a God rather than believe that everything else is uncertain. Let us not argue with them, but grant them that everything said about God is a fiction. According to their supposition, then, I have arrived at my present state by fate or chance or a continuous chain of events, or by some other means; yet since deception and error seem to be imperfections, the less powerful they make my original cause, the more likely it is that I am so imperfect as to be deceived all the time. I have no answer to these arguments, but am finally compelled to admit that there is not one of my former beliefs about which a doubt may not properly be raised; and this is not a flippant or ill-considered conclusion, but is based on powerful and well thought-out reasons. So in future I must withhold my assent from these former beliefs just as carefully as I would from obvious falsehoods, if I want to discover any certainty.

11 But it is not enough merely to have noticed this; I must make an effort to remember it. My habitual opinions keep coming back, and, despite my wishes, they capture my belief, which is as it were bound over to them as a result of long occupation and the law of custom. I shall never get out of the habit of confidently assenting to these opinions, so long as I suppose them to be what in fact they are, namely highly probable opinions—opinions which, despite the fact that they are in a sense doubtful, as has just been shown, it is still much more reasonable to believe than to deny. In view of this, I think it will be a good plan to turn my will in completely the opposite direction and deceive myself, by pretending for a time that these former opinions are utterly false and imaginary. I shall do this until the weight of preconceived opinion is counter-balanced and the distorting influence of habit no longer prevents my judgement from perceiving things correctly. In the meantime, I know that no danger or error will result from my plan, and that I cannot possibly go too far in my distrustful attitude. This is because the task now in hand does not involve action but merely the acquisition of knowledge.

12 I will suppose therefore that not God, who is supremely good and the source of truth, but rather 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 the delusions of dreams which he has devised to ensnare my judgement. I shall consider myself as not having hands or eyes, or flesh, or blood or senses, but as falsely believing that I have all these things. I shall stubbornly and firmly persist in this meditation; and, even if it is not in my power to know any truth, I shall at least do what is in my power, that is, resolutely guard against assenting to any falsehoods, so that the deceiver, however powerful and cunning he may be, will be unable to impose on me in the slightest degree. But this is an arduous undertaking, and a kind of laziness brings me back to normal life. I am like a prisoner who is enjoying an imaginary freedom while asleep; as he begins to suspect that he is asleep, he dreads be-

ing woken up, and goes along with the pleasant illusion as long as he can. In the same way, I happily slide back into my old opinions and dread being shaken out of them, for fear that my peaceful sleep may be followed by hard labour when I wake, and that I shall have to toil not in the light, but amid the inextricable darkness of the problems I have now raised.

SECOND MEDITATION

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

[The *Cogito*]

So serious are the doubts into which I have been thrown as a result of yesterday's meditation that I can neither put them out of my mind nor see any way of resolving them. It feels as if I have fallen unexpectedly into a deep whirlpool which tumbles me around so that I can neither stand on the bottom nor swim up to the top. Nevertheless I will make an effort and once more attempt the same path which I started on yesterday. Anything which admits of the slightest doubt I will set aside just as if I had found it to be wholly false; and I will proceed in this way until I recognize something certain, or, if nothing else, until I at least recognize for certain that there is no certainty. Archimedes used to demand just one firm and immovable point in order to shift the entire earth; so I too can hope for great things if I manage to find just one thing, however slight, that is certain and unshakeable.

2 I will suppose then, that everything I see is spurious. I will believe that my memory tells me lies, and that none of the things that it reports ever happened. I have no senses. Body, shape, extension, movement and place are chimeras. So what remains true? Perhaps just the one fact that nothing is certain.

3 Yet apart from everything I have just listed, how do I know that there is not something else which does not allow even the slightest occasion for doubt? Is there not a God, or whatever I may call him, who puts into me the thoughts I am now having? But why do I think this, since I myself may perhaps be the author of these thoughts? In that case am not I, at least, something? But I have just said that I have no senses and no body. This is the sticking point: what follows from this? Am I not so bound up with a body and with senses that I cannot exist without them? But 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 I am nothing so long as I think that I am something. So after considering everything very thoroughly, I must finally conclude that this proposition, *I am, I exist*, is necessarily true whenever it is put forward by me or conceived in my mind.

[The Nature of the 'I']

4 But I do not yet have a sufficient understanding of what this 'I' is, that now necessarily exists. So I must be on my guard against carelessly taking something else to be this 'I', and so making a mistake in the very item of knowledge that I maintain is the most certain and evident of all. I will therefore go back and meditate on what I originally believed myself to be, before I embarked on this present

train of thought. I will then subtract anything capable of being weakened, even minimally, by the arguments now introduced, so that what is left at the end may be exactly and only what is certain and unshakeable.

5 What then did I formerly think I was? A man. But what is a man? Shall I say 'a rational animal'? No; for then I should have to inquire what an animal is, what rationality is, and in this way one question would lead me down the slope to other harder ones, and I do not now have the time to waste on subtleties of this kind. Instead I propose to concentrate on what came into my thoughts spontaneously and quite naturally whenever I used to consider what I was. Well, the first thought to come to mind was that I had a face, hands, arms and the whole mechanical structure of limbs which can be seen in a corpse, and which I called the body. The next thought was that I was nourished, that I moved about, and that I engaged in sense-perception and thinking; and these actions I attributed to the soul. But as to the nature of this soul, either I did not think about this or else I imagined it to be something tenuous, like a wind or fire or ether, which permeated my more solid parts. As to the body, however, I had no doubts about it, but thought I knew its nature distinctly. If I had tried to describe the mental conception I had of it, I would have expressed it as follows: by a body I understand whatever has a determinable shape and a definable location and can occupy a space in such a way as to exclude any other body; it can be perceived by touch, sight, hearing, taste or smell, and can be moved in various ways, not by itself but by whatever else comes into contact with it. For, according to my judgement, the power of self-movement, like the power of sensation or of thought, was quite foreign to the nature of a body; indeed, it was a source of wonder to me that certain bodies were found to contain faculties of this kind.

6 But what shall I now say that I am, when I am supposing that there is some supremely powerful and, if it is permissible to say so, malicious deceiver, who is deliberately trying to trick me in every way he can? Can I now assert that I possess even the most insignificant of all the attributes which I have just said belong to the nature of a body? I scrutinize them, think about them, go over them again, but nothing suggests itself; it is tiresome and pointless to go through the list once more. But 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. At present I am not admitting anything except what is necessarily true. I am, then, in the strict sense only a thing that thinks; that is, I am a mind, or intelligence, or intellect, or reason—words whose meaning I have been ignorant of until now. But for all that I am a thing which is real and which truly exists. But what kind of a thing? As I have just said—a thinking thing.

7 What else am I? I will use my imagination. I am not that structure of limbs which is called a human body. I am not even some thin vapour which permeates the limbs—a wind, fire, air, breath, or whatever I depict in my imagination; for these are things which I have supposed to be nothing. Let this supposition stand; for all that I am still something. And yet may it not perhaps be the case that these very things which I am supposing to be nothing, because they are unknown

to me, are in reality identical with the 'I' of which I am aware? I do not know, and for the moment I shall not argue the point, since I can make judgements only about things which are known to me. I know that I exist; the question is, what is this 'I' that I know? If the 'I' is understood strictly as we have been taking it, then it is quite certain that knowledge of it does not depend on things of whose existence I am as yet unaware; so it cannot depend on any of the things which I invent in my imagination. And this very word 'invent' shows me my mistake. It would indeed be a case of fictitious invention if I used my imagination to establish that I was something or other; for imagining is simply contemplating the shape or image of a corporeal thing. Yet now I know for certain both that I exist and at the same time that all such images and, in general, everything relating to the nature of body, could be mere dreams (and chimeras). Once this point has been grasped, to say 'I will use my imagination to get to know more distinctly what I am' would seem to be as silly as saying 'I am now awake, and see some truth; but since my vision is not yet clear enough, I will deliberately fall asleep so that my dreams may provide a truer and clearer representation.' I thus realize that none of the things that the imagination enables me to grasp is at all relevant to this knowledge of myself which I possess, and that the mind must therefore be most carefully diverted from such things if it is to perceive its own nature as distinctly as possible.

8 But what then am I? A thing that thinks. What is that? A thing that doubts, understands, affirms, denies, is willing, is unwilling, and also imagines and has sensory perceptions.

9 This is a considerable list, if everything on it belongs to me. But does it? Is it not one and the same 'I' who is now doubting almost everything, who nonetheless understands some things, who affirms that this one thing is true, denies everything else, desires to know more, is unwilling to be deceived, imagines many things even involuntarily, and is aware of many things which apparently come from the senses? Are not all these things just as true as the fact that I exist, even if I am asleep all the time, and even if he who created me is doing all he can to deceive me? Which of all these activities is distinct from my thinking? Which of them can be said to be separate from myself? The fact that it is I who am doubting and understanding and willing is so evident that I see no way of making it any clearer. But it is also the case that the 'I' who imagines is the same 'I'. For even if, as I have supposed, none of the objects of imagination are real, the power of imagination is something which really exists and is part of my thinking. Lastly, it is also the same 'I' who has sensory perceptions, or is aware of bodily things as it were through the senses. For example, I am now seeing light, hearing a noise, feeling heat. But I am asleep, so all this is false. Yet I certainly *seem* to see, to hear, and to be warmed. This cannot be false; what is called 'having a sensory perception' is strictly just this, and in this restricted sense of the term it is simply thinking.

[Knowledge of Bodies, Knowledge of the 'I']

10 From all this I am beginning to have a rather better understanding of what I am. But it still appears—and I cannot stop thinking this—that the corporeal things of which images are formed in my thought, and which the senses investigate, are known with much more distinctness than this puzzling 'I' which cannot be pictured in the imagination. And yet it is surely surprising that I should have a more distinct grasp of things which I realize are doubtful, unknown and foreign to me, than I have of that which is true and known—my own self. But I see what it is: my mind enjoys wandering off and will not yet submit to being restrained within the bounds of truth. Very well then; just this once let us give it a completely free

rein, so that after a while, when it is time to tighten the reins, it may more readily submit to being curbed.

11 Let us consider the things which people commonly think they understand most distinctly of all; that is, the bodies which we touch and see. I do not mean bodies in general—for general perceptions are apt to be somewhat more confused—but one particular body. Let us take, for example, this piece of wax. It has just been taken from the honeycomb; it has not yet quite lost the taste of the honey; it retains some of the scent of the flowers from which it was gathered; its colour, shape and size are plain to see; it is hard, cold and can be handled without difficulty; if you rap it with your knuckle it makes a sound. In short, it has everything which appears necessary to enable a body to be known as distinctly as possible. But even as I speak, I put the wax by the fire, and look: the residual taste is eliminated, the smell goes away, the colour changes, the shape is lost, the size increases; it becomes liquid and hot; you can hardly touch it, and if you strike it, it no longer makes a sound. But does the same wax remain? It must be admitted that it does; no one denies it, no one thinks otherwise. So what was it in the wax that I understood with such distinctness? Evidently none of the features which I arrived at by means of the senses; for whatever came under taste, smell, sight, touch or hearing has now altered—yet the wax remains.

12 Perhaps the answer lies in the thought which now comes to my mind; namely, the wax was not after all the sweetness of the honey, or the fragrance of the flowers, or the whiteness, or the shape, or the sound, but was rather a body which presented itself to me in these various forms a little while ago, but which now exhibits different ones. But what exactly is it that I am now imagining? Let us concentrate, take away everything which does not belong to the wax, and see what is left: merely something extended, flexible and changeable. But what is meant here by ‘flexible’ and ‘changeable’? Is it what I picture in my imagination: that this piece of wax is capable of changing from a round shape to a square shape, or from a square shape to a triangular shape? Not at all; for I can grasp that the wax is capable of countless changes of this kind, yet I am unable to run through this immeasurable number of changes in my imagination, from which it follows that it is not the faculty of imagination that gives me my grasp of the wax as flexible and changeable. And what is meant by ‘extended’? Is the extension of the wax also unknown? For it increases if the wax melts, increases again if it boils, and is greater still if the heat is increased. I would not be making a correct judgement about the nature of wax unless I believed it capable of being extended in many more different ways than I will ever encompass in my imagination. I must therefore admit that the nature of this piece of wax is in no way 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.) But what is this wax which is perceived by the mind alone? It is of course the same wax which I see, which I touch, which I picture in my imagination, in short the same wax which I thought it to be from the start. And yet, and here is the point, the perception I have of it is a case not of vision or touch or imagination—nor has it ever been, despite previous appearances—but of purely mental scrutiny; and this can be imperfect and confused, as it was before, or clear and distinct as it is now, depending on how carefully I concentrate on what the wax consists in.

13 But as I reach this conclusion I am amazed at how (weak and) prone to error my mind is. For although I am thinking about these matters within myself, silently and without speaking, nonetheless the actual words bring me up short, and I am

almost tricked by ordinary ways of talking. We say that we see the wax itself, if it is there before us, not that we judge it to be there from its colour or shape; and this might lead me to conclude without more ado that knowledge of the wax comes from what the eye sees, and not from the scrutiny of the mind alone. But then if I look out of the window and see men crossing the square, as I just happen to have done, I normally 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 which could conceal automata? I *judge* that they are men. And so something which I thought I was seeing with my eyes is in fact grasped solely by the faculty of judgement which is in my mind.

14 However, one who wants to achieve knowledge above the ordinary level should feel ashamed at having taken ordinary ways of talking as a basis for doubt. So let us proceed, and consider on which occasion my perception of the nature of the wax was more perfect and evident. Was it when I first looked at it, and believed I knew it by my external senses, or at least by what they call the ‘common’ sense—that is, the power of imagination? Or is my knowledge more perfect now, after a more careful investigation of the nature of the wax and of the means by which it is known? Any doubt on this issue would clearly be foolish; for what distinctness was there in my earlier perception? Was there anything in it which an animal could not possess? But when I distinguish the wax from its outward forms—take the clothes off, as it were, and consider it naked—then although my judgement may still contain errors, at least my perception now requires a human mind.

15 But what am I to say about this mind, or about myself? (So far, remember, I am not admitting that there is anything else in me except a mind.) What, I ask, is this ‘I’ which seems to perceive the wax so distinctly? Surely my awareness of my own self is not merely much truer and more certain than my awareness of the wax, but also much more distinct and evident. For if I judge that the wax exists from the fact that I see it, clearly this same fact entails much more evidently that I myself also exist. It is possible that what I see is not really the wax; it is possible that I do not 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. By the same token, if I judge that the wax exists from the fact that I touch it, the same result follows, namely that I exist. If I judge that it exists from the fact that I imagine it, or for any other reason, exactly the same thing follows. And the result that I have grasped in the case of the wax may be applied to everything else located outside me. Moreover, if my perception of the wax seemed more distinct after it was established not just by sight or touch but by many other considerations, it must be admitted that I now know myself even more distinctly. This is because every consideration whatsoever which contributes to my perception of the wax, or of any other body, cannot but establish even more effectively the nature of my own mind. But besides this, there is so much else in the mind itself which can serve to make my knowledge of it more distinct, that it scarcely seems worth going through the contributions made by considering bodily things.

16 I see that without any effort I have now finally got back to where I wanted. I now know that even bodies are not strictly perceived by the senses or the faculty of imagination but by the intellect alone, and that this perception derives not from their being touched or seen but from their being understood; and in view of this I know plainly that I can achieve an easier and more evident perception of my own mind than of anything else. But since the habit of holding on to old opinions can-

not be set aside so quickly, I should like to stop here and meditate for some time on this new knowledge I have gained, so as to fix it more deeply in my memory.

THIRD MEDITATION

The existence of God

[The 'Clear and Distinct Perception' Rule]

I will now shut my eyes, stop my ears, and withdraw all my senses. I will eliminate from my thoughts all images of bodily things, or rather, since this is hardly possible, I will regard all such images as vacuous, false and worthless. I will converse with myself and scrutinize myself more deeply; and in this way I will attempt to achieve, little by little, a more intimate knowledge of myself. I am a thing that thinks: that is, a thing that doubts, affirms, denies, understands a few things, is ignorant of many things, is willing, is unwilling, and also which imagines and has sensory perceptions; for as I have noted before, even though the objects of my sensory experience and imagination may have no existence outside me, nonetheless the modes of thinking which I refer to as cases of sensory perception and imagination, in so far as they are simply modes of thinking, do exist within me—of that I am certain.

2 In this brief list I have gone through everything I truly know, or at least everything I have so far discovered that I know. Now I will cast around more carefully to see whether there may be other things within me which I have not yet noticed. I am certain that I am a thinking thing. Do I not therefore also know what is required for my being certain about anything? 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.

3 Yet I previously accepted as wholly certain and evident many things which I afterwards realized were doubtful. What were these? The earth, sky, stars, and everything else that I apprehended with the senses. But what was it about them that I perceived clearly? Just that the ideas, or thoughts, of such things appeared before my mind. Yet even now I am not denying that these ideas occur within me. But there was something else which I used to assert, and which through habitual belief I thought I perceived clearly, although I did not in fact do so. This was that there were things outside me which were the sources of my ideas and which resembled them in all respects. Here was my mistake; or at any rate, if my judgement was true, it was not thanks to the strength of my perception.

4 But what about when I was considering something very simple and straightforward in arithmetic or geometry, for example that two and three added together make five, and so on? Did I not see at least these things clearly enough to affirm their truth? Indeed, the only reason for my later judgement that they were open to doubt was that it occurred to me that perhaps some God could have given me a nature such that I was deceived even in matters which seemed most evident. And whenever my preconceived belief in the supreme power of God comes to mind, I cannot but admit that it would be easy for him, if he so desired, to bring it about that I go wrong even in those matters which I think I see utterly clearly with my mind's eye. Yet when I turn to the things themselves which I think I perceive very clearly, I am so convinced by them that I spontaneously declare: let whoever can

do so deceive me, he will never bring it about that I am nothing, so long as I continue to think I am something; or make it true at some future time that I have never existed, since it is now true that I exist; or bring it about that two and three added together are more or less than five, or anything of this kind in which I see a manifest contradiction. And since I have no cause to think that there is a deceiving God, and I do not yet even know for sure whether there is a God at all, any reason for doubt which depends simply on this supposition is a very slight and, so to speak, metaphysical one. But in order to remove even this slight reason for doubt, as soon as the opportunity arises 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.

[Ideas: Classification and Origins]

5 First, however, considerations of order appear to dictate that I now classify my thoughts into definite kinds, and ask which of them can properly be said to be the bearers of truth and falsity. Some of my thoughts are as it were the images of things, and it is only in these cases that the term 'idea' is strictly appropriate—for example, when I think of a man, or a chimera, or the sky, or an angel, or God. Other thoughts have various additional forms: thus when I will, or am afraid, or affirm, or deny, there is always a particular thing which I take as the object of my thought, but my thought includes something more than the likeness of that thing. Some thoughts in this category are called volitions or emotions, while others are called judgements.

6 Now as far as ideas are concerned, provided they are considered solely in themselves and I do not refer them to anything else, they cannot strictly speaking be false; for whether it is a goat or a chimera that I am imagining, it is just as true that I imagine the former as the latter. As for the will and the emotions, here too one need not worry about falsity; for even if the things which I may desire are wicked or even non-existent, that does not make it any less true that I desire them. Thus the only remaining thoughts where I must be on my guard against making a mistake are judgements. And the chief and most common mistake which is to be found here consists in my judging that the ideas which are in me resemble, or conform to, things located outside me. Of course, if I considered just the ideas themselves simply as modes of my thought, without referring them to anything else, they could scarcely give me any material for error.

7 Among my ideas, some appear to be innate, some to be adventitious, and others to have been invented by me. My understanding of what a thing is, what truth is, and what thought is, seems to derive simply from my own nature. But my hearing a noise, as I do now, or seeing the sun, or feeling the fire, comes from things which are located outside me, or so I have hitherto judged. Lastly, sirens, hippogriffs and the like are my own invention. But perhaps all my ideas may be thought of as adventitious, or they may all be innate, or all made up; for as yet I have not clearly perceived their true origin.

8 But the chief question at this point concerns the ideas which I take to be derived from things existing outside me: what is my reason for thinking that they resemble these things? Nature has apparently taught me to think this. But in addition I know by experience that these ideas do not depend on my will, and hence that they do not depend simply on me. Frequently I notice them even when I do not want to: now, for example, I feel the heat whether I want to or not, and this is why I think that this sensation or idea of heat comes to me from something other

than myself, namely the heat of the fire by which I am sitting. And the most obvious judgement for me to make is that the thing in question transmits to me its own likeness rather than something else.

9 I will now see if these arguments are strong enough. When I say 'Nature taught me to think this', all I mean is that a spontaneous impulse leads me to believe it, not that its truth has been revealed to me by some natural light. There is a big difference here. Whatever is revealed to me by the natural light—for example that from the fact that I am doubting it follows that I exist, and so on—cannot in any way be open to doubt. This is because there cannot be another faculty both as trustworthy as the natural light and also capable of showing me that such things are not true. But as for my natural impulses, I have often judged in the past that they were pushing me in the wrong direction when it was a question of choosing the good, and I do not see why I should place any greater confidence in them in other matters.

10 Then again, although these ideas do not depend on my will, it does not follow that they must come from things located outside me. Just as the impulses which I was speaking of a moment ago seem opposed to my will even though they are within me, so there may be some other faculty not yet fully known to me, which produces these ideas without any assistance from external things; this is, after all, just how I have always thought ideas are produced in me when I am dreaming.

11 And finally, even if these ideas did come from things other than myself, it would not follow that they must resemble those things. Indeed, I think I have often discovered a great disparity (between an object and its idea) in many cases. For example, there are two different ideas of the sun which I find within me. One of them, which is acquired as it were from the senses and which is a prime example of an idea which I reckon to come from an external source, makes the sun appear very small. The other idea is based on astronomical reasoning, that is, it is derived from certain notions which are innate in me (or else it is constructed by me in some other way), and this idea shows the sun to be several times larger than the earth. Obviously both these ideas cannot resemble the sun which exists outside me; and reason persuades me that the idea which seems to have emanated most directly from the sun itself has in fact no resemblance to it at all.

12 All these considerations are enough to establish that it is not reliable judgement but merely some blind impulse that has made me believe up till now that there exist things distinct from myself which transmit to me ideas or images of themselves through the sense organs or in some other way.

[The First Causal Argument]

13 But it now occurs to me that there is another way of investigating whether some of the things of which I possess ideas exist outside me. In so far as the ideas are (considered) simply (as) modes of thought, there is no recognizable inequality among them: they all appear to come from within me in the same fashion. But in so far as different ideas (are considered as images which) represent different things, it is clear that they differ widely. Undoubtedly, the ideas which represent substances to me amount to something more and, so to speak, contain within themselves more objective reality than the ideas which merely represent modes or accidents. Again, the idea that gives me my understanding of a supreme God, eternal, infinite, (immutable,) omniscient, omnipotent and the creator of all things that exist apart from him, certainly has in it more objective reality than the ideas that represent finite substances.

14 Now it is manifest by the natural light that there must be at least as much (reality) in the efficient and total cause as in the effect of that cause. For where, I ask, could the effect get its reality from, if not from the cause? And how could the cause give it to the effect unless it possessed it? It follows from this both that something cannot arise from nothing, and also that what is more perfect—that is, contains in itself more reality—cannot arise from what is less perfect. And this is transparently true not only in the case of effects which possess (what the philosophers call) actual or formal reality, but also in the case of ideas, where one is considering only (what they call) objective reality. A stone, for example, which previously did not exist, cannot begin to exist unless it is produced by something which contains, either formally or eminently everything to be found in the stone; similarly, heat cannot be produced in an object which was not previously hot, except by something of at least the same order (degree or kind) of perfection as heat, and so on. But it is also true that the idea of heat, or of a stone, cannot exist in me unless it is put there by some cause which contains at least as much reality as I conceive to be in the heat or in the stone. For although this cause does not transfer any of its actual or formal reality to my idea, it should not on that account be supposed that it must be less real. The nature of an idea is such that of itself it requires no formal reality except what it derives from my thought, of which it is a mode. But in order for a given idea to contain such and such objective reality, it must surely derive it from some cause which contains at least as much formal reality as there is objective reality in the idea. For if we suppose that an idea contains something which was not in its cause, it must have got this from nothing; yet the mode of being by which a thing exists objectively (or representatively) in the intellect by way of an idea, imperfect though it may be, is certainly not nothing, and so it cannot come from nothing.

15 And although the reality which I am considering in my ideas is merely objective reality, I must not on that account suppose that the same reality need not exist formally in the causes of my ideas, but that it is enough for it to be present in them objectively. For just as the objective mode of being belongs to ideas by *their* very nature, so the formal mode of being belongs to the causes of ideas—or at least the first and most important ones—by their very nature. And although one idea may perhaps originate from another, there cannot be an infinite regress here; eventually one must reach a primary idea, the cause of which will be like an archetype which contains formally (and in fact) all the reality (or perfection) which is present only objectively (or representatively) in the idea. So it is clear to me, by the natural light, that the ideas in me are like (pictures, or) images which can easily fall short of the perfection of the things from which they are taken, but which cannot contain anything greater or more perfect.

16 The longer and more carefully I examine all these points, the more clearly and distinctly I recognize their truth. But what is my conclusion to be? If the objective reality of any of my ideas turns out to be so great that I am sure the same reality does not reside in me, either formally or eminently, and hence that I myself cannot be its cause, it will necessarily follow that I am not alone in the world, but that some other thing which is the cause of this idea also exists. But if no such idea is to be found in me, I shall have no argument to convince me of the existence of anything apart from myself. For despite a most careful and comprehensive survey, this is the only argument I have so far been able to find.

17 Among my ideas, apart from the idea which gives me a representation of myself, which cannot present any difficulty in this context, there are ideas which var-

iously represent God, corporeal and inanimate things, angels, animals and finally other men like myself.

18 As far as concerns the ideas which represent other men, or animals, or angels, I have no difficulty in understanding that they could be put together from the ideas I have of myself, of corporeal things and of God, even if the world contained no men besides me, no animals and no angels.

19 As to my ideas of corporeal things, I can see nothing in them which is so great (or excellent) as to make it seem impossible that it originated in myself. For if I scrutinize them thoroughly and examine them one by one, in the way in which I examined the idea of the wax yesterday, I notice that the things which I perceive clearly and distinctly in them are very few in number. The list comprises size, or extension in length, breadth and depth; shape, which is a function of the boundaries of this extension; position, which is a relation between various items possessing shape; and motion, or change in position; to these may be added substance, duration and number. But as for all the rest, including light and colours, sounds, smells, tastes, heat and cold and the other tactile qualities, I think of these only in a very confused and obscure way, to the extent that I do not even know whether they are true or false, that is, whether the ideas I have of them are ideas of real things or of non-things. For although, as I have noted before, falsity in the strict sense, or formal falsity, can occur only in judgements, there is another kind of falsity, material falsity, which occurs in ideas, when they represent non-things as things. For example, the ideas which I have of heat and cold contain so little clarity and distinctness that they do not enable me to tell whether cold is merely the absence of heat or vice versa, or whether both of them are real qualities, or neither is. And since there can be no ideas which are not as it were of things, if it is true that cold is nothing but the absence of heat, the idea which represents it to me as something real and positive deserves to be called false; and the same goes for other ideas of this kind.

20 Such ideas obviously do not require me to posit a source distinct from myself. For on the one hand, if they are false, that is, represent non-things, I know by the natural light that they arise from nothing—that is, they are in me only because of a deficiency and lack of perfection in my nature. If on the other hand they are true, then since the reality which they represent is so extremely slight that I cannot even distinguish it from a non-thing, I do not see why they cannot originate from myself.

21 With regard to the clear and distinct elements in my ideas of corporeal things, it appears that I could have borrowed some of these from my idea of myself, namely substance, duration, number and anything else of this kind. For example, I think that a stone is a substance, or is a thing capable of existing independently, and I also think that I am a substance. Admittedly I conceive of myself as a thing that thinks and is not extended, whereas I conceive of the stone as a thing that is extended and does not think, so that the two conceptions differ enormously; but they seem to agree with respect to the classification 'substance'. Again, I perceive that I now exist, and remember that I have existed for some time; moreover, I have various thoughts which I can count; it is in these ways that I acquire the ideas of duration and number which I can then transfer to other things. As for all the other elements which make up the ideas of corporeal things, namely extension, shape, position and movement, these are not formally contained in me, since I am nothing but a thinking thing; but since they are merely modes of a substance, and I am a substance, it seems possible that they are contained in me eminently.

22 So there remains only the idea of God; and I must consider whether there is anything in the idea which could not have originated in myself. By the word 'God' I understand 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. All these attributes are such that, the more carefully I concentrate on them, the less possible it seems that they could have originated from me alone. So from what has been said it must be concluded that God necessarily exists.

23 It is true that I have the idea of substance in me in virtue of the fact that I am a substance; but this would not account for my having the idea of an infinite substance, when I am finite, unless this idea proceeded from some substance which really was infinite.

24 And I must not think that, just as my conceptions of rest and darkness are arrived at by negating movement and light, so my perception of the infinite is arrived at not by means of a true idea but merely by negating the finite. On the contrary, I clearly understand that there is more reality in an infinite substance than in a finite one, and hence that my perception of the infinite, that is God, is in some way prior to my perception of the finite, that is myself. For how could I understand that I doubted or desired—that is, lacked something—and that I was not wholly perfect, unless there were in me some idea of a more perfect being which enabled me to recognize my own defects by comparison?

25 Nor can it be said that this idea of God is perhaps materially false and so could have come from nothing, which is what I observed just a moment ago in the case of the ideas of heat and cold, and so on. On the contrary, it is utterly clear and distinct, and contains in itself more objective reality than any other idea; hence there is no idea which is in itself truer or less liable to be suspected of falsehood. This idea of a supremely perfect and infinite being is, I say, true in the highest degree; for although perhaps one may imagine that such a being does not exist, it cannot be supposed that the idea of such a being represents something unreal, as I said with regard to the idea of cold. The idea is, moreover, utterly clear and distinct; for whatever I clearly and distinctly perceive as being real and true, and implying any perfection, is wholly contained in it. It does not matter that I do not grasp the infinite, or that there are countless additional attributes of God which I cannot in any way grasp, and perhaps cannot even reach in my thought; for it is in the nature of the infinite not to be grasped by a finite being like myself. It is enough that I understand the infinite, and that I judge that all the attributes which I clearly perceive and know to imply some perfection—and perhaps countless others of which I am ignorant—are present in God either formally or eminently. This is enough to make the idea that I have of God the truest and most clear and distinct of all my ideas.

26 But perhaps I am something greater than I myself understand, and all the perfections which I attribute to God are somehow in me potentially, though not yet emerging or actualized. For I am now experiencing a gradual increase in my knowledge, and I see nothing to prevent its increasing more and more to infinity. Further, I see no reason why I should not be able to use this increased knowledge to acquire all the other perfections of God. And finally, if the potentiality for these perfections is already within me, why should not this be enough to generate the idea of such perfections?

27 But all this is impossible. First, though it is true that there is a gradual increase in my knowledge, and that I have many potentialities which are not yet actual, this

is all quite irrelevant to the idea of God, which contains absolutely nothing that is potential; indeed, this gradual increase in knowledge is itself the surest sign of imperfection. What is more, even if my knowledge always increases more and more, I recognize that it will never actually be infinite, since it will never reach the point where it is not capable of a further increase; God, on the other hand, I take to be actually infinite, so that nothing can be added to his perfection. And finally, I perceive that the objective being of an idea cannot be produced merely by potential being, which strictly speaking is nothing, but only by actual or formal being.

[The Second Causal Argument]

28 If one concentrates carefully, all this is quite evident by the natural light. But when I relax my concentration, and my mental vision is blinded by the images of things perceived by the senses, it is not so easy for me to remember why the idea of a being more perfect than myself must necessarily proceed from some being which is in reality more perfect. I should therefore like to go further and inquire whether I myself, who have this idea, could exist if no such being existed.

29 From whom, in that case, would I derive my existence? From myself presumably, or from my parents, or from some other beings less perfect than God; for nothing more perfect than God, or even as perfect, can be thought of or imagined.

30 Yet if I derived my existence from myself, then I should neither doubt nor want, nor lack anything at all; for I should have given myself all the perfections of which I have any idea, and thus I should myself be God. I must not suppose that the items I lack would be more difficult to acquire than those I now have. On the contrary, it is clear that, since I am a thinking thing or substance, it would have been far more difficult for me to emerge out of nothing than merely to acquire knowledge of the many things of which I am ignorant—such knowledge being merely an accident of that substance. And if I had derived my existence from myself, which is a greater achievement, I should certainly not have denied myself the knowledge in question, which is something much easier to acquire, or indeed any of the attributes which I perceive to be contained in the idea of God; for none of them seem any harder to achieve. And if any of them were harder to achieve, they would certainly appear so to me, if I had indeed got all my other attributes from myself, since I should experience a limitation of my power in this respect.

31 I do not escape the force of these arguments by supposing that I have always existed as I do now, as if it followed from this that there was no need to look for any author of my existence. For a lifespan can be divided into countless parts, each completely independent of the others, so that it does not follow from the fact that I existed a little while ago that I must exist now, unless there is some cause which as it were creates me afresh at this moment—that is, which preserves me. For it is quite clear to anyone who attentively considers the nature of time that the same power and action are needed to preserve anything at each individual moment of its duration as would be required to create that thing anew if it were not yet in existence. Hence the distinction between preservation and creation is only a conceptual one, and this is one of the things that are evident by the natural light.

32 I must therefore now ask myself whether I possess some power enabling me to bring it about that I who now exist will still exist a little while from now. For since I am nothing but a thinking thing—or at least since I am now concerned only and precisely with that part of me which is a thinking thing—if there were such a

power in me, I should undoubtedly be aware of it. But I experience no such power, and this very fact makes me recognize most clearly that I depend on some being distinct from myself.

33 But perhaps this being is not God, and perhaps I was produced either by my parents or by other causes less perfect than God. No; for as I have said before, it is quite clear that there must be at least as much in the cause as in the effect. And therefore whatever kind of cause is eventually proposed, since I am a thinking thing and have within me some idea of God, it must be admitted that what caused me is itself a thinking thing and possesses the idea of all the perfections which I attribute to God. In respect of this cause one may again inquire whether it derives its existence from itself or from another cause. If from itself, then it is clear from what has been said that it is itself God, since if it has the power of existing through its own might, then undoubtedly it also has the power of actually possessing all the perfections of which it has an idea—that is, all the perfections which I conceive to be in God. If, on the other hand, it derives its existence from another cause, then the same question may be repeated concerning this further cause, namely whether it derives its existence from itself or from another cause, until eventually the ultimate cause is reached, and this will be God.

34 It is clear enough that an infinite regress is impossible here, especially since I am dealing not just with the cause that produced me in the past, but also and most importantly with the cause that preserves me at the present moment.

35 Nor can it be supposed that several partial causes contributed to my creation, or that I received the idea of one of the perfections which I attribute to God from one cause and the idea of another from another—the supposition here being that all the perfections are to be found somewhere in the universe but not joined together in a single being, God. On the contrary, the unity, the simplicity, or the inseparability of all the attributes of God is one of the most important of the perfections which I understand him to have. And surely the idea of the unity of all his perfections could not have been placed in me by any cause which did not also provide me with the ideas of the other perfections; for no cause could have made me understand the interconnection and inseparability of the perfections without at the same time making me recognize what they were.

36 Lastly, as regards my parents, even if everything I have ever believed about them is true, it is certainly not they who preserve me; and in so far as I am a thinking thing, they did not even make me; they merely placed certain dispositions in the matter which I have always regarded as containing me, or rather my mind, for that is all I now take myself to be. So there can be no difficulty regarding my parents in this context. Altogether then, it must be concluded that the mere fact that I exist and have within me an idea of a most perfect being, that is, God, provides a very clear proof that God indeed exists.

37 It only remains for me to examine how I received this idea from God. For I did not acquire it from the senses; it has never come to me unexpectedly, as usually happens with the ideas of things that are perceivable by the senses, when these things present themselves to the external sense organs—or seem to do so. And it was not invented by me either; for I am plainly unable either to take away anything from it or to add anything to it. The only remaining alternative is that it is innate in me, just as the idea of myself is innate in me.

38 And indeed 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—not that the mark need be anything distinct from the work itself. But the mere fact

that God created me is a very strong basis for believing that I am somehow made in his image and likeness, and that I perceive that likeness, which includes the idea of God, by the same faculty which enables me to perceive myself. That is, when I turn my mind's eye upon myself, I understand that I am a thing which is incomplete and dependent on another and which aspires without limit to ever greater and better things; but I also understand at the same time that he on whom I depend has within him all those greater things, not just indefinitely and potentially but actually and infinitely, and hence that he is God. The whole force of the argument lies in this: I recognize that it would be impossible for me to exist with the kind of nature I have—that is, having within me the idea of God—were it not the case that God really existed. By 'God' I mean the very being the idea of whom is within me, that is, the possessor of all the perfections which I cannot grasp, but can somehow reach in my thought, 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.

39 But before examining this point more carefully and investigating other truths which may be derived from it, I should like to pause here and spend some time in the contemplation of God; to reflect on his attributes, and to gaze with wonder and adoration on the beauty of this immense light, so far as the eye of my darkened intellect can bear it. For just as we believe through faith that the supreme happiness of the next life consists solely in the contemplation of the divine majesty, so experience tells us that this same contemplation, albeit much less perfect, enables us to know the greatest joy of which we are capable in this life.

FOURTH MEDITATION

Truth and falsity

[The Problem of Error: Cognitive Error]

During these past few days I have accustomed myself to leading my mind away from the senses; and I have taken careful note of the fact that there is very little about corporeal things that is truly perceived, whereas much more is known about the human mind, and still more about God. The result is that I now have no difficulty in turning my mind away from imaginable things and towards things which are objects of the intellect alone and are totally separate from matter. And indeed the idea I have of the human mind, in so far as it is a thinking thing, which is not extended in length, breadth or height and has no other bodily characteristics, is much more distinct than the idea of any corporeal thing. And when I consider the fact that I have doubts, or that I am a thing that is incomplete and dependent, then there arises in me a clear and distinct idea of a being who is independent and complete, that is, an idea of God. And from the mere fact that there is such an idea within me, or that I who possess this idea exist, I clearly infer that God also exists, and that every single moment of my entire existence depends on him. So clear is this conclusion that I am confident that the human intellect cannot know anything that is more evident or more certain. 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.

2 To begin with, I recognize that it is impossible that God should ever deceive me. For in every case of trickery or deception some imperfection is to be found; and although the ability to deceive appears to be an indication of cleverness or

power, the will to deceive is undoubtedly evidence of malice or weakness, and so cannot apply to God.

3 Next, I know by experience that there is in me a faculty of judgement which, like everything else which is in me, I certainly received from God. And since God does not wish to deceive me, he surely did not give me the kind of faculty which would ever enable me to go wrong while using it correctly.

4 There would be no further doubt on this issue were it not that what I have just said appears to imply that I am incapable of ever going wrong. For if everything that is in me comes from God, and he did not endow me with a faculty for making mistakes, it appears that I can never go wrong. And certainly, so long as I think only of God, and turn my whole attention to him, I can find no cause of error or falsity. But when I turn back to myself, I know by experience that I am prone to countless errors. On looking for the cause of these errors, I find that I possess not only a real and positive idea of God, or a being who is supremely perfect, but also what may be described as a negative idea of nothingness, or of that which is farthest removed from all perfection. I realize that I am, as it were, something intermediate between God and nothingness, or between supreme being and non-being: my nature is such that in so far as I was created by the supreme being, there is nothing in me to enable me to go wrong or lead me astray; but in so far as I participate in nothingness or non-being, that is, in so far as I am not myself the supreme being and am lacking in countless respects, it is no wonder that I make mistakes. I understand, then, that error as such is not something real which depends on God, but merely a defect. Hence my going wrong does not require me to have a faculty specially bestowed on me by God; it simply happens as a result of the fact that the faculty of true judgement which I have from God is in my case not infinite.

5 But this is still not entirely satisfactory. For error is not a pure negation, but rather a privation or lack of some knowledge which somehow should be in me. And when I concentrate on the nature of God, it seems impossible that he should have placed in me a faculty which is not perfect of its kind, or which lacks some perfection which it ought to have. The more skilled the craftsman the more perfect the work produced by him; if this is so, how can anything produced by the supreme creator of all things not be complete and perfect in all respects? There is, moreover, no doubt that God could have given me a nature such that I was never mistaken; again, there is no doubt that he always wills what is best. Is it then better that I should make mistakes than that I should not do so?

[Solution to the Problem of Error]

6 As I reflect on these matters more attentively, it occurs to me first of all that it is no cause for surprise if I do not understand the reasons for some of God's actions; and there is no call to doubt his existence if I happen to find that there are other instances where I do not grasp why or how certain things were made by him. For since I now know that my own nature is very weak and limited, whereas the nature of God is immense, incomprehensible and infinite, I also know without more ado that he is capable of countless things whose causes are beyond my knowledge. And for this reason alone I consider the customary search for final causes to be totally useless in physics; there is considerable rashness in thinking myself capable of investigating the (impenetrable) purposes of God.

7 It also occurs to me that whenever we are inquiring whether the works of God are perfect, we ought to look at the whole universe, not just at one created thing

on its own. For what would perhaps rightly appear very imperfect if it existed on its own is quite perfect when its function as a part of the universe is considered. It is true that, since my decision to doubt everything, it is so far only myself and God whose existence I have been able to know with certainty; but after considering the immense power of God, I cannot deny that many other things have been made by him, or at least could have been made, and hence that I may have a place in the universal scheme of things.

8 Next, when I look more closely at myself and inquire into the nature of my errors (for these are the only evidence of some imperfection in me), I notice that they depend on two concurrent causes, namely on the faculty of knowledge which is in me, and on the faculty of choice or freedom of the will; that is, they depend on both the intellect and the will simultaneously. Now all that 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 in the proper sense of that term. For although countless things may exist without there being any corresponding ideas in me, it should not, strictly speaking, be said that I am deprived of these ideas, but merely that I lack them, in a negative sense. This is because I cannot produce any reason to prove that God ought to have given me a greater faculty of knowledge than he did; and no matter how skilled I understand a craftsman to be, this does not make me think he ought to have put into every one of his works all the perfections which he is able to put into some of them. Besides, I cannot complain that the will or freedom of choice which I received from God is not sufficiently extensive or perfect, since I know by experience that it is not restricted in any way. Indeed, I think it is very noteworthy that there is nothing else in me which is so perfect and so great that the possibility of a further increase in its perfection or greatness is beyond my understanding. If, for example, I consider the faculty of understanding, I immediately recognize that in my case it is extremely slight and very finite, and I at once form the idea of an understanding which is much greater—indeed supremely great and infinite; and from the very fact that I can form an idea of it, I perceive that it belongs to the nature of God. Similarly, if I examine the faculties of memory or imagination, or any others, I discover that in my case each one of these faculties is weak and limited, while in the case of God it is immeasurable. 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 consists 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. 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—either because I clearly understand that reasons of truth and goodness point that way, or because of a divinely produced disposition of my inmost thoughts—the freer is my choice. Neither divine grace nor natural knowledge ever diminishes freedom; on the contrary, they increase and strengthen it. But the indifference I feel when there is no reason pushing me in one direction rather than another is the lowest

grade of freedom; it is evidence not of any perfection of freedom, but rather of a defect in knowledge or a kind of negation. For if I always saw clearly what was true and good, I should never have to deliberate about the right judgement or choice; in that case, although I should be wholly free, it would be impossible for me ever to be in a state of indifference.

9 From these considerations I perceive that the power of willing which I received from God is not, when considered in itself, the cause of my mistakes; for it is both extremely ample and also perfect of its kind. Nor is my power of understanding to blame; for since my understanding comes from God, everything that I understand I undoubtedly understand correctly, and any error here is impossible. So what then is the source of my mistakes? It must be simply this: the scope of the will is wider than that of the intellect; but instead of restricting it within the same limits, I extend its use to matters which I do not understand. Since the will is indifferent in such cases, it easily turns aside from what is true and good, and this is the source of my error and sin.

10 For example, during these past few days I have been asking whether anything in the world exists, and I have realized that from the very fact of my raising this question it follows quite evidently that I exist. I could not but judge that something which I understood so clearly was true; but this was not because I was compelled so to judge by any external force, but because a great light in the intellect was followed by a great inclination in the will, and thus the spontaneity and freedom of my belief was all the greater in proportion to my lack of indifference. But now, besides the knowledge that I exist, in so far as I am a thinking thing, an idea of corporeal nature comes into my mind; and I happen to be in doubt as to whether the thinking nature which is in me, or rather which I am, is distinct from this corporeal nature or identical with it. I am making the further supposition that my intellect has not yet come upon any persuasive reason in favour of one alternative rather than the other. This obviously implies that I am indifferent as to whether I should assert or deny either alternative, or indeed refrain from making any judgement on the matter.

11 What is more, this indifference does not merely apply to cases where the intellect is wholly ignorant, but extends in general to every case where the intellect does not have sufficiently clear knowledge at the time when the will deliberates. For although probable conjectures may pull me in one direction, the mere knowledge that they are simply conjectures, and not certain and indubitable reasons, is itself quite enough to push my assent the other way. My experience in the last few days confirms this: the mere fact that I found that all my previous beliefs were in some sense open to doubt was enough to turn my absolutely confident belief in their truth into the supposition that they were wholly false.

12 If, however, I simply refrain from making a judgement in cases where I do not perceive the truth with sufficient clarity and distinctness, then it is clear that I am behaving correctly and avoiding error. But if in such cases I either affirm or deny, then I am not using my free will correctly. If I go for the alternative which is false, then obviously I shall be in error; if I take the other side, then it is by pure chance that I arrive at the truth, and I shall still be at fault since it is clear by the natural light that the perception of the intellect should always precede the determination of the will. In this incorrect use of free will may be found the privation which constitutes the essence of error. The privation, I say, lies in the operation of the will in so far as it proceeds from me, but not in the faculty of will which I received from God, nor even in its operation, in so far as it depends on him.

13 And I have no cause for complaint on the grounds that the power of understanding or the natural light which God gave me is no greater than it is; for it is in the nature of a finite intellect to lack understanding of many things, and it is in the nature of a created intellect to be finite. Indeed, I have reason to give thanks to him who has never owed me anything for the great bounty that he has shown me, rather than thinking myself deprived or robbed of any gifts he did not bestow.

14 Nor do I have any cause for complaint on the grounds that God gave me a will which extends more widely than my intellect. For since the will consists simply of one thing which is, as it were, indivisible, it seems that its nature rules out the possibility of anything being taken away from it. And surely, the more widely my will extends, then the greater thanks I owe to him who gave it to me.

15 Finally, I must not complain that the forming of those acts of will or judgements in which I go wrong happens with God's concurrence. For in so far as these acts depend on God, they are wholly true and good; and my ability to perform them means that there is in a sense more perfection in me than would be the case if I lacked this ability. As for the privation involved—which is all that the essential definition of falsity and wrong consists in—this does not in any way require the concurrence of God, since it is not a thing; indeed, when it is referred to God as its cause, it should be called not a privation but simply a negation. For it is surely no imperfection in God that he has given me the freedom to assent or not to assent in those cases where he did not endow my intellect with a clear and distinct perception; but it is undoubtedly an imperfection in me to misuse that freedom and make judgements about matters which I do not fully understand. I can see, however, that God could easily have brought it about that without losing my freedom, and despite the limitations in my knowledge, I should nonetheless never make a mistake. He could, for example, have endowed my intellect with a clear and distinct perception of everything about which I was ever likely to deliberate; or he could simply have impressed it unforgettably on my memory that I should never make a judgement about anything which I did not clearly and distinctly understand. Had God made me this way, then I can easily understand that, considered as a totality, I would have been more perfect than I am now. But I cannot therefore deny that there may in some way be more perfection in the universe as a whole because some of its parts are not immune from error, while others are immune, than there would be if all the parts were exactly alike. And I have no right to complain that the role God wished me to undertake in the world is not the principal one or the most perfect of all.

16 What is more, even if I have no power to avoid error in the first way just mentioned, which requires a clear perception of everything I have to deliberate on, I can avoid error in the second way, which depends merely on my remembering to withhold judgement on any occasion when the truth of the matter is not clear. Admittedly, I am aware of a certain weakness in me, in that I am unable to keep my attention fixed on one and the same item of knowledge at all times; but by attentive and repeated meditation I am nevertheless able to make myself remember it as often as the need arises, and thus get into the habit of avoiding error.

17 It is here that man's greatest and most important perfection is to be found, and I therefore think that today's meditation, involving an investigation into the cause of error and falsity, has been very profitable. The cause of error must surely be the one I have explained; for if, whenever I have to make a judgement, I restrain my will so that it extends to what the intellect clearly and distinctly reveals, and no further, then it is quite impossible for me to go wrong. This is because every clear

and distinct perception is undoubtedly something, and hence cannot come from nothing, but must necessarily have God for its author. Its author, I say, is God, who is supremely perfect, and who cannot be a deceiver on pain of contradiction; hence the perception is undoubtedly true. So today I have learned not only what precautions to take to avoid ever going wrong, but also what to do to arrive at the truth. For I shall unquestionably reach the truth, if only I give sufficient attention to all the things which I perfectly understand, and separate these from all the other cases where my apprehension is more confused and obscure. And this is just what I shall take good care to do from now on.

FIFTH MEDITATION

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

[True and Immutable Natures]

There are many matters which remain to be investigated concerning the attributes of God and the nature of myself, or my mind; and perhaps I shall take these up at another time. But now that I have seen what to do and what to avoid in order to reach the truth, the most pressing task seems to be to try to escape from the doubts into which I fell a few days ago, and see whether any certainty can be achieved regarding material objects.

2 But before I inquire whether any such things exist outside me, I must consider the ideas of these things, in so far as they exist in my thought, and see which of them are distinct, and which confused.

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

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

5 But I think the most important consideration at this point is that I find within me countless ideas of things which even though they may not exist anywhere outside me still cannot be called nothing; for although in a sense they can be thought of at will, they are not my invention but have their own true and immutable natures. When, for example, I imagine a triangle, even if perhaps no such figure exists, or has ever existed, anywhere outside my thought, there is still a determinate nature, or essence, or form of the triangle which is immutable and eternal, and not invented by me or dependent on my mind. This is clear from the fact that various properties can be demonstrated of the triangle, for example that its three angles equal two right angles, that its greatest side subtends its greatest angle, and the like; and since these properties are ones which I now clearly recognize wheth-

er I want to or not, even if I never thought of them at all when I previously imagined the triangle, it follows that they cannot have been invented by me.

6 It would be beside the point for me to say that since I have from time to time seen bodies of triangular shape, the idea of the triangle may have come to me from external things by means of the sense organs. For I can think up countless other shapes which there can be no suspicion of my ever having encountered through the senses, and yet I can demonstrate various properties of these shapes, just as I can with the triangle. All these properties are certainly true, since I am clearly aware of them, and therefore they are something, and not merely nothing; for it is obvious that whatever is true is something; and I have already amply demonstrated that everything of which I am clearly aware is true. And even if I had not demonstrated this, the nature of my mind is such that I cannot but assent to these things, at least so long as I clearly perceive them. I also remember that even before, when I was completely preoccupied with the objects of the senses, I always held that 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.

[The Ontological Argument]

7 But if the mere fact that I can produce from my thought the idea of something entails that everything which I clearly and distinctly perceive to belong to that thing really does belong to it, is not this a possible basis for another argument to prove the existence of God? Certainly, the idea of God, or a supremely perfect being, is one which I find within me just as surely as the idea of any shape or number. And my understanding that it belongs to his nature that he always exists is no less clear and distinct than is the case when I prove of any shape or number that some property belongs to its nature. Hence, even if it turned out that not everything on which I have meditated in these past days is true, I ought still to regard the existence of God as having at least the same level of certainty as I have hitherto attributed to the truths of mathematics.

8 At first sight, however, this is not transparently clear, but has some appearance of being a sophism. Since I have been accustomed to distinguish between existence and essence in everything else, I find it easy to persuade myself that existence can also be separated from the essence of God, and hence that God can be thought of as not existing. But when I concentrate more carefully, 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, or than the idea of a mountain can be separated from the idea of a valley. Hence it is just as much of a contradiction to think of God (that is, a supremely perfect being) lacking existence (that is, lacking a perfection), as it is to think of a mountain without a valley.

9 However, even granted that I cannot think of God except as existing, just as I cannot think of a mountain without a valley, it certainly does not follow from the fact that I think of a mountain with a valley that there is any mountain in the world; and similarly, it does not seem to follow from the fact that I think of God as existing that he does exist. For my thought does not impose any necessity on things; and just as I may imagine a winged horse even though no horse has wings, so I may be able to attach existence to God even though no God exists.

10 But there is a sophism concealed here. From the fact that I cannot think of a mountain without a valley, it does not follow that a mountain and valley exist an-

ewhere, but simply that a mountain and a valley, whether they exist or not, are mutually inseparable. But 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. It is not that my thought makes it so, or imposes any necessity on any thing; on the contrary, it is the necessity of the thing itself, namely the existence of God, which determines my thinking in this respect. For I am not free to think of God without existence (that is, a supremely perfect being without a supreme perfection) as I am free to imagine a horse with or without wings.

11 And it must not be objected at this point that while it is indeed necessary for me to suppose God exists, once I have made the supposition that he has all perfections (since existence is one of the perfections), nevertheless the original supposition was not necessary. Similarly, the objection would run, it is not necessary for me to think that all quadrilaterals can be inscribed in a circle; but given this supposition, it will be necessary for me to admit that a rhombus can be inscribed in a circle—which is patently false. Now admittedly, it is not necessary that I ever light upon any thought of God; but whenever I do choose to think of the first and supreme being, and bring forth the idea of God from the treasure house of my mind as it were, it is necessary that I attribute all perfections to him, even if I do not at that time enumerate them or attend to them individually. And this necessity plainly guarantees that, when I later realize that existence is a perfection, I am correct in inferring that the first and supreme being exists. In the same way, it is not necessary for me ever to imagine a triangle; but whenever I do wish to consider a rectilinear figure having just three angles, it is necessary that I attribute to it the properties which license the inference that its three angles equal no more than two right angles, even if I do not notice this at the time. By contrast, when I examine what figures can be inscribed in a circle, it is in no way necessary for me to think that this class includes all quadrilaterals. Indeed, I cannot even imagine this, so long as I am willing to admit only what I clearly and distinctly understand. So there is a great difference between this kind of false supposition and the true ideas which are innate in me, of which the first and most important is the idea of God. There are many ways in which I understand that this idea is not something fictitious which is dependent on my thought, but is an image of a true and immutable nature. First of all, there is the fact that, apart from God, there is nothing else of which I am capable of thinking such that existence belongs to its essence. Second, I cannot understand how there could be two or more Gods of this kind; and after supposing that one God exists, I plainly see that it is necessary that he has existed from eternity and will abide for eternity. And finally, I perceive many other attributes of God, none of which I can remove or alter.

12 But whatever method of proof I use, I am always brought back to the fact that it is only what I clearly and distinctly perceive that completely convinces me. Some of the things I clearly and distinctly perceive are obvious to everyone, while others are discovered only by those who look more closely and investigate more carefully; but once they have been discovered, the latter are judged to be just as certain as the former. In the case of a right-angled triangle, for example, the fact that the square on the hypotenuse is equal to the square on the other two sides is not so readily apparent as the fact that the hypotenuse subtends the largest angle; but once one has seen it, one believes it just as strongly. But as regards God, if I were not overwhelmed by preconceived opinions, and if the images of things perceived by the senses did not besiege my thought on every side, I would certainly acknowledge him sooner and more easily than anything else. For what is more

self-evident than the fact that the supreme being exists, or that God, to whose essence alone existence belongs, exists?

[Certainty and God]

13 Although it needed close attention for me to perceive this, I am now just as certain of it as I am of everything else which appears most certain. And what is more, I see that the certainty of all other things depends on this, so that without it nothing can ever be perfectly known.

14 Admittedly my nature is such that so long as I perceive something very clearly and distinctly I cannot but believe it to be true. But my nature is also such that I cannot fix my mental vision continually on the same thing, so as to keep perceiving it clearly; and often the memory of a previously made judgement may come back, when I am no longer attending to the arguments which led me to make it. And so other arguments can now occur to me which might easily undermine my opinion, if I were unaware of God; and I should thus never have true and certain knowledge about anything, but only shifting and changeable opinions. For example, when I consider the nature of a triangle, it appears most evident to me, steeped as I am in the principles of geometry, that its three angles are equal to two right angles; and so long as I attend to the proof, I cannot but believe this to be true. But as soon as I turn my mind's eye away from the proof, then in spite of still remembering that I perceived it very clearly, I can easily fall into doubt about its truth, if I am unaware of God. For I can convince myself that I have a natural disposition to go wrong from time to time in matters which I think I perceive as evidently as can be. This will seem even more likely when I remember that there have been frequent cases where I have regarded things as true and certain, but have later been led by other arguments to judge them to be false.

15 Now, however, I have perceived that God exists, and at the same time I have understood that everything else depends on him, and that he is no deceiver; and I have drawn the conclusion that everything which I clearly and distinctly perceive is of necessity true. Accordingly, even if I am no longer attending to the arguments which led me to judge that this is true, as long as I remember that I clearly and distinctly perceived it, there are no counter-arguments which can be adduced to make me doubt it, but on the contrary I have true and certain knowledge of it. And I have knowledge not just of this matter, but of all matters which I remember ever having demonstrated, in geometry and so on. For what objections can now be raised? That the way I am made makes me prone to frequent error? But I now know that I am incapable of error in those cases where my understanding is transparently clear. Or can it be objected that I have in the past regarded as true and certain many things which I afterwards recognized to be false? But none of these were things which I clearly and distinctly perceived: I was ignorant of this rule for establishing the truth, and believed these things for other reasons which I later discovered to be less reliable. So what is left to say? Can one raise the objection I put to myself a while ago, that I may be dreaming, or that everything which I am now thinking has as little truth as what comes to the mind of one who is asleep? Yet even this does not change anything. For even though I might be dreaming, if there is anything which is evident to my intellect, then it is wholly true.

16 Thus 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.

SIXTH MEDITATION

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

[Bodies and the Imagination]

It remains for me to examine whether material things exist. And at least I now know they are capable of existing, in so far as they are the subject-matter of pure mathematics, since I perceive them clearly and distinctly. For there is no doubt that God is capable of creating everything that I am capable of perceiving in this manner; and I have never judged that something could not be made by him except on the grounds that there would be a contradiction in my perceiving it distinctly. The conclusion that material things exist is also suggested by the faculty of imagination, which I am aware of using when I turn my mind to material things. For when I give more attentive consideration to what imagination is, it seems to be nothing else but an application of the cognitive faculty to a body which is intimately present to it, and which therefore exists.

2 To make this clear, I will first examine the difference between imagination and pure understanding. When I imagine a triangle, for example, I do not merely understand that it is a figure bounded by three lines, but at the same time I also see the three lines with my mind's eye as if they were present before me; and this is what I call imagining. But if I want to think of a chiliagon, although I understand that it is a figure consisting of a thousand sides just as well as I understand the triangle to be a three-sided figure, I do not in the same way imagine the thousand sides or see them as if they were present before me. It is true that since I am in the habit of imagining something whenever I think of a corporeal thing, I may construct in my mind a confused representation of some figure; but it is clear that this is not a chiliagon. For it differs in no way from the representation I should form if I were thinking of a myriagon, or any figure with very many sides. Moreover, such a representation is useless for recognizing the properties which distinguish a chiliagon from other polygons. But suppose I am dealing with a pentagon: I can of course understand the figure of a pentagon, just as I can the figure of a chiliagon, without the help of the imagination; but I can also imagine a pentagon, by applying my mind's eye to its five sides and the area contained within them. And in doing this I notice quite clearly that imagination requires a peculiar effort of mind which is not required for understanding; this additional effort of mind clearly shows the difference between imagination and pure understanding.

3 Besides this, I consider that this power of imagining which is in me, differing as it does from the power of understanding, is not a necessary constituent of my own essence, that is, of the essence of my mind. For if I lacked it, I should undoubtedly remain the same individual as I now am; from which it seems to follow that it depends on something distinct from myself. And I can easily understand that, if there does exist some body to which the mind is so joined that it can apply itself to contemplate it, as it were, whenever it pleases, then it may possibly be this very body that enables me to imagine corporeal things. So the difference between this mode of thinking and pure understanding may simply be this: when the mind understands, it in some way turns towards itself and inspects one of the ideas which

are within it; but when it imagines, it turns towards the body and looks at something in the body which conforms to an idea understood by the mind or perceived by the senses. I can, as I say, easily understand that this is how imagination comes about, if the body exists; and since there is no other equally suitable way of explaining imagination that comes to mind, I can make a probable conjecture that the body exists. But this is only a probability; and despite a careful and comprehensive investigation, I do not yet see how the distinct idea of corporeal nature which I find in my imagination can provide any basis for a necessary inference that some body exists.

4 But besides that corporeal nature which is the subject-matter of pure mathematics, there is much else that I habitually imagine, such as colours, sounds, tastes, pain and so on—though not so distinctly. Now I perceive these things much better by means of the senses, which is how, with the assistance of memory, they appear to have reached the imagination. So in order to deal with them more fully, I must pay equal attention to the senses, and see whether the things which are perceived by means of that mode of thinking which I call ‘sensory perception’ provide me with any sure argument for the existence of corporeal things.

[Bodies and the Senses: A Review]

5 To begin with, I will go back over all the things which I previously 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 set out my reasons for subsequently calling these things into doubt. And finally I will consider what I should now believe about them.

6 First of all then, I perceived by my senses that I had a head, hands, feet and other limbs making up the body which 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 which could affect it in various favourable or unfavourable ways; and I gauged the favourable effects by a sensation of pleasure, and the unfavourable ones by a sensation of pain. In addition to pain and pleasure, I also had sensations within me of hunger, thirst, and other such appetites, and also of physical propensities towards cheerfulness, sadness, anger and similar emotions. And outside me, besides the extension, shapes and movements of bodies, I also had sensations of their hardness and heat, and of the other tactile qualities. In addition, 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, one from another. Considering the ideas of all these qualities which presented themselves to my thought, although the ideas were, strictly speaking, the only immediate objects of my sensory awareness, it was not unreasonable for me to think that the items which I was perceiving through the senses were things quite distinct from my thought, namely bodies which produced the ideas. For my experience was that these ideas came to me quite without my consent, so that I could not have sensory awareness of any object, even if I wanted to, unless it was present to my sense organs; and I could not avoid having sensory awareness of it when it was present. And since the ideas perceived by the senses were much more lively and vivid and even, in their own way, more distinct than any of those which I deliberately formed through meditating or which I found impressed on my memory, it seemed impossible that they should have come from within me; so the only alternative was that they came from other things. Since the sole source of my knowledge of these things was the ideas themselves, the supposition that the things resembled the ideas was bound to occur to me. In addition, I remembered that the use of my senses had come first, while the use of my reason came only

later; and I saw that the ideas which I formed myself were less vivid than those which I perceived with the senses and were, for the most part, made up of elements of sensory ideas. In this way I easily convinced myself that I had nothing at all in the intellect which I had not previously had in sensation. As for the body which by some special right I called ‘mine’, my belief that this body, more than any other, belonged to me had some justification. For I could never be separated from it, as I could from other bodies; and I felt all my appetites and emotions in, and on account of, this body; and finally, I was aware of pain and pleasurable ticklings in parts of this body, but not in other bodies external to it. But why should that curious sensation of pain give rise to a particular distress of mind; or why should a certain kind of delight follow on a tickling sensation? Again, why should that curious tugging in the stomach which I call hunger tell me that I should eat, or a dryness of the throat tell me to drink, and so on? I was not able to give any explanation of all this, except that nature taught me so. For there is absolutely no connection (at least that I can understand) between the tugging sensation and the decision to take food, or between the sensation of something causing pain and the mental apprehension of distress that arises from that sensation. These and other judgements that I made concerning sensory objects, I was apparently taught to make by nature; for I had already made up my mind that this was how things were, before working out any arguments to prove it.

7 Later on, however, I had many experiences which gradually undermined all the faith I had had in the senses. Sometimes towers which had looked round from a distance appeared square from close up; and enormous statues standing on their pedestals did not seem large when observed from the ground. In these and countless other such cases, I found that the judgements of the external senses were mistaken. And this applied not just to the external senses but to the internal senses as well. For what can be more internal than pain? And yet I had heard that those who had had a leg or an arm amputated sometimes still seemed to feel pain intermittently in the missing part of the body. So even in my own case it was apparently 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 have ever thought I was having while awake I can also think of myself as sometimes having while asleep; and since I do not believe that what I seem to perceive in sleep comes from things located outside me, I did not 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 since I did not know the author of my being (or at least was pretending not to), I saw nothing to rule out the possibility that my natural constitution made me prone to error even in matters which seemed to me most true. As for the reasons for my previous confident belief in the truth of the things perceived by the senses, I had no trouble in refuting them. For since I apparently had natural impulses towards many things which reason told me to avoid, I reckoned that a great deal of confidence should not be placed in what I was taught by nature. And despite the fact that the perceptions of the senses were not dependent on my will, I did not think that I should on that account infer that they proceeded from things distinct from myself, since I might perhaps have a faculty not yet known to me which produced them.

8 But now, when I am beginning to achieve a better knowledge of myself and the author of my being, although I do not think I should heedlessly accept everything I seem to have acquired from the senses, neither do I think that everything should be called into doubt.

[Important Conclusions Proved]

9 First, I know that everything which I clearly and distinctly understand is capable of being created by God so as to correspond exactly with my understanding of it. Hence 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. The question of what kind of power is required to bring about such a separation does not affect the judgement that the two things are distinct. Thus, simply by knowing that I exist and seeing at the same time that absolutely nothing else belongs to my nature or essence except that I am a thinking thing, I can infer correctly that my essence consists solely in the fact that I am a thinking thing. It is true that I may have (or, to anticipate, that I certainly have) a body that is very closely joined to me. But nevertheless, on the one hand I have a clear and distinct idea of myself, in so far as I am simply a thinking, non-extended thing; and on the other hand I have a distinct idea of body, in so far as this is simply an extended, non-thinking thing. And accordingly, it is certain that I am really distinct from my body, and can exist without it.

10 Besides this, I find in myself faculties for certain special modes of thinking, namely imagination and sensory perception. Now I can clearly and distinctly understand myself as a whole without these faculties; but I cannot, conversely, understand these faculties without me, that is, without an intellectual substance to inhere in. This is because there is an intellectual act included in their essential definition; and hence I perceive that the distinction between them and myself corresponds to the distinction between the modes of a thing and the thing itself. Of course I also recognize that there are other faculties (like those of changing position, of taking on various shapes, and so on) which, like sensory perception and imagination, cannot be understood apart from some substance for them to inhere in, and hence cannot exist without it. But it is clear that these other faculties, if they exist, must be in a corporeal or extended substance and not an intellectual one; for the clear and distinct conception of them includes extension, but does not include any intellectual act whatsoever. Now there is in me a passive faculty of sensory perception, that is, a faculty for receiving and recognizing the ideas of sensible objects; but I could not make use of it unless there was also an active faculty, either in me or in something else, which produced or brought about these ideas. But this faculty cannot be in me, since clearly it presupposes no intellectual act on my part, and the ideas in question are produced without my cooperation and often even against my will. So the only alternative is that it is in another substance distinct from me—a substance which contains either formally or eminently all the reality which exists objectively in the ideas produced by this faculty (as I have just noted). This substance is either a body, that is, a corporeal nature, in which case it will contain formally (and in fact) everything which is to be found objectively (or representatively) in the ideas; or else it is God, or some creature more noble than a body, in which case it will contain eminently whatever is to be found in the ideas. But since God is not a deceiver, it is quite clear that he does not transmit the ideas to me either directly from himself, or indirectly, via some creature which contains the objective reality of the ideas not formally but only eminently. For God has given me no faculty at all for recognizing any such source for these ideas; on the contrary, he has given me a great propensity to believe that they are produced by corporeal things. So I do not see how God could be understood to be anything but a deceiver if the ideas were transmitted from a source other than corporeal things. It follows that corporeal 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.

11 What of the other aspects of corporeal things which are either particular (for example that the sun is of such and such a size or shape), or less clearly understood, such as light or sound or pain, and so on? Despite the high degree of doubt and uncertainty involved here, the very fact that God is not a deceiver, and the consequent impossibility of there being any falsity in my opinions which cannot be corrected by some other faculty supplied by God, offers me a sure hope that I can attain the truth even in these matters. Indeed, there is no doubt that everything that I am taught by nature contains some truth. For if nature is considered in its general aspect, then I understand by the term nothing other than God himself, or the ordered system of created things established by God. And by my own nature in particular I understand nothing other than the totality of things bestowed on me by God.

12 There is nothing that my own nature teaches me more vividly than that I have a body, and that when I feel pain there is something wrong with the body, and that when I am hungry or thirsty the body needs food and drink, and so on. So I should not doubt that there is some truth in this.

13 Nature also teaches me, by these sensations of pain, hunger, thirst and so on, that I am not merely present in my body as a sailor is present in a ship, but that I am very closely joined and, as it were, intermingled with it, so that I and the body form a unit. If this were not so, I, who am nothing but a thinking thing, would not feel pain when the body was hurt, but would perceive the damage purely by the intellect, just as a sailor perceives by sight if anything in his ship is broken. Similarly, when the body needed food or drink, I should have an explicit understanding of the fact, instead of having confused sensations of hunger and thirst. For these sensations of hunger, thirst, pain and so on are nothing but confused modes of thinking which arise from the union and, as it were, intermingling of the mind with the body.

14 I am also taught by nature that various other bodies exist in the vicinity of my body, and that some of these are to be sought out and others avoided. And from the fact that I perceive by my senses a great variety of colours, sounds, smells and tastes, as well as differences in heat, hardness and the like, I am correct in inferring that the bodies which are the source of these various sensory perceptions possess differences corresponding to them, though perhaps not resembling them. Also, the fact that some of the perceptions are agreeable to me while others are disagreeable makes it quite certain that my body, or rather my whole self, in so far as I am a combination of body and mind, can be affected by the various beneficial or harmful bodies which surround it.

15 There are, however, many other things which I may appear to have been taught by nature, but which in reality I acquired not from nature but from a habit of making ill-considered judgements; and it is therefore quite possible that these are false. Cases in point are the belief that any space in which nothing is occurring to stimulate my senses must be empty; or that the heat in a body is something exactly resembling the idea of heat which is in me; or that when a body is white or green, the selfsame whiteness or greenness which I perceive through my senses is present in the body; or that in a body which is bitter or sweet there is the selfsame taste which I experience, and so on; or, finally, that stars and towers and other

distant bodies have the same size and shape which they present to my senses, and other examples of this kind. But to make sure that my perceptions in this matter are sufficiently distinct, I must more accurately define exactly what I mean when I say that I am taught something by nature. In this context I am taking nature to be something more limited than the totality of things bestowed on me by God. For this includes many things that belong to the mind alone—for example my perception that what is done cannot be undone, and all other things that are known by the natural light; but at this stage I am not speaking of these matters. It also includes much that relates to the body alone, like the tendency to move in a downward direction, and so on; but I am not speaking of these matters either. My sole concern here is with what God has bestowed on me as a combination of mind and body. My nature, then, in this limited sense, does indeed teach me to avoid what induces a feeling of pain and to seek out what induces feelings of pleasure, and so on. But it does not appear to teach us to draw any conclusions from these sensory perceptions about things located outside us without waiting until the intellect has examined the matter. For knowledge of the truth about such things seems to belong to the mind alone, not to the combination of mind and body. Hence, although a star has no greater effect on my eye than the flame of a small light, that does not mean that there is any real or positive inclination in me to believe that the star is no bigger than the light; I have simply made this judgement from childhood onwards without any rational basis. Similarly, although I feel heat when I go near a fire and feel pain when I go too near, there is no convincing argument for supposing that there is something in the fire which resembles the heat, any more than for supposing that there is something which resembles the pain. There is simply reason to suppose that there is something in the fire, whatever it may eventually turn out to be, which produces in us the feelings of heat or pain. And likewise, even though there is nothing in any given space that stimulates the senses, it does not follow that there is no body there. In these cases and many others I see that I have been in the habit of misusing the order of nature. For the proper purpose of the sensory perceptions given me by nature is simply to inform the mind of what is beneficial or harmful for the composite of which the mind is a part; and to this extent they are sufficiently clear and distinct. But I misuse them by treating them as reliable touchstones for immediate judgements about the essential nature of the bodies located outside us; yet this is an area where they provide only very obscure information.

[The Problem of Error II: Nature and Sensory Error]

16 I have already looked in sufficient detail at how, notwithstanding the goodness of God, it may happen that my judgements are false. But a further problem now comes to mind regarding those very things which nature presents to me as objects which I should seek out or avoid, and also regarding the internal sensations, where I seem to have detected errors—e.g. when someone is tricked by the pleasant taste of some food into eating the poison concealed inside it. Yet in this case, what the man's nature urges him to go for is simply what is responsible for the pleasant taste, and not the poison, which his nature knows nothing about. The only inference that can be drawn from this is that his nature is not omniscient. And this is not surprising, since man is a limited thing, and so it is only fitting that his perfection should be limited.

17 And yet it is not unusual for us to go wrong even in cases where nature does urge us towards something. Those who are ill, for example, may desire food or drink that will shortly afterwards turn out to be bad for them. Perhaps it may be

said that they go wrong because their nature is disordered, but this does not remove the difficulty. A sick man is no less one of God's creatures than a healthy one, and it seems no less a contradiction to suppose that he has received from God a nature which deceives him. Yet a clock constructed with wheels and weights observes all the laws of its nature just as closely when it is badly made and tells the wrong time as when it completely fulfils the wishes of the clockmaker. In the same way, I might consider the body of a man as a kind of machine equipped with and 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 perform all the same movements as it now does in those cases where movement is not under the control of the will or, consequently, of the mind. I can easily see that if such a body suffers from dropsy, for example, and is affected by the dryness of the throat which normally produces in the mind the sensation of thirst, the resulting condition of the nerves and other parts will dispose the body to take a drink, with the result that the disease will be aggravated. Yet this is just as natural as the body's being stimulated by a similar dryness of the throat to take a drink when there is no such illness and the drink is beneficial. Admittedly, when I consider the purpose of the clock, I may say that it is departing from its nature when it does not tell the right time; and similarly when I consider the mechanism of the human body, I may think that, in relation to the movements which normally occur in it, it too is deviating from its nature if the throat is dry at a time when drinking is not beneficial to its continued health. But I am well aware that 'nature' as I have just used it has a very different significance from 'nature' in the other sense. As I have just used it, 'nature' is simply a label which depends on my thought; it is quite extraneous to the things to which it is applied, and depends simply on my comparison between the idea of a sick man and a badly-made clock, and the idea of a healthy man and a well-made clock. But by 'nature' in the other sense I understand something which is really to be found in the things themselves; in this sense, therefore, the term contains something of the truth.

18 When we say, then, with respect to the body suffering from dropsy, that it has a disordered nature because it has a dry throat and yet does not need drink, the term 'nature' is here used merely as an extraneous label. However, with respect to the composite, that is, the mind united with this body, what is involved is not a mere label, but a true error of nature, namely that it is thirsty at a time when drink is going to cause it harm. It thus remains to inquire how it is that the goodness of God does not prevent nature, in this sense, from deceiving us.

[Solution to the Problem of Error]

19 The first observation I make at this point is that there is a great difference between the mind and the body, inasmuch as the body is by its very nature always divisible, while the mind is utterly indivisible. For when I consider the mind, or myself in so far as I am merely a thinking thing, I am unable to distinguish any parts within myself; I understand myself to be something quite single and complete. Although the whole mind seems to be united to the whole body, I recognize that if a foot or arm or any other part of the body is cut off, nothing has thereby been taken away from the mind. As for the faculties of willing, of understanding, of sensory perception and so on, these cannot be termed parts of the mind, since it is one and the same mind that wills, and understands and has sensory perceptions. By contrast, there is no corporeal or extended thing that I can think of which in my thought I cannot easily divide into parts; and this very fact makes me understand that it is 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.

20 My next observation is that the mind is not immediately affected by all parts of the body, but only by the brain, or perhaps just by one small part of the brain, namely the part which is said to contain the 'common' sense. Every time this part of the brain is in a given state, it presents the same signals to the mind, even though the other parts of the body may be in a different condition at the time. This is established by countless observations, which there is no need to review here.

21 I observe, in addition, that the nature of the body is such that whenever any part of it is moved by another part which is some distance away, it can always be moved in the same fashion by any of the parts which lie in between, even if the more distant part does nothing. For example, in a cord ABCD, if one end D is pulled so that the other end A moves, the exact same movement could have been brought about if one of the intermediate points B or C had been pulled, and D had not moved at all. In similar fashion, when I feel a pain in my foot, physiology tells me that this happens by means of nerves distributed throughout the foot, and that these nerves are like cords which go from the foot right up to the brain. When the nerves are pulled in the foot, they in turn pull on inner parts of the brain to which they are attached, and produce a certain motion in them; and nature has laid it down that this motion should produce in the mind a sensation of pain, as occurring in the foot. But since these nerves, in passing from the foot to the brain, must pass through the calf, the thigh, the lumbar region, the back and the neck, it can happen that, even if it is not the part in the foot but one of the intermediate parts which is being pulled, the same motion will occur in the brain as occurs when the foot is hurt, and so it will necessarily come about that the mind feels the same sensation of pain. And we must suppose the same thing happens with regard to any other sensation.

22 My final observation is that any given movement occurring in the part of the brain that immediately affects the mind produces just one corresponding sensation; and hence the best system that could be devised is that it should produce the one sensation which, of all possible sensations, is most especially and most frequently conducive to the preservation of the healthy man. And experience shows that the sensations which nature has given us are all of this kind; and so there is absolutely nothing to be found in them that does not bear 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, by way of the spinal cord, reaches the inner parts of the brain, and there gives the mind its signal for having a certain sensation, namely the sensation of a pain as occurring in the foot. This stimulates the mind to do its best to get rid of the cause of the pain, which it takes to be harmful to the foot. It is true that God could have made the nature of man such that this particular motion in the brain indicated something else to the mind; it might, for example, have made the mind aware of the actual motion occurring in the brain, or in the foot, or in any of the intermediate regions; or it might have indicated something else entirely. But there is nothing else which would have been so conducive to the continued well-being of the body. In the same way, when we need drink, there arises a certain dryness in the throat; this sets in motion the nerves of the throat, which in turn move the inner parts of the brain. This motion produces in the mind a sensation of thirst, because the most useful thing

for us to know about the whole business is that we need drink in order to stay healthy. And so it is in the other cases.

23 It is quite clear from all this that, notwithstanding the immense goodness of God, 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 there may be some occurrence, not in the foot but in one of the other areas through which the nerves travel in their route from the foot to the brain, or even in the brain itself; and if this cause produces the same motion which is generally produced by injury to the foot, then pain will be felt as if it were in the foot. This deception of the senses is natural, because a given motion in the brain must always produce the same sensation in the mind; and the origin of the motion in question is much more often going to be something which is hurting the foot, rather than something existing elsewhere. So it is reasonable that this motion should always indicate to the mind a pain in the foot rather than in any other part of the body. Again, dryness of the throat may sometimes arise not, as it normally does, from the fact that a drink is necessary to the health of the body, but from some quite opposite cause, as happens in the case of the man with dropsy. Yet it is much better that it should mislead on this occasion than that it should always mislead when the body is in good health. And the same goes for the other cases.

24 This consideration is the greatest help to me, not only for noticing all the errors to which my nature is liable, but also for enabling me to correct or avoid them without difficulty. For I know that in matters regarding the well-being of the body, all my senses report the truth much more frequently than not. Also, I can almost always make use of more than one sense to investigate the same thing; and in addition, I can use both my memory, which connects present experiences with preceding ones, and my intellect, which has by now examined all the causes of error. Accordingly, I should not have any further fears about the falsity of what my senses tell me every day; on the contrary, the exaggerated doubts of the last few days should be dismissed as laughable. This applies especially to the principal reason for doubt, namely my inability to distinguish between being asleep and being awake. For I now notice that there is a vast difference between the two, in that dreams are never linked by memory with all the other actions of life as waking experiences are. If, while I am awake, anyone were suddenly to appear to me and then disappear immediately, as happens in sleep, so that I could not see where he had come from or where he had gone to, it would not be unreasonable for me to judge that he was a ghost, or a vision created in my brain, rather than a real man. But when I distinctly see where things come from and where and when they come to me, and when I can connect my perceptions of them with the whole of the rest of my life without a break, then I am quite certain that when I encounter these things I am not asleep but awake. And I ought not to have even the slightest doubt of their reality if, after calling upon all the senses as well as my memory and my intellect in order to check them, I receive no conflicting reports from any of these sources. For from the fact that God is not a deceiver it follows that in cases like these I am completely free from error. But since the pressure of things to be done does not always allow us to stop and make such a meticulous check, it must be admitted that in this human life we are often liable to make mistakes about particular things, and we must acknowledge the weakness of our nature.