

willed that I be deceived in this way, for he is said to be supremely good. Nonetheless, if it were repugnant to his goodness to have created me such that I be deceived all the time, it would also seem foreign to that same goodness to permit me to be deceived even occasionally. But we cannot make this last assertion.

Perhaps there are some who would rather deny so a powerful a God than believe that everything else is uncertain. Let us not oppose them; rather, let us grant that everything said here about God is fictitious. Now they suppose that I came to be what I am either by fate, or by chance, or by a connected chain of events, or by some other way. But because being deceived and being mistaken appear to be a certain imperfection, the less powerful they take the author of my origin to be, the more probable it will be that I am so imperfect that I am always deceived. I have nothing to say in response to these arguments. But eventually I am forced to admit that there is nothing among the things I once believed to be true which it is not permissible to doubt—and not out of frivolity or lack of forethought, but for valid and considered reasons. Thus I must be no less careful to withhold assent henceforth even from these beliefs than I would from those that are patently false, if I wish to find anything certain.

But it is not enough simply to have realized these things: I must take steps to keep myself mindful of them. For long-standing opinions keep returning, and, almost against my will, they take advantage of my credulity, as if it were bound over to them by long use and the claims of intimacy. Nor will I ever get out of the habit of assenting to them and believing in them, so long as I take them to be exactly what they are, namely, in some respects doubtful, as has just now been shown, but nevertheless highly probable, so that it is much more consonant with reason to believe them than to deny them. Hence, it seems to me I would do well to deceive myself by turning my will in completely the opposite direction and pretend for a time that these opinions are wholly false and imaginary, until finally, as if with prejudices weighing down each side equally, no bad habit should turn my judgment any further from the correct perception of things. For indeed I know that meanwhile there is no danger or error in following this procedure, and that it is impossible for me to indulge in too much distrust, since I am now concentrating only on knowledge, not on action.

Accordingly, I will suppose not a supremely good God, the source of truth, but rather an evil genius, supremely powerful and clever, who has directed his entire effort at deceiving me. I will regard the heavens, the air, the earth, colors, shapes, sounds, and all external things as nothing but the bedeviling hoaxes of my dreams, with which he lays snares for my

credulity. I will regard myself as not having hands, or eyes, or flesh, or blood, or any senses, but as nevertheless falsely believing that I possess all these things. I will remain resolute and steadfast in this meditation, and even if it is not within my power to know anything true, it certainly is within my power to take care resolutely to withhold my assent to what is false, lest this deceiver, however powerful, however clever he may be, have any effect on me. But this undertaking is arduous, and a certain laziness brings me back to my customary way of living. I am not unlike a prisoner who enjoyed an imaginary freedom during his sleep, but, when he later begins to suspect that he is dreaming, fears being awakened and nonchalantly conspires with these pleasant illusions. In just the same way, I fall back of my own accord into my old opinions, and dread being awakened, lest the toilsome wakefulness which follows upon a peaceful rest must be spent thenceforward not in the light but among the inextricable shadows of the difficulties now brought forward.

MEDITATION TWO: Concerning the Nature of the Human Mind: That It Is Better Known Than the Body

Yesterday's meditation has thrown me into such doubts that I can no longer ignore them, yet I fail to see how they are to be resolved. It is as if I had suddenly fallen into a deep whirlpool; I am so tossed about that I can neither touch bottom with my foot, nor swim up to the top. Nevertheless I will work my way up and will once again attempt the same path I entered upon yesterday. I will accomplish this by putting aside everything that admits of the least doubt, as if I had discovered it to be completely false. I will stay on this course until I know something certain, or, if nothing else, until I at least know for certain that nothing is certain. Archimedes sought but one firm and immovable point in order to move the entire earth from one place to another. Just so, great things are also to be hoped for if I succeed in finding just one thing, however slight, that is certain and unshaken.

Therefore I suppose that everything I see is false. I believe that none of what my deceitful memory represents ever existed. I have no senses whatever. Body, shape, extension, movement, and place are all chimeras. What then will be true? Perhaps just the single fact that nothing is certain.

But how do I know there is not something else, over and above all those things that I have just reviewed, concerning which there is not even the slightest occasion for doubt? Is there not some God, or by whatever name I might call him, who instills these very thoughts in me? But why would

I think that, since I myself could perhaps be the author of these thoughts? Am I not then at least something? But I have already denied that I have any senses and any body. Still I hesitate; for what follows from this? Am I so tied to a body and to the senses that I cannot exist without them? But I have persuaded myself that there is absolutely nothing in the world: no sky, no earth, no minds, no bodies. Is it then the case that I too do not exist? But doubtless I did exist, if I persuaded myself of something. But there is some deceiver or other who is supremely powerful and supremely sly and who is always deliberately deceiving me. Then too there is no doubt that I exist, if he is deceiving me. And let him do his best at deception, he will never bring it about that I am nothing so long as I shall think that I am something. Thus, after everything has been most carefully weighed, it must finally be established that this pronouncement "I am, I exist" is necessarily true every time I utter it or conceive it in my mind.

But I do not yet understand sufficiently what I am—I, who now necessarily exist. And so from this point on, I must be careful lest I unwittingly mistake something else for myself, and thus err in that very item of knowledge that I claim to be the most certain and evident of all. Thus, I will meditate once more on what I once believed myself to be, prior to embarking upon these thoughts. For this reason, then, I will set aside whatever can be weakened even to the slightest degree by the arguments brought forward, so that eventually all that remains is precisely nothing but what is certain and unshaken.

What then did I use to think I was? A man, of course. But what is a man? Might I not say a "rational animal"? No, because then I would have to inquire what "animal" and "rational" mean. And thus from one question I would slide into many more difficult ones. Nor do I now have enough free time that I want to waste it on subtleties of this sort. Instead, permit me to focus here on what came spontaneously and naturally into my thinking whenever I pondered what I was. Now it occurred to me first that I had a face, hands, arms, and this entire mechanism of bodily members: the very same as are discerned in a corpse, and which I referred to by the name "body." It next occurred to me that I took in food, that I walked about, and that I sensed and thought various things; these actions I used to attribute to the soul. But as to what this soul might be, I either did not think about it or else I imagined it a rarified I-know-not-what, like a wind, or a fire, or ether, which had been infused into my coarser parts. But as to the body I was not in any doubt. On the contrary, I was under the impression that I knew its nature distinctly. Were I perhaps tempted to describe this nature such as I conceived it in my mind, I would have

described it thus: by "body," I understand all that is capable of being bounded by some shape, of being enclosed in a place, and of filling up a space in such a way as to exclude any other body from it; of being perceived by touch, sight, hearing, taste, or smell; of being moved in several ways, not, of course, by itself, but by whatever else impinges upon it. For it was my view that the power of self-motion, and likewise of sensing or of thinking, in no way belonged to the nature of the body. Indeed I used rather to marvel that such faculties were to be found in certain bodies.

But now what am I, when I suppose that there is some supremely powerful and, if I may be permitted to say so, malicious deceiver who deliberately tries to fool me in any way he can? Can I not affirm that I possess at least a small measure of all those things which I have already said belong to the nature of the body? I focus my attention on them, I think about them, I review them again, but nothing comes to mind. I am tired of repeating this to no purpose. But what about those things I ascribed to the soul? What about being nourished or moving about? Since I now do not have a body, these are surely nothing but fictions. What about sensing? Surely this too does not take place without a body; and I seemed to have sensed in my dreams many things that I later realized I did not sense. What about thinking? Here I make my discovery: thought exists; it alone cannot be separated from me. I am; I exist—this is certain. But for how long? For as long as I am thinking; for perhaps it could also come to pass that if I were to cease all thinking I would then utterly cease to exist. At this time I admit nothing that is not necessarily true. I am therefore precisely nothing but a thinking thing; that is, a mind, or intellect, or understanding, or reason—words of whose meanings I was previously ignorant. Yet I am a true thing and am truly existing; but what kind of thing? I have said it already: a thinking thing.

What else am I? I will set my imagination in motion. I am not that concatenation of members we call the human body. Neither am I even some subtle air infused into these members, nor a wind, nor a fire, nor a vapor, nor a breath, nor anything I devise for myself. For I have supposed these things to be nothing. The assumption still stands; yet nevertheless I am something. But is it perhaps the case that these very things which I take to be nothing, because they are unknown to me, nevertheless are in fact no different from that "me" that I know? This I do not know, and I will not quarrel about it now. I can make a judgment only about things that are known to me. I know that I exist; I ask now who is this "I" whom I know? Most certainly, in the strict sense the knowledge of this "I" does not depend upon things of whose existence I do not yet have knowledge.

Therefore it is not dependent upon any of those things that I simulate in my imagination. But this word "simulate" warns me of my error. For I would indeed be simulating were I to "imagine" that I was something, because imagining is merely the contemplating of the shape or image of a corporeal thing. But I now know with certainty that I am and also that all these images—and, generally, everything belonging to the nature of the body—could turn out to be nothing but dreams. Once I have realized this, I would seem to be speaking no less foolishly were I to say: "I will use my imagination in order to recognize more distinctly who I am," than were I to say: "Now I surely am awake, and I see something true; but since I do not yet see it clearly enough, I will deliberately fall asleep so that my dreams might represent it to me more truly and more clearly." Thus I realize that none of what I can grasp by means of the imagination pertains to this knowledge that I have of myself. Moreover, I realize that I must be most diligent about withdrawing my mind from these things so that it can perceive its nature as distinctly as possible.

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

Indeed it is no small matter if all of these things belong to me. But why should they not belong to me? Is it not the very same "I" who now doubts almost everything, who nevertheless understands something, who affirms that this one thing is true, who denies other things, who desires to know more, who wishes not to be deceived, who imagines many things even against my will, who also notices many things which appear to come from the senses? What is there in all of this that is not every bit as true as the fact that I exist—even if I am always asleep or even if my creator makes every effort to mislead me? Which of these things is distinct from my thought? Which of them can be said to be separate from myself? For it is so obvious that it is I who doubt, I who understand, and I who will, that there is nothing by which it could be explained more clearly. But indeed it is also the same "I" who imagines; for although perhaps, as I supposed before, absolutely nothing that I imagined is true, still the very power of imagining really does exist, and constitutes a part of my thought. Finally, it is this same "I" who senses or who is cognizant of bodily things as if through the senses. For example, I now see a light, I hear a noise, I feel heat. These things are false, since I am asleep. Yet I certainly do seem to see, hear, and feel warmth. This cannot be false. Properly speaking, this is what in me is called "sensing." But this, precisely so taken, is nothing other than thinking.

From these considerations I am beginning to know a little better what I am. But it still seems (and I cannot resist believing) that corporeal things—whose images are formed by thought, and which the senses themselves examine—are much more distinctly known than this mysterious "I" which does not fall within the imagination. And yet it would be strange indeed were I to grasp the very things I consider to be doubtful, unknown, and foreign to me more distinctly than what is true, what is known—than, in short, myself. But I see what is happening: my mind loves to wander and does not yet permit itself to be restricted within the confines of truth. So be it then; let us just this once allow it completely free rein, so that, a little while later, when the time has come to pull in the reins, the mind may more readily permit itself to be controlled.

Let us consider those things which are commonly believed to be the most distinctly grasped of all: namely the bodies we touch and see. Not bodies in general, mind you, for these general perceptions are apt to be somewhat more confused, but one body in particular. Let us take, for instance, this piece of wax. It has been taken quite recently from the honeycomb; it has not yet lost all the honey flavor. It retains some of the scent of the flowers from which it was collected. Its color, shape, and size are manifest. It is hard and cold; it is easy to touch. If you rap on it with your knuckle it will emit a sound. In short, everything is present in it that appears needed to enable a body to be known as distinctly as possible. But notice that, as I am speaking, I am bringing it close to the fire. The remaining traces of the honey flavor are disappearing; the scent is vanishing; the color is changing; the original shape is disappearing. Its size is increasing; it is becoming liquid and hot; you can hardly touch it. And now, when you rap on it, it no longer emits any sound. Does the same wax still remain? I must confess that it does; no one denies it; no one thinks otherwise. So what was there in the wax that was so distinctly grasped? Certainly none of the aspects that I reached by means of the senses. For whatever came under the senses of taste, smell, sight, touch or hearing has now changed; and yet the wax remains.

Perhaps the wax was what I now think it is: namely that the wax itself never really was the sweetness of the honey, nor the fragrance of the flowers, nor the whiteness, nor the shape, nor the sound, but instead was a body that a short time ago manifested itself to me in these ways, and now does so in other ways. But just what precisely is this thing that I thus imagine? Let us focus our attention on this and see what remains after we have removed everything that does not belong to the wax: only that it is something extended, flexible, and mutable. But what is it to be flexible

and mutable? Is it what my imagination shows it to be: namely, that this piece of wax can change from a round to a square shape, or from the latter to a triangular shape? Not at all; for I grasp that the wax is capable of innumerable changes of this sort, even though I am incapable of running through these innumerable changes by using my imagination. Therefore this insight is not achieved by the faculty of imagination. What is it to be extended? Is this thing's extension also unknown? For it becomes greater in wax that is beginning to melt, greater in boiling wax, and greater still as the heat is increased. And I would not judge correctly what the wax is if I did not believe that it takes on an even greater variety of dimensions than I could ever grasp with the imagination. It remains then for me to concede that I do not grasp what this wax is through the imagination; rather, I perceive it through the mind alone. The point I am making refers to this particular piece of wax, for the case of wax in general is clearer still. But what is this piece of wax which is perceived only by the mind? Surely it is the same piece of wax that I see, touch, and imagine; in short it is the same piece of wax I took it to be from the very beginning. But I need to realize that the perception of the wax is neither a seeing, nor a touching, nor an imagining. Nor has it ever been, even though it previously seemed so; rather it is an inspection on the part of the mind alone. This inspection can be imperfect and confused, as it was before, or clear and distinct, as it is now, depending on how closely I pay attention to the things in which the piece of wax consists.

But meanwhile I marvel at how prone my mind is to errors. For although I am considering these things within myself silently and without words, nevertheless I seize upon words themselves and I am nearly deceived by the ways in which people commonly speak. For we say that we see the wax itself, if it is present, and not that we judge it to be present from its color or shape. Whence I might conclude straghtaway that I know the wax through the vision had by the eye, and not through an inspection on the part of the mind alone. But then were I perchance to look out my window and observe men crossing the square, I would ordinarily say I see the men themselves just as I say I see the wax. But what do I see aside from hats and clothes, which could conceal automata? Yet I judge them to be men. Thus what I thought I had seen with my eyes, I actually grasped solely with the faculty of judgment, which is in my mind.

But a person who seeks to know more than the common crowd ought to be ashamed of himself for looking for doubt in common ways of speaking. Let us then go forward and inquire when it was that I perceived more perfectly and evidently what the piece of wax was. Was it when I

first saw it and believed I knew it by the external sense, or at least by the so-called common sense, that is, the power of imagination? Or do I have more perfect knowledge now, when I have diligently examined both what the wax is and how it is known? Surely it is absurd to be in doubt about this matter. For what was there in my initial perception that was distinct? What was there that any animal seemed incapable of possessing? But indeed when I distinguish the wax from its external forms, as if stripping it of its clothing, and look at the wax in its nakedness, then, even though there can be still an error in my judgment, nevertheless I cannot perceive it thus without a human mind.

But what am I to say about this mind, that is, about myself? For as yet I admit nothing else to be in me over and above the mind. What, I ask, am I who seem to perceive this wax so distinctly? Do I not know myself not only much more truly and with greater certainty, but also much more distinctly and evidently? For if I judge that the wax exists from the fact that I see it, certainly from this same fact that I see the wax it follows much more evidently that I myself exist. For it could happen that what I see is not truly wax. It could happen that I have no eyes with which to see anything. But it is utterly impossible that, while I see or think I see (I do not now distinguish these two), I who think am not something. Likewise, if I judge that the wax exists from the fact that I touch it, the same outcome will again obtain, namely that I exist. If I judge that the wax exists from the fact that I imagine it, or for any other reason, plainly the same thing follows. But what I note regarding the wax applies to everything else that is external to me. Furthermore, if my perception of the wax seemed more distinct after it became known to me not only on account of sight or touch, but on account of many reasons, one has to admit how much more distinctly I am now known to myself. For there is not a single consideration that can aid in my perception of the wax or of any other body that fails to make even more manifest the nature of my mind. But there are still so many other things in the mind itself on the basis of which my knowledge of it can be rendered more distinct that it hardly seems worth enumerating those things which emanate to it from the body.

But to and behold, I have returned on my own to where I wanted to be. For since I now know that even bodies are not, properly speaking, perceived by the senses or by the faculty of imagination, but by the intellect alone, and that they are not perceived through their being touched or seen, but only through their being understood, I manifestly know that nothing can be perceived more easily and more evidently than my own mind. But since the tendency to hang on to long-held beliefs cannot be

put aside so quickly, I want to stop here, so that by the length of my meditation this new knowledge may be more deeply impressed upon my memory.

MEDITATION THREE: Concerning God, That He Exists

I will now shut my eyes, stop up my ears, and withdraw all my senses. I will also blot out from my thoughts all images of corporeal things, or rather, since the latter is hardly possible, I will regard these images as empty, false and worthless. And as I converse with myself alone and look more deeply into myself, I will attempt to render myself gradually better known and more familiar to myself. I am a thing that thinks, that is to say, a thing that doubts, affirms, denies, understands a few things, is ignorant of many things, wills, refrains from willing, and also imagines and senses. For as I observed earlier, even though these things that I sense or imagine may perhaps be nothing at all outside me, nevertheless I am certain that these modes of thinking, which are cases of what I call sensing and imagining, insofar as they are merely modes of thinking, do exist within me.

In these few words, I have reviewed everything I truly know, or at least what so far I have noticed that I know. Now I will ponder more carefully to see whether perhaps there may be other things belonging to me that up until now I have failed to notice. I am certain that I am a thinking thing. But do I not therefore also know what is required for me to be certain of anything? Surely in this first instance of knowledge, there is nothing but a certain clear and distinct perception of what I affirm. Yet this would hardly be enough to render me certain of the truth of a thing, if it could ever happen that something that I perceived so clearly and distinctly were false. And thus I now seem able to posit as a general rule that everything I very clearly and distinctly perceive is true.

Be that as it may, I have previously admitted many things as wholly certain and evident that nevertheless I later discovered to be doubtful. What sort of things were these? Why, the earth, the sky, the stars, and all the other things I perceived by means of the senses. But what was it about these things that I clearly perceived? Surely the fact that the ideas or thoughts of these things were hovering before my mind. But even now I do not deny that these ideas are in me. Yet there was something else I used to affirm, which, owing to my habitual tendency to believe it, I used to think was something I clearly perceived, even though I actually did not perceive it at all: namely, that certain things existed outside me, things

from which those ideas proceeded and which those ideas completely resembled. But on this point I was mistaken; or rather, if my judgment was a true one, it was not the result of the force of my perception.

But what about when I considered something very simple and easy in the areas of arithmetic or geometry, for example that two plus three make five, and the like? Did I not intuit them at least clearly enough so as to affirm them as true? To be sure, I did decide later on that I must doubt these things, but that was only because it occurred to me that some God could perhaps have given me a nature such that I might be deceived even about matters that seemed most evident. But whenever this preconceived opinion about the supreme power of God occurs to me, I cannot help admitting that, were he to wish it, it would be easy for him to cause me to err even in those matters that I think I intuit as clearly as possible with the eyes of the mind. On the other hand, whenever I turn my attention to those very things that I think I perceive with such great clarity, I am so completely persuaded by them that I spontaneously blurt out these words: "let anyone who can do so deceive me; so long as I think that I am something, he will never bring it about that I am nothing. Nor will he one day make it true that I never existed, for it is true now that I do exist. Nor will he even bring it about that perhaps two plus three might equal more or less than five, or similar items in which I recognize an obvious contradiction." And certainly, because I have no reason for thinking that there is a God who is a deceiver (and of course I do not yet sufficiently know whether there even is a God), the basis for doubting, depending as it does merely on the above hypothesis, is very tenuous and, so to speak, metaphysical. But in order to remove even this basis for doubt, I should at the first opportunity inquire whether there is a God, and, if there is, whether or not he can be a deceiver. For if I am ignorant of this, it appears I am never capable of being completely certain about anything else.

However, at this stage good order seems to demand that I first group all my thoughts into certain classes, and ask in which of them truth or falsity properly resides. Some of these thoughts are like images of things; to these alone does the word "idea" properly apply, as when I think of a man, or a chimera, or the sky, or an angel, or God. Again there are other thoughts that take different forms: for example, when I will, or fear, or affirm, or deny, there is always some thing that I grasp as the subject of my thought, yet I embrace in my thought something more than the likeness of that thing. Some of these thoughts are called volitions or affects, while others are called judgments.

Now as far as ideas are concerned, if they are considered alone and in

69 that the square of the hypotenuse is equal to the sum of the squares of the other two sides as it is that the hypotenuse is opposite the largest angle, nevertheless, once the former has been ascertained, it is no less believed. However, as far as God is concerned, if I were not overwhelmed by prejudices and if the images of sensible things were not besieging my thought from all directions, I would certainly acknowledge nothing sooner or more easily than him. For what, in and of itself, is more manifest than that a supreme being exists, that is, that God, to whose essence alone existence belongs, exists?

And although I needed to pay close attention in order to perceive this, nevertheless I now am just as certain about this as I am about everything else that seems most certain. Moreover, I observe also that certitude about other things is so dependent on this, that without it nothing can ever be perfectly known.

70 For I am indeed of such a nature that, while I perceive something very clearly and distinctly, I cannot help believing it to be true. Nevertheless, my nature is also such that I cannot focus my mental gaze always on the same thing, so as to perceive it clearly. Often the memory of a previously made judgment may return when I am no longer attending to the arguments on account of which I made such a judgment. Thus, other arguments can be brought forward that would easily make me change my opinion, were I ignorant of God. And thus I would never have true and certain knowledge about anything, but merely fickle and changeable opinions. Thus, 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 its demonstration I cannot help believing this to be true. But no sooner do I turn the mind's eye away from the demonstration, than, however much I still recall that I had observed it most clearly, nevertheless, it can easily happen that I entertain doubts about whether it is true, were I ignorant of God. For I can convince myself that I have been so constituted by nature that I might occasionally be mistaken about those things I believe I perceive most evidently, especially when I recall that I have often taken many things to be true and certain, which other arguments have subsequently led me to judge to be false.

But once I perceived that there is a God, and also understood at the same time that everything else depends on him, and that he is not a deceiver, I then concluded that everything that I clearly and distinctly perceive is necessarily true. Hence even if I no longer attend to the reasons leading me to judge this to be true, so long as I merely recall that I did

clearly and distinctly observe it, no counter-argument can be brought forward that might force me to doubt it. On the contrary, I have a true and certain knowledge of it. And not just of this one fact, but of everything else that I recall once having demonstrated, as in geometry, and so on. For what objections can now be raised against me? That I have been made such that I am often mistaken? But I now know that I cannot be mistaken in matters I plainly understand. That I have taken many things to be true and certain which subsequently I recognized to be false? But none of these were things I clearly and distinctly perceived. But I was ignorant of this rule for determining the truth, and I believed these things perhaps for other reasons which I later discovered were less firm. What then remains to be said? That perhaps I am dreaming, as I recently objected against myself, in other words, that everything I am now thinking of is no truer than what occurs to someone who is asleep? Be that as it may, this changes nothing; for certainly, even if I were dreaming, if anything is evident to my intellect, then it is entirely true.

And thus I see plainly that the certainty and truth of every science depends exclusively upon the knowledge of the true God, to the extent that, prior to my becoming aware of him, I was incapable of achieving perfect knowledge about anything else. But now it is possible for me to achieve full and certain knowledge about countless things, both about God and other intellectual matters, as well as about the entirety of that corporeal nature which is the object of pure mathematics.

MEDITATION SIX: Concerning the Existence of Material Things, and the Real Distinction between Mind and Body

It remains for me to examine whether material things exist. Indeed I now know that they can exist, at least insofar as they are the object of pure mathematics, since I clearly and distinctly perceive them. For no doubt God is capable of bringing about everything that I am capable of perceiving in this way. And I have never judged that God was incapable of something, except when it was incompatible with my perceiving it distinctly. Moreover, from the faculty of imagination, which I notice I use while dealing with material things, it seems to follow that they exist. For to anyone paying very close attention to what imagination is, it appears to be simply a certain application of the knowing faculty to a body intimately present to it, and which therefore exists.

To make this clear, I first examine the difference between imagination and pure intellection. So, for example, when I imagine a triangle, I not

only understand that it is a figure bounded by three lines, but at the same time I also envisage with the mind's eye those lines as if they were present, and this is what I call "imagining." On the other hand, if I want to think about a chiliagon, I certainly understand that it is a figure consisting of a thousand sides, just as well as I understand that a triangle is a figure consisting of three sides, yet I do not imagine those thousand sides in the same way, or envisage them as if they were present. And although in that case—because of force of habit I always imagine something whenever I think about a corporeal thing—I may perchance represent to myself some figure in a confused fashion, nevertheless this figure is obviously not a chiliagon. For this figure is really no different from the figure I would represent to myself, were I thinking of a myriagon or any other figure with a large number of sides. Nor is this figure of any help in knowing the properties that differentiate a chiliagon from other polygons. But if the figure in question is a pentagon, I surely can understand its figure, just as was the case with the chiliagon, without the help of my imagination. But I can also imagine a pentagon by turning the mind's eye both to its five sides and at the same time to the area bounded by those sides. At this point I am manifestly aware that I am in need of a peculiar sort of effort on the part of the mind in order to imagine, one that I do not employ in order to understand. This new effort on the part of the mind clearly shows the difference between imagination and pure intellect.

Moreover, I consider that this power of imagining that is in me, insofar as it differs from the power of understanding, is not required for my own essence, that is, the essence of my mind. For were I to be lacking this power, I would nevertheless undoubtedly remain the same entity I am now. Thus it seems to follow that the power of imagining depends upon something distinct from me. And I readily understand that, were a body to exist to which a mind is so joined that it may apply itself in order, as it were, to look at it any time it wishes, it could happen that it is by means of this very body that I imagine corporeal things. As a result, this mode of thinking may differ from pure intellect only in the sense that the mind, when it understands, in a sense turns toward itself and looks at one of the ideas that are in it; whereas when it imagines, it turns toward the body, and intuitively in the body something that conforms to an idea either understood by the mind or perceived by sense. To be sure, I easily understand that the imagination can be actualized in this way, provided a body does exist. And since I can think of no other way of explaining imagination that is equally appropriate, I make a probable conjecture from this that a body exists. But this is only a probability. And even though I may examine everything

carefully, nevertheless I do not yet see how the distinct idea of corporeal nature that I find in my imagination can enable me to develop an argument which necessarily concludes that some body exists.

But I am in the habit of imagining many other things, over and above that corporeal nature which is the object of pure mathematics, such as colors, sounds, tastes, pain, and the like, though not so distinctly. And I perceive these things better by means of the senses, from which, with the aid of the memory, they seem to have arrived at the imagination. Thus I should pay the same degree of attention to the senses, so that I might deal with them more appropriately. I must see whether I can obtain any reliable argument for the existence of corporeal things from those things that are perceived by the mode of thinking that I call "sense."

First of all, to be sure, I will review here all the things I previously believed to be true because I had perceived them by means of the senses and the causes I had for thinking this. Next I will assess the causes why I later called them into doubt. Finally, I will consider what I must now believe about these things.

So first, I sensed that I had a head, hands, feet, and other members that comprised this body which I viewed as part of me, or perhaps even as the whole of me. I sensed that this body was found among many other bodies, by which my body can be affected in various beneficial or harmful ways. I gauged what was opportune by means of a certain sensation of pleasure, and what was inopportune by a sensation of pain. In addition to pain and pleasure, I also sensed within me hunger, thirst, and other such appetites, as well as certain bodily tendencies toward mirth, sadness, anger, and other such affects. And externally, besides the extension, shapes, and motions of bodies, I also sensed their hardness, heat, and other tactile qualities. I also sensed light, colors, odors, tastes, and sounds, on the basis of whose variety I distinguished the sky, the earth, the seas, and the other bodies, one from the other. Now given the ideas of all these qualities that presented themselves to my thought, and which were all that I properly and immediately sensed, still it was surely not without reason that I thought I sensed things that were manifestly different from my thought, namely, the bodies from which these ideas proceeded. For I knew by experience that these ideas came upon me utterly without my consent, to the extent that, wish as I may, I could not sense any object unless it was present to a sense organ. Nor could I fail to sense it when it was present. And since the ideas perceived by sense were much more vivid and explicit and even, in their own way, more distinct than any of those that I deliberately and knowingly formed through meditation or that I found impressed on my

memory, it seemed impossible that they came from myself. Thus the remaining alternative was that they came from other things. Since I had no knowledge of such things except from those same ideas themselves, I could not help entertaining the thought that they were similar to those ideas. Moreover, I also recalled that the use of the senses antedated the use of reason. And since I saw that the ideas that I myself fashioned were not as explicit as those that I perceived through the faculty of sense, and were for the most part composed of parts of the latter, I easily convinced myself that I had absolutely no idea in the intellect that I did not have beforehand in the sense faculty. Not without reason did I judge that this body, which by a certain special right I called "mine," belongs more to me than did any other. For I could never be separated from it in the same way I could be from other bodies. I sensed all appetites and feelings in and on behalf of it. Finally, I noticed pain and pleasurable excitement in its parts, but not in other bodies external to it. But why should a certain sadness of spirit arise from some sensation or other of pain, and why should a certain elation arise from a sensation of excitement, or why should that peculiar twitching in the stomach, which I call hunger, warn me to have something to eat, or why should dryness in the throat warn me to take something to drink, and so on? I plainly had no explanation other than that I had been taught this way by nature. For there is no affinity whatsoever, at least none I am aware of, between this twitching in the stomach and the will to have something to eat, or between the sensation of something causing pain and the thought of sadness arising from this sensation. But nature also seems to have taught me everything else as well that I judged concerning the objects of the senses, for I had already convinced myself that this was how things were, prior to my assessing any of the arguments that might prove it.

Afterwards, however, many experiences gradually weakened any faith that I had in the senses. Towers that had seemed round from afar occasionally appeared square at close quarters. Very large statues mounted on their pedestals did not seem large to someone looking at them from ground level. And in countless other such instances I determined that judgments in matters of the external senses were in error. And not just the external senses, but the internal senses as well. For what can be more intimate than pain? But I had sometimes heard it said by people whose leg or arm had been amputated that it seemed to them that they still occasionally sensed pain in the very limb they had lost. Thus, even in my own case it did not seem to be entirely certain that some bodily member was causing me pain, even though I did sense pain in it. To these causes for doubt I

recently added two quite general ones. The first was that everything I ever thought I sensed while awake I could believe I also sometimes sensed while asleep, and since I do not believe that what I seem to sense in my dreams comes to me from things external to me, I saw no reason why I should hold this belief about those things I seem to be sensing while awake. The second was that, since I was still ignorant of the author of my origin (or at least pretended to be ignorant of it), I saw nothing to prevent my having been so constituted by nature that I should be mistaken even about what seemed to me most true. As to the arguments that used to convince me of the truth of sensible things, I found no difficulty responding to them. For since I seemed driven by nature toward many things about which reason tried to dissuade me, I did not think that what I was taught by nature deserved much credence. And even though the perceptions of the senses did not depend on my will, I did not think that we must therefore conclude that they came from things distinct from me, since perhaps there is some faculty in me, as yet unknown to me, that produces these perceptions.

But now, having begun to have a better knowledge of myself and the author of my origin, I am of the opinion that I must not rashly admit everything that I seem to derive from the senses; but neither, for that matter, should I call everything into doubt.

First, I know that all the things that I clearly and distinctly understand can be made by God such as I understand them. For this reason, my ability clearly and distinctly to understand one thing without another suffices to make me certain that the one thing is different from the other, since they can be separated from each other, at least by God. The question as to the sort of power that might effect such a separation is not relevant to their being thought to be different. For this reason, from the fact that I know that I exist, and that at the same time I judge that obviously nothing else belongs to my nature or essence except that I am a thinking thing, I rightly conclude that my essence consists entirely in my being a thinking thing. And although perhaps (or rather, as I shall soon say, assuredly) I have a body that is very closely joined to me, nevertheless, because on the one hand I have a clear and distinct idea of myself, insofar as I am merely a thinking thing and not an extended thing, and because on the other hand I have a distinct idea of a body, insofar as it is merely an extended thing and not a thinking thing, it is certain that I am really distinct from my body, and can exist without it.

Moreover, I find in myself faculties for certain special modes of thinking, namely the faculties of imagining and sensing. I can clearly and distinctly

understand myself in my entirety without these faculties, but not vice versa: I cannot understand them clearly and distinctly without me, that is, without a substance endowed with understanding in which they inhere, for they include an act of understanding in their formal concept. Thus I perceive them to be distinguished from me as modes from a thing. I also acknowledge that there are certain other faculties, such as those of moving from one place to another, of taking on various shapes, and so on, that, like sensing or imagining, cannot be understood apart from some substance in which they inhere, and hence without which they cannot exist. But it is clear that these faculties, if in fact they exist, must be in a corporeal or extended substance, not in a substance endowed with understanding. For some extension is contained in a clear and distinct concept of them, though certainly not any understanding. Now there clearly is in me a passive faculty of sensing, that is, a faculty for receiving and knowing the ideas of sensible things; but I could not use it unless there also existed, either in me or in something else, a certain active faculty of producing or bringing about these ideas. But this faculty surely cannot be in me, since it clearly presupposes no act of understanding, and these ideas are produced without my cooperation and often even against my will. Therefore the only alternative is that it is in some substance different from me, containing either formally or eminently all the reality that exists objectively in the ideas produced by that faculty, as I have just noted above. Hence this substance is either a body that is, a corporeal nature, which contains formally all that is contained objectively in the ideas, or else it is God, or some other creature more noble than a body, which contains eminently all that is contained objectively in the ideas. But since God is not a deceiver, it is patently obvious that he does not send me these ideas either immediately by himself, or even through the mediation of some creature that contains the objective reality of these ideas not formally but only eminently. For since God has given me no faculty whatsoever for making this determination, but instead has given me a great inclination to believe that these ideas issue from corporeal things, I fail to see how God could be understood not to be a deceiver, if these ideas were to issue from a source other than corporeal things. And consequently corporeal things exist. Nevertheless, perhaps not all bodies exist exactly as I grasp them by sense, since this sensory grasp is in many cases very obscure and confused. But at least they do contain everything I clearly and distinctly understand—that is, everything, considered in a general sense, that is encompassed in the object of pure mathematics.

As far as the remaining matters are concerned, which are either merely

particular (for example, that the sun is of such and such a size or shape, and so on) or less clearly understood (for example, light, sound, pain, and the like), even though these matters are very doubtful and uncertain, nevertheless the fact that God is no deceiver (and thus no falsity can be found in my opinions, unless there is also in me a faculty given me by God for the purpose of rectifying this falsity) offers me a definite hope of reaching the truth even in these matters. And surely there is no doubt that all that I am taught by nature has some truth to it; for by "nature," taken generally, I understand nothing other than God himself or the ordered network of created things which was instituted by God. By my own particular nature I understand nothing other than the combination of all the things bestowed upon me by God.

There is nothing that this nature teaches me more explicitly than that I have a body that is ill-disposed when I feel pain, that needs food and drink when I suffer hunger or thirst, and the like. Therefore, I should not doubt that there is some truth in this.

By means of these sensations of pain, hunger, thirst and so on, nature also teaches not merely that I am present to my body in the way a sailor is present in a ship, but that I am most tightly joined and, so to speak, commingled with it, so much so that I and the body constitute one single thing. For if this were not the case, then I, who am only a thinking thing, would not sense pain when the body is injured; rather, I would perceive the wound by means of the pure intellect, just as a sailor perceives by sight whether anything in his ship is broken. And when the body is in need of food or drink, I should understand this explicitly, instead of having confused sensations of hunger and thirst. For clearly these sensations of thirst, hunger, pain, and so on are nothing but certain confused modes of thinking arising from the union and, as it were, the commingling of the mind with the body.

Moreover, I am also taught by nature that various other bodies exist around my body, some of which are to be pursued, while others are to be avoided. And to be sure, from the fact that I sense a wide variety of colors, sounds, odors, tastes, levels of heat, and grades of roughness, and the like, I rightly conclude that in the bodies from which these different perceptions of the senses proceed there are differences corresponding to the different perceptions—though perhaps the latter do not resemble the former. And from the fact that some of these perceptions are pleasant while others are unpleasant, it is plainly certain that my body, or rather my whole self, insofar as I am comprised of a body and a mind, can be affected by various beneficial and harmful bodies in the vicinity.

82 Granted, there are many other things that I seem to have been taught by nature; nevertheless it was not really nature that taught them to me but a certain habit of making reckless judgments. And thus it could easily happen that these judgments are false: for example, that any space where there is absolutely nothing happening to move my senses is empty; or that there is something in a hot body that bears an exact likeness to the idea of heat that is in me; or that in a white or green body there is the same whiteness or greenness that I sense; or that in a bitter or sweet body there is the same taste, and so on; or that stars and towers and any other distant bodies have the same size and shape that they present to my senses, and other things of this sort. But to ensure that my perceptions in this matter are sufficiently distinct, I ought to define more precisely what exactly I mean when I say that I am "taught something by nature." For I am taking "nature" here more narrowly than the combination of everything bestowed on me by God. For this combination embraces many things that belong exclusively to my mind, such as my perceiving that what has been done cannot be undone, and everything else that is known by the light of nature. That is not what I am talking about here. There are also many things that belong exclusively to the body, such as that it tends to move downward, and so on. I am not dealing with these either, but only with what God has bestowed on me insofar as I am composed of mind and body. Accordingly, it is this nature that teaches me to avoid things that produce a sensation of pain and to pursue things that produce a sensation of pleasure, and the like. But it does not appear that nature teaches us to conclude anything, besides these things, from these sense perceptions unless the intellect has first conducted its own inquiry regarding things external to us. For it seems to belong exclusively to the mind, and not to the composite of mind and body, to know the truth in these matters. Thus, although a star affects my eye no more than does the flame from a small torch, still there is no real or positive tendency in my eye toward believing that the star is no larger than the flame. Yet, ever since my youth, I have made this judgment without any reason for doing so. And although I feel heat as I draw closer to the fire, and I also feel pain upon drawing too close to it, there is not a single argument that persuades me that there is something in the fire similar to that heat, any more than to that pain. On the contrary, I am convinced only that there is something in the fire that, regardless of what it finally turns out to be, causes in us those sensations of heat or pain. And although there may be nothing in a given space that moves the senses, it does not therefore follow that there is no body in it. But I see that in these and many other instances I have been in the habit of subverting the order

of nature. For admittedly I use the perceptions of the senses (which are properly given by nature only for signifying to the mind what things are useful or harmful to the composite of which it is a part, and to that extent they are clear and distinct enough) as reliable rules for immediately discerning what is the essence of bodies located outside us. Yet they signify nothing about that except quite obscurely and confusedly.

I have already examined in sufficient detail how it could happen that my judgments are false, despite the goodness of God. But a new difficulty now arises regarding those very things that nature shows me are either to be sought out or avoided, as well as the internal sensations where I seem to have detected errors, as for example, when someone is deluded by a food's pleasant taste to eat the poison hidden inside it. In this case, however, he is driven by nature only toward desiring the thing in which the pleasurable taste is found, but not toward the poison, of which he obviously is unaware. I can only conclude that this nature is not omniscient. This is not remarkable, since man is a limited thing, and thus only what is of limited perfection befits him.

But we not infrequently err even in those things to which nature impels us. Take, for example, the case of those who are ill and who desire food or drink that will soon afterwards be injurious to them. Perhaps it could be said here that they erred because their nature was corrupt. However, this does not remove our difficulty, for a sick man is no less a creature of God than a healthy one, and thus it seems no less inconsistent that the sick man got a deception-prone nature from God. And a clock made of wheels and counter-weights follows all the laws of nature no less closely when it has been badly constructed and does not tell time accurately than it does when it completely satisfies the wish of its maker. Likewise, I might regard a man's body as a kind of mechanism that is outfitted with and composed of bones, nerves, muscles, veins, blood and skin in such a way that, even if no mind existed in it, the man's body would still exhibit all the same motions that are in it now except for those motions that proceed either from a command of the will or, consequently, from the mind. I easily recognize that it would be natural for this body, were it, say, suffering from dropsy and experiencing dryness in the throat (which typically produces a thirst sensation in the mind), and also so disposed by its nerves and other parts to take something to drink, the result of which would be to exacerbate the illness. This is as natural as for a body without any such illness to be moved by the same dryness in the throat to take something to drink that is useful to it. And given the intended purpose of the clock, I could say that it deviates from its nature when it fails to tell the right

time. And similarly, considering the mechanism of the human body in terms of its being equipped for the motions that typically occur in it, I may think that it too is deviating from its nature, if its throat were dry when having something to drink is not beneficial to its conservation. Nevertheless, I am well aware that this last use of "nature" differs greatly from the other. For this latter "nature" is merely a designation dependent on my thought, since it compares a man in poor health and a poorly constructed clock with the ideas of a healthy man and of a well-made clock, a designation extrinsic to the things to which it is applied. But by "nature" taken in the former sense, I understand something that is really in things, and thus is not without some truth.

When we say, then, in the case of the body suffering from dropsy, that its "nature" is corrupt, given the fact that it has a parched throat and yet does not need something to drink, "nature" obviously is merely an extrinsic designation. Nevertheless, in the case of the composite, that is, of a mind joined to such a body, it is not a mere designation, but a true error of nature that this body should be thirsty when having something to drink would be harmful to it. It therefore remains to inquire here how the goodness of God does not prevent "nature," thus considered, from being deceptive.

Now my first observation here is that there is a great difference between a mind and a body in that a body, by its very nature, is always divisible. On the other hand, the mind is utterly indivisible. For when I consider the mind, that is, myself insofar as I am only a thinking thing, I cannot distinguish any parts within me; rather, I understand myself to be manifestly one complete thing. Although the entire mind seems to be united to the entire body, nevertheless, were a foot or an arm or any other bodily part to be amputated, I know that nothing has been taken away from the mind on that account. Nor can the faculties of willing, sensing, understanding, and so on be called "parts" of the mind, since it is one and the same mind that wills, senses, and understands. On the other hand, there is no corporeal or extended thing I can think of that I may not in my thought easily divide into parts; and in this way I understand that it is divisible. This consideration alone would suffice to teach me that the mind is wholly diverse from the body, had I not yet known it well enough in any other way.

My second observation is that my mind is not immediately affected by all the parts of the body, but only by the brain, or perhaps even by just one small part of the brain, namely, by that part where the "common" sense is said to reside. Whenever this part of the brain is disposed in the

same manner, it presents the same thing to the mind, even if the other parts of the body are able meanwhile to be related in diverse ways. Countless experiments show this, none of which need be reviewed here.

My next observation is that the nature of the body is such that whenever any of its parts can be moved by another part some distance away, it can also be moved in the same manner by any of the parts that lie between them, even if this more distant part is doing nothing. For example, in the cord ABCD, if the final part D is pulled, the first part A would be moved in exactly the same manner as it could be, if one of the intermediate parts B or C were pulled, while the end part D remained immobile. Likewise, when I feel a pain in my foot, physics teaches me that this sensation took place by means of nerves distributed throughout the foot, like stretched cords extending from the foot all the way to the brain. When these nerves are pulled in the foot, they also pull on the inner parts of the brain to which they extend, and produce a certain motion in them. This motion has been constituted by nature so as to affect the mind with a sensation of pain, as if it occurred in the foot. But because these nerves need to pass through the shin, thigh, loins, back, and neck to get from the foot to the brain, it can happen that even if it is not the part in the foot but merely one of the intermediate parts that is being struck, the very same movement will occur in the brain that would occur were the foot badly injured. The inevitable result will be that the mind feels the same pain. The same opinion should hold for any other sensation.

My final observation is that, since any given motion occurring in that part of the brain immediately affecting the mind produces but one sensation in it, I can think of no better arrangement than that it produces the one sensation that, of all the ones it is able to produce, is most especially and most often conducive to the maintenance of a healthy man. Moreover, experience shows that all the sensations bestowed on us by nature are like this. Hence there is absolutely nothing to be found in them that does not bear witness to God's power and goodness. Thus, for example, when the nerves in the foot are agitated in a violent and unusual manner, this motion of theirs extends through the marrow of the spine to the inner reaches of the brain, where it gives the mind the sign to sense something, namely, the pain as if it is occurring in the foot. This provokes the mind to do its utmost to move away from the cause of the pain, since it is seen as harmful to the foot. But the nature of man could have been so constituted by God that this same motion in the brain might have indicated something else to the mind; for example, either the motion itself as it occurs in the brain, or in the foot, or in some place in between, or something else entirely

different. But nothing else would have served so well the maintenance of the body. Similarly, when we need something to drink, a certain dryness arises in the throat that moves the nerves in the throat, and, by means of them, the inner parts of the brain. And this motion affects the mind with a sensation of thirst, because in this entire affair nothing is more useful for us to know than that we need something to drink in order to maintain our health; the same holds in the other cases.

From these considerations it is utterly apparent that, notwithstanding the immense goodness of God, the nature of man, insofar as it is composed of mind and body, cannot help being sometimes mistaken. For if some cause, not in the foot but in some other part through which the nerves extend from the foot to the brain, or perhaps even in the brain itself, were to produce the same motion that would normally be produced by a badly injured foot, the pain will be felt as if it were in the foot, and the senses will naturally be deceived. For since an identical motion in the brain can only bring about an identical sensation in the mind, and it is more frequently the case that this motion is wont to arise on account of a cause that harms the foot than on account of some other thing existing elsewhere, it is reasonable that the motion should always show pain to the mind as something belonging to the foot rather than to some other part. And if dryness in the throat does not arise, as is normal, because taking something to drink contributes to bodily health, but from a contrary cause, as happens in the case of someone with dropsy, then it is far better that it should deceive on that occasion than that it should always be deceptive when the body is in good health. The same holds for the other cases.

This consideration is most helpful, not only for my noticing all the errors to which my nature is liable, but also for enabling me to correct or avoid them without difficulty. To be sure, I know that all the senses set forth what is true more frequently than what is false regarding what concerns the welfare of the body. Moreover, I can nearly always make use of several of them in order to examine the same thing. Furthermore, I can use my memory, which connects current happenings with past ones, and my intellect, which now has examined all the causes of error. Hence I should no longer fear that those things that are daily shown me by the senses are false. On the contrary, the hyperbolic doubts of the last few days ought to be rejected as ludicrous. This goes especially for the chief reason for doubting, which dealt with my failure to distinguish being asleep from being awake. For I now notice that there is a considerable difference between these two; dreams are never joined by the memory with all the other actions of life, as is the case with those actions that occur when one

is awake. For surely, if, while I am awake, someone were suddenly to appear to me and then immediately disappear, as occurs in dreams, so that I see neither where he came from nor where he went, it is not without reason that I would judge him to be a ghost or a phantom conjured up in my brain, rather than a true man. But when these things happen, and I notice distinctly where they come from, where they are now, and when they come to me, and when I connect my perception of them without interruption with the whole rest of my life, I am clearly certain that these perceptions have happened to me not while I was dreaming but while I was awake. Nor ought I have even the least doubt regarding the truth of these things, if, having mustered all the senses, in addition to my memory and my intellect, in order to examine them, nothing is passed on to me by one of these sources that conflicts with the others. For from the fact that God is no deceiver, it follows that I am in no way mistaken in these matters. But because the need to get things done does not always permit us the leisure for such a careful inquiry, we must confess that the life of man is apt to commit errors regarding particular things, and we must acknowledge the infirmity of our nature.