An Essay Concerning Human Understanding

John Locke, 1689

Chapter i: Introduction

1. Since it is the *understanding* that sets man above all other animals and enables him to use and dominate them, it is certainly worth our while to enquire into it. The understanding is like the eye in this respect: it makes us see and perceive all other things but doesn't look in on itself. To stand back from it and treat it as an object of study requires skill and hard work Still, whatever difficulties there may be in doing this, whatever it is that keeps *us* so much in the dark to *ourselves*, it will be worthwhile to let as much light as possible in upon our minds, and to learn as much as we can about our own understandings. As well as being enjoyable, this will help us to think well about other topics.

2. My purpose, therefore, is to enquire into •the origin, certainty, and extent of human knowledge, and also into •the grounds and degrees of belief, opinion, and assent. I shan't involve myself with the biological aspects of the mind. For example, I shan't wrestle with the question of what alterations of our bodies lead to our having sensation through our sense-organs or to our having any ideas in our understandings. Challenging and entertaining as these questions may be, I shall by-pass them because they aren't relevant to my project. All we need for my purposes is to consider the human ability to *think*. My time will be well spent if by this plain, factual method I can explain how our understandings come to have those notions of things that we have, and can establish ways of measuring how certainly we can know things, and

of evaluating the grounds we have for our opinions. Although our opinions are various, different, and often wholly contradictory, we express them with great assurance and confidence. Someone observing human opinions from the outside—seeing how they conflict with one another, and yet how fondly they are embraced and how stubbornly they are maintained—might have reason to suspect that either there isn't any such thing as truth or that mankind isn't equipped to come to know it.

3. So it will be worth our while to find where the line falls between *opinion* and *knowledge*, and to learn more about the 'opinion' side of the line. What I want to know is this: When we are concerned with something about which we have no certain knowledge, what rules or standards should guide *how* confident we allow ourselves to be that our opinions are right? Here is the method I shall follow in trying to answer that question. First, I shall enquire into the origin of those *ideas* or *notions*—call them what you will—that a man observes and is conscious of having in his mind. How does the understanding come to be equipped with them? Secondly, I shall try to show what *knowledge* the understanding has by means of those ideas—how much of it there is, how secure it is, and how self-evident it is. I shall also enquire a little into the nature and grounds of *faith* or *opinion*—that is, acceptance of something as true when we don't know for certain that it is true. …

Chapter ii: No innate ·speculative· principles in the mind

1. Some people regard it as settled that there are in the understanding certain innate principles. These are conceived as primary notions [= 'first thoughts']—letters printed on the mind of man, so to speak—which the soul [= 'mind'; no religious implications] receives when it first comes into existence, and that it brings into the world with it. I could show any fair-minded reader that this is wrong if I could show (as I hope to do in the present work) how men can get all the knowledge they have, and can arrive at certainty about some things, purely by using their natural faculties [= 'capacities', 'abilities'], without help from any innate notions

or principles. Everyone will agree, presumably, that it would be absurd to suppose that the *ideas* of colours are innate in a creature to whom God has given eyesight, which is a power to get those ideas through the eyes from external objects. It would be equally unreasonable to explain our knowledge of various *truths* in terms of innate 'imprinting' if it could just as easily be explained through our ordinary abilities to come to know things. Anyone who follows his own thoughts in the search of truth, and is led even slightly off the path of common beliefs, is likely to be criticized for this; ·and I expect to be criticized for saying that none of our intellectual possessions are innate·. So I shall present the reasons that made me doubt the truth of the innateness doctrine. That will be my excuse for my mistake, if that's what it is. Whether it is a mistake can be decided by those who are willing, as I am, to welcome truth wherever they find it.

2. Nothing is more commonly taken for granted than that certain principles, both speculative [= 'having to do with what is the case'] and practical [= 'having to do with morality, or what ought to be the case'] are accepted by all mankind. Some people have argued that because these principles are (they think) universally accepted, they must have been stamped onto the souls of men from the outset.

3. This argument from universal consent has a defect in it. Even if it were in fact true that all mankind agreed in accepting certain truths, that wouldn't prove them to be innate if universal agreement could be explained in some other way; and I think it can.

4. Worse still, this *argument from universal consent* which is used to prove that there are innate principles can be turned into a proof that there are none; because there aren't any principles to which all mankind give universal assent. I shall begin with speculative principles, taking as my example those much vaunted logical principles •'Whatever is, is' and •'It is impossible for the same thing to be and not to be', which are the most widely thought to be innate. They are so firmly and generally believed to be accepted by everyone in the world that it may be thought strange that anyone should question this. Yet I am willing to

say that these propositions, far from being accepted by everyone, have never even been heard of by a great part of mankind.

5. Children and idiots have no thought—not an inkling—of these principles, and that fact alone is enough to destroy the universal assent that any truth that was genuinely innate would have to have. For it seems to me nearly a contradiction to say that there are truths imprinted on the soul that it doesn't perceive or understand—because if 'imprinting' means anything it means making something be perceived: to imprint anything on the mind without the mind's perceiving it seems to me hardly intelligible. So if children and idiots have souls, minds, with those principles imprinted on them, they can't help perceiving them and assenting to them. Since they don't do that, it is evident that the principles are not innately impressed upon their minds. If they were naturally imprinted, and thus innate, how could they be unknown? To say that a notion is imprinted on the mind, *and* that the mind is ignorant of it and has never paid attention to it, is to make this impression nothing. No proposition can be said to be in the mind which it has never known or been conscious of. It may be said that a proposition that the mind has never consciously known may be 'in the mind' in the sense that the mind is capable of knowing it; but in that sense *every true proposition that the mind is capable of ever assenting to may be said to be 'in the mind' and to be imprinted!* Indeed, there could be 'imprinted on' someone's mind, in *this* sense, truths that the person never did and never will know. For a man may be capable of knowing, and indeed of knowing with certainty, many things that he doesn't in fact come to know at any time in his life. So if the mere *ability* to know is the natural impression philosophers are arguing for, all the truths a man ever comes to know will have to count as innate; and this great doctrine about 'innateness' will come down to nothing more than a very improper way of speaking, and not something that disagrees with the views of those who deny innate principles. For nobody, I think, ever denied that the mind was capable of knowing many truths. Those who think that •all knowledge is acquired ·rather than innate· also think that •the *capacity* for knowledge is innate. If these words 'to be in the

understanding' are used properly, they mean 'to be understood'. Thus, to be in the understanding and not be understood—to be in the mind and never be perceived—amounts to saying that something *is* and *is not* in the mind or understanding. If therefore these two propositions, •'Whatsoever is, is' and •'It is impossible for the same thing to be and not to be' are imprinted by nature, children cannot be ignorant of them; infants and all who have souls must necessarily have them in their understandings, know the truth of them, and assent to that truth. …

BOOK II

Chapter i: Ideas in general, and their origin

1. Everyone is conscious to himself that he thinks; and when thinking is going on, the mind is engaged with *ideas* that it contains. So it's past doubt that men have in their minds various ideas, such as are those expressed by the words 'whiteness', 'hardness', 'sweetness', 'thinking', 'motion', 'man', 'elephant', 'army', 'drunkenness', and others. The first question, then, is *How does he acquire these ideas?* It is widely believed that men have ideas stamped upon their minds in their very first being. My opposition to this in Book I will probably be received more favourably when I have shown where the understanding can get all its ideas from—an account that I contend will be supported by everyone's own observation and experience.

2. Let us then suppose the mind to have no ideas in it, to be like *white paper* with nothing written on it. How then does it come to be written on? From where does it get that vast store which the busy and boundless imagination of man has painted on it—all the materials of reason and knowledge? To this I answer, in one word, from *experience*. Our understandings derive all the materials of thinking from *observations* that we make of •external objects that can be perceived through the senses, and of •the internal operations of our minds, which we perceive by looking in at ourselves. These two are the fountains of knowledge, from which arise all the ideas we have or can naturally have.

3. First, our senses when applied to particular perceptible objects convey into the mind many distinct perceptions of things, according to the different ways in which the objects affect them. That's how we come by the ideas we have of yellow, white, heat, cold, soft, hard, bitter, sweet, and all so on—the so-called 'sensible qualities'. When I say the senses convey ·these ideas· into the mind, ·I don't mean this strictly and literally, because I don't mean to say that an idea actually *travels across* from the perceived object to the person's mind. Rather· I mean that through the senses external objects convey into the mind *something that produces there* those perceptions [= 'ideas']. This great source of most of the ideas we have I call SENSATION.

4. Secondly, the other fountain from which experience provides ideas to the understanding is the perception of the operations of our own mind within us. This yields ideas that couldn't be had from external things—ones such as ·the ideas of· perception, thinking, doubting, believing, reasoning, knowing, willing, and all the different things that our minds do. Being conscious of these actions of the mind and observing them in ourselves, our understandings get from them ideas that are as distinct as the ones we get from bodies affecting our senses. Every man has this source of ideas wholly within himself; and though it is not sense, because it has nothing to do with external objects, it is still very like sense, and might properly enough be called 'internal sense'. But along with calling the other 'sensation', I call this REFLECTION, because the ideas it gives us can be had only by a mind reflecting on its own operations within itself. By 'reflection' then, in the rest of this work, I mean the notice that the mind takes of *what* it is doing, and how. (I am here using 'operations' in a broad sense, to cover not only the *actions* of the mind on its ideas but also *passive states* that can arise from them, such as is the satisfaction or uneasiness arising from any thought.) So that's my thesis: all our ideas take their beginnings from those two sources—external material things as objects of sensation, and the operations of our own minds as objects of reflection.

5.. . . . When we have taken a full survey of •the ideas we get from these sources, and of their various modes, combinations, and relations,

we shall find they are •our whole stock of ideas; and that we have nothing in our minds that didn't come in one of these two ways. [Locke then challenges the reader to 'search into his understanding' and see whether he has any ideas other than those of sensation and reflection.]

6. If you look carefully at the state of a new-born child, you'll find little reason to think that he is well stocked with ideas that are to be the matter of his future knowledge. He gets ideas gradually; and though the ideas of obvious and familiar qualities imprint themselves before the memory begins to keep a record of when or how, ideas of unusual qualities are different. Some of *them* come so late that most people can remember when they first had them. And if we had reason to, we *could* arrange for child to be brought up in such a way as to have very few ideas, even ordinary ones, until he had grown to manhood. In actuality children are born into the world surrounded by bodies that perpetually affect them so as to imprint on their minds a variety of ideas: light and colours are busy everywhere, as long as the eyes are open; sounds and some tangible qualities engage the senses appropriate to them, and force an entrance into the mind. But I think you'll agree that if a child were kept in a place where he never saw any colour but black and white till he was a man, he would have no ideas of scarlet or green—any more than a person has an idea of the taste of oysters or of pineapples if he has never actually tasted either. …

Chapter viii: Some further points about our simple ideas

… **8**. Whatever the mind perceives in itself—whatever is the immediate object of perception, thought, or understanding—I call an *idea*; and the power to produce an idea in our mind I call a *quality* of the thing that has that power. Thus a snow-ball having the power to produce in us the ideas of white, cold, and round, the powers to produce those ideas in us, as they are in the snow-ball, I call *qualities*; and as they are sensations or perceptions in our understandings, I call them *ideas*. If I sometimes speak of 'ideas' as in the things themselves, please

understand me to mean to be talking about the qualities in the objects that produce them in us.

9. Qualities thus considered in bodies are of two kinds. First, there are those that are utterly inseparable from the body, whatever state it is in. Qualities of this kind are the ones that a body doesn't lose, however much it alters, whatever force is used on it, however finely it is divided. Take a grain of wheat, divide it into two parts, each part has still solidity, extension, shape, and mobility; divide it again, and it still retains those qualities; go on dividing it until the parts become imperceptible, each part must still retain all those qualities. . . . I call them original or *primary qualities* of body, which I think we may observe to produce simple ideas in us, viz. solidity, extension, shape, motion or rest, and number.

10. Secondly, there are qualities that are, in the objects themselves, really nothing but *powers to produce various sensations in us by their primary qualities*, i.e. by the size, shape, texture, and motion of their imperceptible parts. Examples of these are colours, sounds, tastes, and so on. I call these *secondary qualities*. To these we can add a third sort, an example of which is the power of fire to change the colour or consistency of wax and clay. This would ordinarily be said to be *only a power in* ·rather than *a quality of* · the object; but it is just as much a real quality as the powers that I have called 'secondary qualities'. (I call them 'qualities' so as to comply with the common way of speaking, and add 'secondary' to mark them off from the rest.) The primary qualities of fire—that is, the size, texture, and motion of its minute parts—give it a power to affect *wax* and *clay* etc.; and those same primary qualities give it a power to produce in *me* a sensation of warmth or burning; if the latter is a quality in the fire, why not the former also?

11. The next question is: How do bodies produce ideas in us? Obviously they do it by impact; we can't conceive bodies to operate in any way but that.

12. External objects are not united [= 'directly connected'] to our mind when they produce ideas in it, and yet we do somehow perceive

qualities in the objects. Clearly there has to be some motion that ·goes from the object to our sense-organs, and· from there is continued by our nerves or our animal spirits to the brains or the seat of sensation, there to produce in our mind the particular ideas we have of them. [Locke held the then-common view that human physiology involves 'animal spirits'. These constitute the body's hydraulic system (Bernard Williams's phrase)—an *extremely* finely divided fluid that transmits pressures through tiny cracks and tunnels.] Since the extension, shape, number, and motion of visible bodies can be seen from a distance, it is evident that some bodies that are too small to be seen individually must travel from those bodies across to the eyes, and thereby convey to the brain some motion that produces in us these ideas that we have of them.

13. We may conceive that the ideas of secondary qualities are also produced by the operation of insensible particles on our senses. Plainly there are plenty of bodies that are so small that we can't, by any of our senses, discover the size, shape, or motion of any one of them taken singly. The particles of the air and water are examples of this, and there are others still smaller—perhaps as much smaller than particles of air and water as the latter are smaller than peas or hail-stones. Let us suppose in the meantime that the different motions and shapes, sizes and number of such particles, affecting our various sense-organs, produce in us the different sensations that we have of the colours and smells of bodies. . . . It is no more impossible to conceive that God should attach such ideas to motions that in no way *resemble* them than it is that he should attach the idea [= 'feeling'] of pain to the motion of a piece of steel dividing our flesh, which in no way resembles the pain.

14. What I have said about colours and smells applies equally to tastes and sounds, and other such sensible qualities. Whatever reality we mistakenly attribute to them, they are really nothing in the objects themselves but powers to produce various sensations in us. These powers depend, as I have said, on those primary qualities, namely size, shape, texture, and motion of parts.

15. From this we can easily infer that the ideas of the primary qualities of bodies resemble them, and their patterns really do exist in the bodies

themselves; but the ideas produced in us by secondary qualities don't resemble them at all. There is nothing *like* our ideas ·of secondary qualities· existing in the bodies themselves. All they are in the bodies is a *power to produce those sensations in us*. What is sweet, blue, or warm in idea is nothing but the particular size, shape, and motion of the imperceptible parts in the bodies that we call 'sweet', 'blue', or 'warm'.

16. Flame is called 'hot' and 'light'; snow 'white' and 'cold'; and manna 'white' and 'sweet'—all from the ideas they produce in us. [We know that Locke sometimes calls qualities 'ideas', but that seems not to be enough to explain the oddity of the next sentence down to its first comma. The passage as given here is almost verbatim Locke; all of the oddity is there in what he wrote.] Those qualities are commonly thought to be the same in those bodies as those ideas are in us, the one perfectly resembling the other; and most people would think it weird to deny this. But think about this: a fire at one distance produces in us the sensation of •warmth, and when we come closer it produces in us the very different sensation of •pain; what reason can you give for saying that the idea of *warmth* that was produced in you by the fire is actually in the fire, without also saying that the idea of *pain* that the same fire produced in you in the same way is in the fire? Why are whiteness and coldness in snow, and pain not, when it produces each idea in us, and can do so only through the size, shape, number, and motion of its solid parts?...

20. Pound an almond, and the clear white colour will be altered into a dirty one, and the sweet taste into an oily one. What real alteration can the beating of the pestle make in any body other than an alteration of the texture of it?

21. We are now in a position to explain how it can happen that the same water, at the same time, produces the idea of cold by one hand and of heat by the other; whereas the same water couldn't possibly be at once hot and cold if those ideas were really in it. If we imagine warmth in our hands to be nothing but a certain sort and degree of motion in the minute particles of our nerves or animal spirits, we can

understand how it is possible for the same water at the same time to produce the sensations of heat in one hand and of cold in the other (which shape never does; something never feels square to one hand and spherical to the other). If the sensation of heat and cold is nothing but the increase or lessening of the motion of the minute parts of our bodies, caused by the corpuscles of some other body, we can easily understand that if motion is greater in one hand than in the other, and the two hands come into contact with a body that is intermediate between them in temperature, the particles in one hand will be slowed down while those of the other will speed up, thus causing different sensations. …

Chapter xi: Discerning, and other operations of the mind

8. When children have through repeated sensations got some ideas fixed in their memories, they gradually begin to learn the use of signs. And when they acquire the skill to apply their organs of speech to producing articulate sounds, they begin to use words to signify their ideas to others. They *borrow* some of these verbal signs from others; but they also *make* some of their own, as we can observe from the new and unusual names children often give to things when they first use language.

9. So words are used to stand as outward marks of our internal ideas, which are taken from particular things; but if every particular idea that we take in had its own special name, there would be no end to names. To prevent this, the mind makes *particular* ideas received from *particular* things become *general*; which it does by considering them as they are in the mind—mental appearances—separate from all other existences, and from the circumstances of real existence, such as time, place, and so on. This procedure is called *abstraction*. In it, an idea taken from a particular thing becomes a general representative of all of the same kind, and its name becomes a general name that is applicable to any existing thing that fits that abstract idea. Such precise naked appearances in the mind, without considering •how or •from where or

•in company with what others it acquired them, the understanding stores away for use as *standards*: it will classify real things into •sorts on the basis of their agreement with these patterns ·or standards·. The abstract ideas have names commonly attached to them, so that they also serve as patterns for applying •words, labels, to the things that they enable us to sort. Thus you observe the same colour today in chalk or snow that you yesterday saw in milk; your mind considers that appearance alone, makes it a representative of all of that kind and gives it the name 'whiteness'; and by that sound you signify the same quality, wherever it is imagined or met with. This is how *universals*, whether ideas or words, are made. …

BOOK IV

Chapter x: knowledge of the existence of a god

1. Though God has given us no innate ideas of himself—has not stamped onto our minds from the outset words in which we can read his existence—yet having equipped us with the mental faculties that we have, he hasn't left himself without witness ·to his existence·. We have sense, perception, and reason, and can't be without a clear proof of him as long as we carry our *selves* with us. We can't fairly complain of our ignorance about this great point, since God has so plentifully provided us with the means to discover and know him, so far as is needed for the goal of our existence and for the great matter of our happiness. But though this is the most obvious truth that reason reveals, and though (I think) its evidentness is equal to mathematical certainty, ·becoming certain of· it still requires thought and attention: the mind must deduce God's existence in a rule-guided way from something that is intuitively known, for otherwise we shall be as uncertain and ignorant of this as of other propositions that are in themselves capable of clear demonstration. To show that we are capable of knowing—i.e. being certain—that there is a God, and to see how we can acquire this certainty, I think we need go no further than *ourselves*, and the undoubted knowledge we have of our own existence.

2. I think it is beyond question that man has a clear idea of his own existence; he knows certainly he exists, and that he is something. If you can doubt whether you are anything or not, I have nothing to say to you, any more than I would argue with pure nothing, or try to convince non-entity that it is something. If anyone •claims to be so sceptical as to deny his own existence (for •really to doubt this is manifestly impossible), I am willing to let him luxuriate in his beloved state of being nothing, until hunger or some other pain convinces him of the contrary! This then, I think I may take for a truth, which everyone's certain knowledge assures him of and will not let him doubt, namely that he is something that actually exists.

3. In the next place, man knows by an intuitive certainty that *bare nothing* can no more •produce any real being than it can •be equal to two right angles. If a man doesn't know that non-entity or the absence of all being cannot be equal to two right angles, he can't possibly know any demonstration in Euclid. If therefore we know there is some real being, and that non-entity cannot produce any real being, that yields an evident demonstration that *from eternity there has been something*; for what didn't exist from eternity had a beginning, and what had a beginning ·wasn't produced by •nothing, and so· must be produced by •something other than itself.

4. Next, it is evident, that if one thing received •its existence and beginning from something else, it must also have received from something else •all that is in it and belongs to its being. All its powers must be have come from the same source. This eternal source of all being, therefore, must also be the source of all power; and so this eternal being must be also the most powerful.

5. A man finds perception and knowledge in himself, and that yields the next step in the proof: we are certain now that there is not only some being, but some *knowing thinking* being, in the world. So either •there was a time when there was no knowing being, and when knowledge began to be, or else •there has been a knowing being from eternity. If you ·take the former option, and· say that there was a time when no

being had any knowledge—a time when the eternal being had no understanding—I reply that in that case it was impossible that there should ever have come to be any knowledge. For things wholly devoid of knowledge, and operating blindly and without any perception, to produce a knowing being—this is no more possible than that a triangle should have three angles bigger than two right angles. For it is as inconsistent with the idea of senseless matter that it should put sense, perception, and knowledge into itself as it is inconsistent with the idea of a triangle that it should put into itself greater angles than two right ones.

6. Thus by thinking about ourselves and what we infallibly find in our own constitutions, our reason leads us to the knowledge of the certain and evident truth *that there is an eternal, most powerful, and most knowing being*; and it doesn't matter whether we call it 'God'.
The ·existence of the· thing is evident, and from properly thinking through this idea we can easily deduce all the other attributes that we ought to ascribe to this eternal being. If nevertheless anyone should be found so senselessly arrogant as to suppose that man alone is knowing and wise, yet is also the product of mere ignorance and chance, and that all the rest of the universe acts only by that blind chance, I shall offer him Tully's firm and reasonable rebuke: 'What can be more sillily arrogant and unbecoming than for a man to think that he has a mind and understanding in him while all the rest of the universe contains no such thing? Or that things he can barely *comprehend* with the utmost stretch of his reason should be *moved and managed* without any help at all from reason?' …

9. There are only two sorts of beings in the world that man knows or conceives. First, such as are purely material, without sense, perception, or thought, such as the clippings of our beards and parings of our nails.

Secondly, sensing, thinking, perceiving beings, such as we find ourselves to be. From now on I shall refer to these two groups as *incogitative* and *cogitative* beings respectively.

10. If there must be something eternal, it is very obvious to reason that it must be a cogitative being. For it is as impossible •to conceive that mere incogitative matter should ever produce a thinking intelligent being as •to conceive that *nothing* should of itself produce *matter*. …

Chapter xi: knowledge of the existence of other things

1. We know of our own existence by *intuition*, and our certain knowledge that a God exists comes through *reason*, ·i.e. by *demonstration*·, as I have shown.

We can know of the existence of other things only by *sensation*. No idea you have in your mind has any necessary connection with any real existence; and your existence has no necessary connection with the existence of anything except God. Therefore the only way you can know that anything else exists is through its actually operating on you, making itself perceived by you. Merely having the idea of a thing in your mind no more proves its existence than the picture of a man is evidence of his existence in the world, or than the visions of a dream make a true history.

2. The fact that we get ideas from outside ourselves is what informs us of the existence of other things; it tells us that at that time something external to us exists and causes those ideas in us, though we may not know—or even give any thought to—how it does that. The certainty of our senses and of the ideas we receive through them is not lessened by our not knowing how the ideas are produced. For example, while I write these words something produces in my mind—through the effects of the paper on my eyes—an idea that leads me to call *white* whatever object causes it; and from this I know that on this occasion some object outside me has the quality whose appearance before my eyes always causes that kind of idea. The best assurance I can have, the best my faculties are capable of, is the testimony of my eyes; they are the proper and sole judges of this thing. I have reason to rely on their testimony as being so certain that I can no more •doubt that while I write this I see

white and black and something really exists that causes that sensation in me, than I can •doubt that I write or that I move my hand. This is a certainty as great as human nature is capable of concerning the existence of anything except oneself and God.

3. The information that our senses give us concerning the existence of things outside us, although it isn't quite as certain as our intuitive knowledge, or as what we know through deductive reasoning using our own clear abstract ideas, is still secure enough to deserve to be called 'knowledge'. If we convince ourselves that our faculties inform us truthfully about the existence of the objects that affect them, this can't be regarded as an unjustified confidence. Nobody, I think, can genuinely be so sceptical as to be uncertain of the existence of the things that he sees and feels; and if anyone can doubt as much as that, he will never have any controversy with me, for he can never be sure I say anything that he disagrees with ·because he can't even be sure that I exist·. As for myself, I think God has given me assurance enough of the existence of things outside me: I know which ways of relating to them will bring me pleasure and which will bring me pain, and that is a matter of great concern to me here on earth. We certainly can't have better evidence than we do that our faculties don't deceive us about the existence of material beings, for we can't do anything except through our faculties—indeed, we can't even talk of knowledge except with the help of those faculties that enable us to understand what knowledge is. Furthermore, besides the assurance we have from our senses themselves that they don't err in what they tell us about the existence of things outside us when we are affected by them, we have other, confirming reasons for the same conclusion.

4. First, it is obvious that those perceptions ·that we think are produced by outer things· are produced in us by exterior causes affecting our senses, because people who lack the organs of one of the senses can never have the ideas belonging to that sense produced in their minds. This is too obvious to be doubted. So we can be sure that those perceptions reach our minds through the organs of that sense ·from something external to those organs·. Clearly, the organs themselves

don't produce such ideas, for if they did then the eyes of a man in the dark would produce colours and his nose would smell roses in the winter, whereas in fact nobody experiences the taste of a pineapple till he goes to the ·West· Indies where it is, and tastes it.

5. Secondly, sometimes I find that I can't avoid having those ideas produced in my mind. When my eyes are shut, I can choose to recall to my mind the ideas of light or the sun that former sensations have lodged in my memory, or choose to set such ideas aside and instead take into my ·imaginative· view the idea of the smell of a rose or the taste of sugar. But if at noon I turn my eyes towards the sun, I can't avoid the ideas that the light or sun then produces in me. So there is a clear difference between •the ideas stored in my memory (over which, if they were *only* in my memory, I would always have the same power to call them up or set them aside as I choose) and •those that force themselves on me and that I can't avoid having. The latter ideas—the ones I have whether I want them or not—must be produced in my mind by some exterior cause, and the brisk acting of some external objects whose power I can't resist. Besides, everybody can see the difference in himself between having a memory of how the sun looks and actually looking at it. His perceptions of these two are so unalike that few of his ideas are easier to tell apart. This gives him certain knowledge that they are not both memory or products purely of his mind, and that actual seeing has an external cause. …