

An Essay Concerning Human Understanding

Book IV: Knowledge

John Locke

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[Brackets] enclose editorial explanations. Small ·dots· enclose material that has been added, but can be read as though it were part of the original text. Occasional •bullets, and also indenting of passages that are not quotations, are meant as aids to grasping the structure of a sentence or a thought. Every four-point ellipsis indicates the omission of a brief passage that seems to present more difficulty than it is worth. Longer omissions are reported on, between [brackets], in normal-sized type.

First launched: July 2004

Last amended: August 2007

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Chapter xiv: Judgment

1. The understanding faculties were given to man not merely for the pursuit of true theories but also for the conduct of his life. He would be at a great loss in his life if he had nothing to direct him except certain knowledge. For that is very scanty, as we have seen: he would often be utterly in the dark, and in most of the actions of his life he would be brought to a halt, if he had nothing to guide him in the absence of clear and certain knowledge. Someone who refuses to eat until he can prove rigorously that the food will nourish him, who won't move until he infallibly knows that his project will succeed, will have little to do except to sit still and die.

2. God has put some things in broad daylight, giving us some certain knowledge, so that we have a taste of what thinking creatures are capable of (they are probably capable of ever so much more), intending this to make us want and try to be in a better state. But for most of our concerns he has allowed us only the twilight (so to speak) of probability. This is suitable for the state—neither high nor low, and only provisional—that God has been pleased to place us in here. He has wanted to restrain our over-confidence and presumption, letting every day's experience make us conscious of how short-sighted we are and how liable to error. That should be a constant warning to us that we should devote our present life on earth to trying hard and carefully to find and then follow the way that might lead us to a state of greater perfection. For even if revelation were silent about this, it would be highly rational to think that to the extent that men employ the talents God has given them here on earth, they will be correspondingly rewarded at the close of the day, when their sun sets and night brings their

labours to an end.

3. The faculty that God has given to man, to make up for the lack of clear and certain knowledge where that can't be had, is *judgment*. Using this, the mind takes its ideas to agree or disagree—that is, takes a proposition to be true or false—without proofs that it perceives as demonstratively self-evident. The mind employs judgment sometimes because it must, where demonstrative proofs and certain knowledge are not to be had; and sometimes out of laziness, lack of skill, or haste, in cases where demonstrative and certain proofs are to be had. Men often fail to take the time needed to examine the agreement or disagreement of two ideas that interest them. Either they are incapable of the attention needed for a long train of argument, or they are merely impatient; either way, they skim through the proof or even ignore it entirely, and settle for whatever conclusion—holding that the ideas agree or that they disagree—on the basis of what, from the quick look they have had, seems to them most likely. When this faculty of the mind is exercised immediately about things, it is called *judgment*; when exercised about things that are *said* it is most commonly called *assent or dissent*. As the latter is the most usual way in which the mind has occasion to employ this faculty, I shall discuss it in terms of 'assent' and 'dissent'...

4. Thus the mind has two faculties having to do with truth and falsehood.

First, knowledge, whereby it certainly perceives and is satisfied beyond doubt of the agreement or disagreement of any ideas.

Secondly, judgment, which is putting together or separat-

ing ideas in the mind when their agreement or disagreement isn't perceived but is presumed to be so—taken to be so *before* its truth certainly appears, as the word implies ['pre-

sume' comes from Latin meaning 'take before']. And if it unites or separates them in accordance with how things are in reality, it is *right* judgment.

Chapter xv: Probability

1. •Demonstration is showing the agreement or disagreement of two ideas by the intervention of one or more proofs, •the separate links of• which have a constant, unchangeable, and visible connection with one another; and •probability is nothing but *the appearance of* such an agreement or disagreement, by the intervention of proofs whose connection isn't perceived to be constant and unchangeable, but is or appears for the most part to be so, sufficiently to induce the mind to judge the proposition to be true or to be false. [Locke now sketches what happens when someone follows a demonstration of a geometrical theorem. Then:] But another man, who never took the trouble to follow the demonstration, hearing a respected mathematician affirm that *the three angles of a triangle are equal to two right angles* assents to this, i.e. accepts it as true. The foundation of his assent is the probability of the thing, on evidence of a kind that is usually reliable; because the man whose word he takes for it isn't accustomed to affirm things that he doesn't know to be true, especially in matters of this kind. So that what causes the other man's assent to the proposition that *the three angles of a triangle are equal to two right angles*—what makes him take these ideas to agree, without knowing that they do so—is the usual truthfulness of the speaker in other cases, or his supposed truthfulness in this.

2. Our knowledge, as I have shown, is very narrow, and we are not so lucky as to find certain truth in everything we happen to think about; most of the propositions that we think with, reason with, use in discourse, and indeed *act* on, are ones of whose truth we can't have undoubted knowledge. Yet some of them come so close to certainty that we have no doubt about them, and assent to them as firmly, and act (on that assent) as resolutely, as if they were infallibly demonstrated and our knowledge of them were perfect and certain. But here there are degrees •of •confidence• from the very neighbourhood of certainty and demonstration right down to improbability and unlikelihood of truth, and down further to the brink of impossibility; and also degrees •of assent from full assurance and confidence right down to conjecture, doubt, and distrust. So now, following up my account of the limits of human knowledge and certainty, I shall discuss the various degrees and grounds of probability, and assent or faith.

3. Probability is likelihood of truth, and the etymological sense of the word signifies a proposition for which there are good enough arguments or proofs for it to be accepted as true. [The Latin source of 'probable' is *probare* = 'prove'.] The mind's acceptance of this sort of proposition is called 'belief',

‘assent’, or ‘opinion’, or ‘faith’, which is the receiving of a proposition as true on the strength of arguments or proofs that are persuasive but don’t give certain knowledge. The difference between probability and certainty, between faith and knowledge, is that in all the parts of knowledge there is intuition: each step involves a visible and certain connection; in belief or faith, not so. What makes me believe is something extraneous to the thing I believe—something that doesn’t clearly show the agreement or disagreement of the ideas in question.

4. . . .The grounds of probability are the two following. First, the conformity of something with our own knowledge, observation, and experience. Secondly, the testimony of others, vouching for something on the strength of *their* observation and experience. In evaluating the testimony of others, we have to consider how many of them there are, whether they are honest, whether they are intelligent, what the author of the book from which the testimony is

taken is *up to*, whether the parts and circumstances of the testimony hang together, and what contrary testimonies there are.

[In section 5 Locke says that judgments of probability should be based on all the evidence on each side. He brings out the element of subjectivity in this by contrasting two evaluations of the testimony ‘I have seen a man walking on the surface of water hardened by cold’—that of someone who has seen such things himself, and that of someone who lives in the tropics and has never experienced or before heard of ice.]

[Section 6 sums up the chapter, adding a warning against the common practice of judging something to be probable *because many people accept it*. The section concludes:] If the opinions of others whom we know and think well of constitute a ground of assent, men have reason to be heathens in Japan, Moslems in Turkey, Papists in Spain, Protestants in England, and Lutherans in Sweden. I shall say more about this wrong ground of assent later.

Chapter xvi: The degrees of assent

1. The grounds of probability laid down in the preceding chapter serve not only as the basis on which to decide *whether* to assent to a proposition but also as the measure of *how strongly* we should assent. Bear in mind, though, that whatever grounds of probability there may *be*, they will operate on the truth-seeking mind only to the extent that they *appear* to it in its first judgment or its first look into the matter. I admit that in the opinions that men have and firmly

stick to, their assent is not always based on a present view of the reasons that at first won them over; for in most cases it is hard—and in many almost impossible—for people, even ones with admirable memories, to retain all the proofs that initially made them embrace that side of the question. It suffices that they did once carefully and fairly sift the matter as far as they could, and that they have searched into everything that they can imagine might throw light on the question, and done

their best to evaluate the evidence as a whole; and having thus once found on which side the probability appeared to them, after as full and exact an enquiry as they can make, they store the conclusion in their memories as a truth they have learned; and for the future they remain satisfied with the testimony of their memories that they have seen evidence for this opinion that entitles it to the degree of their assent that they are now giving to it.

2. This is all that most men are capable of doing, in regulating their opinions and judgments. And it is all we can ask them to do, because the only two alternatives are impossible. We could demand that a person retain clearly in his memory all the proofs concerning anything he finds probable, maintaining them in the same order and regular deduction of consequences in which he formerly placed them or saw them (and on one single question that might be enough to fill a book!). Or we could require a man, for every opinion that he embraces, to re-examine the proofs every day. Both are impossible. So inevitably memory has to be relied on in these matters, and men are bound to have various confident opinions whose proofs are not at that moment in their thoughts—and perhaps whose proofs they *can't* recall right then. . . .

3. I have to admit that men's sticking to their past judgments and adhering firmly to conclusions formerly made often leads them to be obstinate in maintaining errors and mistakes. But their fault is not that they rely on their memories for what they previously judged well, but that they judged before they had examined well. Can't we find many men (perhaps even *most* men) who think they have formed right judgments on various matters, having no reason for this except that they never thought otherwise? Men who imagine themselves to have judged rightly only because they never questioned or

examined their own opinions? Which amounts to saying that they think they judged rightly because they never *judged* at all. Yet these are just the ones who hold their opinions with the greatest stiffness, because in general those who are the most fierce and firm in their tenets are those who have least examined them. Once we *know* something, we are certain it is so; and we can rest assured that our knowledge won't be overturned or called into doubt by lurking proofs that haven't yet been discovered. But in matters of probability we can't always be sure that we have taken account of everything that might be relevant to the question, and that there is no evidence still to be found which could turn the probability-scales the other way, and outweigh everything that now seems to us to carry the most weight. Who has the leisure, patience, and means to collect together all the proofs concerning most of the opinions he has, so as safely to conclude that he has a clear and full view, and that there's nothing else that might come to light to change his mind? And yet we are forced to settle for one side or the other. The conduct of our lives and the management of our great concerns won't allow delay. . . .

4. So it is unavoidable, for most if not all men, to have various opinions without certain and indubitable proofs of their truth; and it would look like ignorance, lightness, or folly if men were always to give up their former beliefs the moment they are shown a counter-argument that they can't immediately refute. This, I think, indicates that we in our diversity of opinions should all maintain peace and the ordinary procedures of humanity and friendship; for we can't reasonably expect that anyone should promptly and humbly drop his own opinion and embrace ours with a blind resignation to an authority that he doesn't acknowledge as an authority. However often the understanding goes wrong,

it *can't* accept any guide except reason, and *can't* blindly submit to the will and dictates of another. If the person you want to win over to your opinions is •one who examines before he assents, you must allow him time to go over the account again, to recall points favouring his own side—ones he has currently forgotten—and to see on which side the advantage lies. And if he doesn't think your arguments are good enough to indicate that he should take all that trouble reconsidering the matter, this is only what *you* often do in similar cases; and you wouldn't like it if others told to you what points you should study. And if he is •one who takes his opinions on trust, how can we expect him to renounce the tenets that time and custom have so settled in his mind that he thinks them self-evident, or takes them to be things he was told by God himself or by God's messengers? How can we expect that opinions that are settled in *that* way should be surrendered to the arguments or authority of a stranger or an adversary; especially if there is any suspicion that the adversary is *up to something*, as there always is when men think themselves ill treated? We should sympathize with one another's ignorance and try to remove it by all the gentle and fair methods of instruction; and *not* instantly ill-treat others as obstinate and perverse because they won't renounce their own opinions and accept the ones we are trying to force on them, when it is more than probable that we are at least as obstinate in not accepting some of theirs! For where is the man who has incontestable evidence of the truth of all his beliefs or of the falsehood of all the beliefs he condemns, or can say that he has examined *to the bottom* all his own opinions and everyone else's? ·In our life· on this earth we are in a fleeting state of action and blindness, which requires us to •believe without •knowing, often indeed on very slight grounds; and this should make us work harder and more carefully to inform ourselves than to constrain others. At

least those who haven't thoroughly examined to the bottom all their own beliefs should admit that they are unfit to prescribe to others. . . . Those who *have* fairly and truly examined ·the grounds for their beliefs·, and have been brought by this beyond doubt about the doctrines they profess and live by, would have a fairer claim to require others to follow them. But there are so few of these, and they find so little reason to be dogmatic in their opinions, that nothing insolent and bullying is to be expected from them; and there is reason to think that ·in general· if men were better instructed themselves they wouldn't push others around so much.

5. Returning now to the grounds of assent, and to the different degrees of it: the propositions we accept as probable are of two sorts. There are •propositions concerning some particular existence—usually called 'matter of fact'—that could be observed and so admit of support from human testimony; and there are •ones concerning things that *cannot* have such support because they are beyond the discovery of our senses. ·I shall discuss the former in sections 6–11, and the latter in section 12·.

6. Concerning the first of these, namely particular matters of fact, ·I distinguish three kinds of case, to which I give a section each·. First, when something that fits with the constant observation of ourselves and others in similar cases is supported by reports of all who mention it, we accept it as easily and build on it as firmly as if it were certain knowledge; and we reason and act on it with as little doubt as if we had a perfect demonstration of it. Thus, if all Englishmen who have occasion to mention it were to affirm that it froze in England last winter, or that there were swallows seen there in the summer, I think one could hardly doubt this more than one does that seven and four

are eleven. Thus, the first and highest degree of probability occurs when the general consent of all men in all ages, as far as it can be known, fits one's own constant and never-failing experience in similar cases. Into this category come all the generally agreed constitutions and properties of bodies, and the regular proceedings of causes and effects in the ordinary course of nature. We call this an argument from the nature of things themselves. When our own and other men's constant observation has found something always to go the same way, we with reason conclude that it is the effect of steady and regular causes, though we don't outright *know* them. Thus, that

fire warmed a man, made lead fluid, and changed the colour or consistency in wood or charcoal;

iron sank in water, and floated in quicksilver

—when such propositions as these about particular facts fit with our constant experience, are generally spoken of in the same way by others, and therefore are not so much as questioned by anybody, we are left with no doubt of the truth of a narrative affirming such a thing to have happened, or of an assertion that it will happen again in the same way. These probabilities rise so near to certainty that they govern our thoughts as absolutely, and influence all our actions as fully, as the most evident demonstration; and in our practical concerns we hardly, if at all, distinguish them from certain knowledge. belief, with such a basis for it, rises to *assurance*.

7. Secondly, the next degree of probability occurs when I find—by my own experience and the agreement of everyone else who mentions it—that something is *for the most part* thus and so, and a particular instance of it is reported by many trustworthy witnesses. For example, history's account of men in all ages, and my own experience as far as it goes,

confirm that *most men prefer their private advantage to the public good*; so if all historians that write about Tiberius say that *he* had that preference, it is extremely probable that he did. In this case our assent is well enough based to raise itself to a degree that we may call *confidence*.

8. Thirdly, in things that could easily go either way—a bird flies this way or that, there is thunder on my right or my left, etc.—when a particular matter of fact is vouched for by the testimony of witnesses whom we have no reason to suspect, our assent is unavoidable. Thus, that there is in Italy such a city as Rome, that about 1700 hundred years ago there lived in it a man named Julius Caesar, that he was a general who won a battle against someone named Pompey—all this, although in the nature of the thing there is nothing for or against it, because it is reported by credible historians and contradicted by no-one, a man can't avoid believing it and can no more doubt it than he does the existence and actions of his own acquaintances, of which he himself is a witness.

9. Up to here the matter is straightforward. Probability on such grounds—i.e. those discussed in sections 6–8—carries so much convincingness with it that it naturally determines the judgment and leaves us with no freedom whether to believe or disbelieve, just as a demonstration leaves us with no freedom whether to know or remain ignorant. Things become harder when testimonies contradict common experience, and the reports of history and witnesses clash with the ordinary course of nature or with one another. When that happens we need to use diligence, attention, and exactness if we are to form a right judgment, and to proportion our assent to the credibility and probability of the thing. The probability of a proposition rises and falls depending on whether it is favoured or contradicted by those two foundations of credibility, namely •common observation in similar cases, and

•particular reports with regard to that particular instance. The former of these allow of so much variety of •contrary observations, circumstances, and reports; and the latter are so much affected by different •qualifications of the reporters, and differences in their characters, purposes, and level of care; that it's impossible to devise precise rules governing the various degrees to which men give their assent. The only general thing to be said is this: as the arguments and proofs, for and against, appear to us—after due examination, attending to the detail of every particular circumstance—to weigh more or less heavily on one side of the other, so they should produce in the mind such different attitudes as we call *belief, conjecture, guess, doubt, wavering, distrust, disbelief, etc.*

[Sections **10–11** concern probability and testimony. Their main point is that if we know only that one person reports that another person reports that P, this is less good evidence for P than having the original report. 'So that the more hands a tradition has successively passed through, the •less strength and convincings it receives from them.' Locke offers this as a corrective to some people's belief that traditions are made •more credible by having been passed along for centuries. In section **11** he says that he doesn't intend to demean history, but offers warnings about how it should be practised.]

12. The probabilities I have mentioned up to here have all concerned matters of fact, and things that can be reported on the basis of observation. There remains the other sort of probability—the second of the two mentioned at the end of section 5.—•relating to matters• concerning which men differ in their opinions although the things don't fall within reach of our senses and so aren't capable of eye-witness reports. •These can be sorted into two large groups. Here is the first•:

- The existence, nature, and operations of finite immaterial beings other than ourselves—e.g. Spirits, angels, devils, etc.
- The existence of material things that our senses can't take notice of because they are either too small or too far away—e.g. whether there are any plants, animals, and thinking inhabitants of the planets and other mansions of this vast universe.

•The second category contains propositions• about *the manner of operation* of most parts of the works of nature. We see the perceptible effects, but their causes are unknown—we don't perceive *how* they are produced. We see that animals are generated, nourished, and move, that the magnet attracts iron, and that the parts of a candle turn into flame as they melt, giving us both light and heat. These and their like we see and know; but their causes we can only guess at, conjecturing with probability. They don't come under scrutiny by the human senses, so nobody can examine them and testify to them; and therefore •a proposition about them• can appear more or less probable only by the standard of how well it agrees to truths that are established in our minds, and how well it stands comparison with things that we do know and observe. The only help we have in these matters is *analogy*; it is our only source for judgments of probability •of this kind. Here are three examples•: **1** Observing that merely rubbing two bodies violently together produces heat, and very often fire, we have reason to think that what we call heat and fire consists in a violent agitation of the tiny imperceptible parts of the burning matter. **2** Observing that the different refractions of transparent bodies produce in our eyes the different appearances of various colours, and that the same effect can be produced by looking from different angles at velvet, watered silk, etc., we think it probable that the colour and shining of bodies is nothing

but the different arrangement and refraction of their minute and imperceptible parts. **3** Finding in all the observable parts of the creation that there is a gradual connection of one thing with another, with no large or discernible gaps between, . . . we have reason to believe that quite generally things ascend in degrees of perfection by such gentle steps. It is hard to say where sensing and thinking begin, and where non-sensing and non-thinking end; and who is quick-sighted enough to determine precisely which is the lowest species of living things and which the highest of those that have no life? Things, as far as we can observe, lessen and increase continuously, like the diameters of cross-sections of a regular cone: there is a clear difference in size between two diameters that are far apart, but the difference between the upper and lower of two cross-sections that touch one another is hardly discernible. There is a vast difference between some men and some lower animals; but there are other man/brute pairs where the differences in understanding and abilities are so small that it will be hard to say that the man's endowments are either clearer or larger than the brute's. Observing, I say, such gradual and gentle descents downwards in those parts of the creation that are beneath man, the rule of analogy may make it probable that it is so also in things above us and above our observation; and that there are many kinds of thinking beings that surpass us in various degrees of perfection, ascending upwards towards the infinite perfection of the Creator by gentle steps and differences of which each is at no great distance from the next.

This sort of probability, which is the best guide for rational experiments and the formation of hypotheses, also has its use and influence; and cautious reasoning from analogy often leads us into the discovery of truths and useful productions that would otherwise lie concealed.

13. Though common experience and the ordinary course of things rightly have a tremendous influence on the minds of men, leading them to give or refuse belief to things that are put to them, there is one case where the strangeness of the reported fact does *not* make men less prone to accept a fair testimony that is given of it. Where such reported supernatural events are suitable to the purposes of God, who has the power to change the course of nature, reports of them may be *more* fit to be believed the more they go beyond ordinary observation or are contrary to it. This is a special feature of miracles. . . .

14. There is also one sort of proposition that demands our highest degree of assent just from its being asserted, whether or not what it says agrees with common experience and the ordinary course of things. This is the testimony of someone who can't deceive or be deceived, namely God. This kind of testimony has a special name of its own, namely 'revelation', and our assent to it is called 'faith'. This matches outright *knowledge* in how totally it takes command of our minds, and how completely it excludes all wavering. We may as well doubt our own existence as doubt that any revelation from God is true. Thus, faith is a settled and sure principle of assent and assurance, leaving no room for doubt or hesitation. But we must be sure that it *is* a divine revelation, and that we understand it correctly; for if we have faith and assurance in what is not divine revelation we shall be open to all the extravagance of fanaticism and all the error of wrong principles. In such cases, therefore, our assent can't rationally be higher than the evidence *that this is indeed a revelation, and that this is what it means*. If it's merely *probable* that it is a revelation, or that this is its true sense, our assent should reach no higher than an *assurance* or *distrust* depending on how high or low the probability is.

In chapter xviii I shall say more about faith, and the priority it ought to have over other arguments of persuasion. My topic there will be faith as against reason, though really faith

is just assent founded on the highest reason.

Chapter xvii: Reason

1. The word 'reason' has different meanings in the English language. Sometimes it refers to true and clear •principles, sometimes to clear and fair •deductions from those principles, and sometimes to •a cause, and particularly a final cause [= 'purpose']. But my topic here is 'reason' in a different sense from any of those, namely: as the name of •the faculty that is supposed to distinguish man from the lower animals, and in which he obviously much surpasses them.

2. Given that general knowledge consists (as I have shown it does) in a •perception of the agreement or disagreement of our own ideas, and given also that knowledge of the existence of anything outside us (except for God, whose existence every man can demonstrate to himself from his own existence) can be had only through •our senses, what room is there for the use of any other faculty in addition to •inner perception and •outer sense? What need do we have for reason? A great need, both for enlarging our knowledge and for regulating our assent. For reason is involved both in knowledge and in opinion, and is a necessary *aid* to all our other intellectual faculties—and indeed two of those faculties are contained within reason, namely *sagacity* and *illation*. By sagacity it finds out intermediate ideas to create a chain linking two ideas, and by illation it orders the intermediate ideas so

as to reveal what connection there is in each link of the chain that holds the premises together with the conclusion. We call this 'illation' or 'inference'; it consists simply in perceiving the connection between the ideas at each step of the deduction, through which the mind comes to see either the •certain agreement or disagreement of a pair of ideas, as in demonstration yielding knowledge, or their •probable connection, on the basis of which the mind gives or withholds its assent, as in *opinion*. Sense and intuition reach only a very little way. Most of our knowledge depends on deductions and intermediate ideas; and in cases where we have to settle for *assent* rather than *knowledge*, and accept propositions as true without being certain that they are so, we need to find out, examine, and compare the grounds of their probability.

In both these cases—that is, •certain agreement and •probable connection—the faculty that discovers the intermediate items and applies them correctly to reveal certainty in the one (knowledge) and probability in the other (assent) is what we call *reason*. Just as reason perceives •the necessary and indubitable connection of all the ideas or proofs to one another in each step of a demonstration that produces knowledge, so also it perceives •the probable connection of all the ideas or proofs to one another in every step of a discourse that it will think it right to assent to. This is the

lowest degree of what can be truly called 'reason'. For where the mind doesn't perceive this probable connection, where it doesn't discern whether there is *any* such connection, there men's opinions are not the product of judgment or the consequence of reason, but the effects of chance and hazard, of a mind floating at random without choice and without direction.

3. So we can distinguish four levels in reason, in descending order: **1** the discovering and finding out of truths, **2** sorting them out and laying them in a clear order that will make it easy to see plainly their connection and force, **3** perceiving their connection, and **4** coming to a correct conclusion. Reason can be seen at work at all these levels in any mathematical demonstration: it is one thing to **3** perceive the connection of each part when examining a demonstration that someone else has constructed; it's another thing **4** to perceive the dependence of the conclusion on all the parts; and it's yet something else again **2** construct a demonstration clearly and neatly oneself; and something else again **1** to have first found out these intermediate ideas or proofs by which it is made.

[Section **4** is a nine-page attack on the view that the only or best or proper use of reason is in constructing and following *syllogisms*. This is widely regarded as one of the weakest things in the *Essay* (Leibniz in his *New Essays* sharply and competently sorts it out), and its topic is of little interest today. It does include the memorable, if unfair, joke: 'God hasn't been so sparing to men as to make them merely two-legged creatures, leaving it to Aristotle to make them rational.' A little later Locke adds:] I don't say all this to lessen Aristotle, whom I look on as one of the greatest men amongst the ancients. Few have equalled his breadth of view, acuteness, penetration of thought, and strength of

judgment. In this very invention of ·syllogistic· forms of argumentation, through which conclusions can be shown to be rightly inferred, he did great service against those who were not ashamed to deny anything. [The conclusion of the section is also worthy of note:] I'm not in favour of taking away anything that can help the understanding to attain knowledge. If men skilled and practised in syllogisms find them helpful to their reason in the discovery of truth, I think they ought to use them. My point is just that they shouldn't ascribe more to those forms than they are entitled to, thinking that men who don't employ syllogisms are deprived of all or some of the use of their reasoning faculty. Some eyes need spectacles to see things clearly and distinctly; but those who use them shouldn't say that nobody can see clearly without them. Those who do so may have been genuinely helped by the *artifice* of syllogism, but they will be thought to favour this too much, and to discredit or undervalue *nature* ·in the form of natural reason·. Reason, by its own penetration where it is strong and is exercised, usually sees more quickly and clearly without syllogism. If ·a particular person's· use of those spectacles has so dimmed ·his· reason's sight that without them he can't see whether an argument is valid or not, I'm not so unreasonable as to oppose his using them. Everyone knows what best fits his own sight. But let him not conclude from his experience that everyone is in the dark who doesn't use just the same helps that he finds a need for!

[Sections **5–6** continue the attack on syllogisms. The point in **5** is just that, however little syllogism helps us to get knowledge, 'it is of far less or no use at all in probabilities'. The theme of **6** is that syllogism is at best a way of setting out arguments that have already been discovered, and is useless as a means to discovering arguments in the first place. Locke

unfavourably contrasts formal scholastic syllogistic reasoning with what can be done by ‘native rustic reason’—another echo of the contrast between art and nature.]

7. I don’t doubt, however, that ways can be found to assist our reason in this most useful part of its activity, namely the discovery of new knowledge. I am encouraged to say this by the judicious Hooker, who in his *Ecclesiastical Polity* I.i.6 writes:

If we could add to our repertoire the right *helps* of true art and learning, . . . there would undoubtedly be almost as much difference in maturity of judgment between •men who had those helps and •men as they now are as there is between •the latter and •little children.

I don’t claim to have invented or discovered here any of those ‘right helps’ that this great and profound thinker mentions; but obviously he wasn’t thinking of syllogism and the logic now in use, because those were as well known at his time as they are now. I will be satisfied if my discussion leads others to cast about for new discoveries, and to seek in their own thoughts for those ‘right helps of art’, which I’m afraid won’t be found by those who slavishly confine themselves to the rules and dictates of others. (I at any rate haven’t done *that*. My discussion of this topic is, so far as I am concerned, wholly new and unborrowed.) . . . I venture to say that this age is adorned with some men whose strength of judgment and breadth of understanding are such that if they were willing to employ their thoughts on this subject, they could open new and undiscovered ways to the advancement of knowledge.

8. . . . Before leaving this subject I want to take notice of one obvious mistake in the rules of syllogism, namely the rule that no syllogistic reasoning can be valid unless it has at

least one general proposition in it. As if we couldn’t reason and have knowledge about particulars! The fact is that the immediate object of *all* our reasoning and knowledge is nothing but particulars. Every man’s reasoning and knowledge is only about the ideas existing in his own mind, which are truly—every one of them—particular existences; and our knowledge and reasoning about other things depends on their corresponding with our particular ideas. Thus the perception of the agreement or disagreement of our particular ideas is all there is to our knowledge. Universality is only accidental to it, and consists only in the fact that a particular idea. . . can correspond to and represent more than one particular thing. But the perception of the agreement or disagreement of any two ideas—and consequently the knowledge arising from that—is equally clear and certain, whether either, or both, or *neither* of those ideas can represent more than one real thing. [Locke ends the section with a proposed change in the conventional order in which the premises of a syllogism are written down.]

9. Reason, though it penetrates into the depths of the sea and earth, elevates our thoughts as high as the stars, and leads us through the vast spaces and large rooms of this mighty universe, still comes far short of the real extent of what there is to be known about things, even corporeal things. There are many circumstances in which it fails us. I shall list five, giving them a section each.

First, it completely fails us when our ideas fail. It doesn’t and can’t extend itself further than they do; and so whenever we have no ideas, our reasoning stops and we are at an end of our calculation. And if at any time we reason about words that don’t stand for any ideas, it is only about those sounds and nothing else.

10. Secondly, our reason is often puzzled and at a loss because of the obscurity, confusion, or imperfection of the ideas it is engaged with; and then we are involved in difficulties and contradictions. For example, not having any perfect idea of **1** the *least extension* of matter or of **2** *infinity*, we are at a loss about the divisibility of matter. The former lack **1** blocks us from saying that some portions of matter have the 'least extension' and so are indivisible; the latter lack **2** blocks us from saying that all portions of matter are divisible, i.e. that matter is infinitely divisible. In contrast with that, we have perfect, clear, and distinct ideas of *number*, so our reason meets with none of those inextricable difficulties in respect of numbers, and doesn't find itself involved in contradictions about them. Again, we have only imperfect ideas of the operations of our minds, and of how the mind produces motion in our bodies or thoughts in our minds, and even more imperfect ideas of the operation of God; so we run into great difficulties about free created agents, difficulties from which reason can't thoroughly extricate itself.

11. Thirdly, our reason is often brought to a stand-still because it doesn't perceive the ideas that could serve to show the certain or probable agreement or disagreement of some pair of ideas. In this respect some men's faculties far outstrip those of others. Until that great instrument and example of human sagacity *algebra* was discovered, men looked with amazement at some of the demonstrations of ancient mathematicians, and could hardly help thinking that the discovery of some of those proofs was a superhuman achievement.

12. Fourthly, the mind often proceeds on false principles, and that gets it into absurdities and difficulties, dilemmas and contradictions, without knowing how to free itself; and in that case it's no use pleading for help from reason, except

perhaps to reveal the falsehood and reject the influence of the wrong principles. Reason is so far from clearing up the difficulties that a man gets into by building on false foundations that if he pushes on his reason will entangle him all the more, and deepen his perplexities.

13. Fifthly, just as obscure and imperfect ideas often get our reason into difficulties, so for the same reason do dubious words. It often happens in discourses and arguings that uncertain signs, when not warily attended to, puzzle men's reason and bring them to a halt. But these defects in ideas and meanings are our fault, not that of reason. Their consequences are nevertheless obvious, and the perplexities or errors they fill men's minds with are everywhere observable.

[Sections **14–18** repeat things Locke has already said, about intuition, demonstration, and probability. He repeats an earlier conjecture about the intellectual capacities of 'angels, and the Spirits of just men made perfect'. He emphasizes the risk of forgetting some of the steps in a long demonstration, or suspecting that one has forgotten them.]

19. Before we leave this subject, it may be worth our while to reflect a little on four sorts of arguments that men commonly use when reasoning with others—either to win the others' assent or to awe them into silence.

The first is **1** to bring forward the opinions of men whose skills, learning, eminence, power, or some other cause has made them famous and given them some kind of authority in people's minds. This often succeeds, because a man is thought to be unduly proud if he doesn't readily yield to the judgment of approved authors, which is customarily received with respect and submission by others. . . . Someone who backs his position with such authorities thinks they ought to win the argument for him, and if anyone stands out against them he will call such a person *impudent*. This, I think, may

be called *argumentum ad verecundiam*—‘argument aimed at producing deference in one’s opponent’.

20. Another means that men commonly use to force others to submit their judgments and accept the opinion under discussion is **2** to require the adversary to accept what they bring forward as a proof or to offer a better proof of the contrary position. This I call *argumentum ad ignorantiam* [= ‘argument] aimed at ignorance’.

21. A third tactic is **3** to press a man with consequences drawn from his own principles or concessions. This is already known under the name of *argumentum ad hominem* [= ‘argument] aimed at the man’.

22. The fourth is **4** the use of proofs drawn from any of the foundations of knowledge or probability. This I call *argumentum ad iudicium* [= ‘argument aimed at controlled judgment’]. This is the only one of the four that brings true instruction with it, and advances us towards knowledge. [Locke now elegantly contrasts this with the other three, *twice*.] It doesn’t **1** argue that another man’s opinion is right because I out of respect—or for any other reason except conviction—will not contradict him. It doesn’t **2** prove another man to be on the right path and that I ought to follow him along it because I don’t know a better one. Nor does it **3** argue that another man is right because he has shown me that I am in the wrong. I may be **1** modest, and therefore not oppose another man’s opinion; I may be **2** ignorant, and not be able to produce a better proof; I may be **3** in an error, and someone may show me that I am so. All or any of these may dispose me, perhaps, for the reception of truth, but *they don’t help me to reach it*; that help must come from proofs and arguments and light arising from the nature of things themselves, and not from my shame-facedness, ignorance, or error.

23. From what I have said about reason, we may be able to guess at the distinction of things into those that are *according to, above, and contrary to* reason. •*According to* reason are propositions whose truth we can discover by examining and tracing ideas that we have from sensation and reflection, and by natural deduction find the proposition to be true or probable. •*Above* reason are propositions whose truth or probability we can’t derive through reason from those principles. •*Contrary to* reason are propositions that are inconsistent with our clear and distinct ideas. Thus the existence of one God is according to reason; the existence of more than one God, contrary to reason; the resurrection of the dead, above reason. ‘Above reason’ may be taken in a double sense, either as meaning ‘above probability’ or as meaning ‘above certainty’; and I suppose that ‘contrary to reason’ is also sometimes taken in that broader way.

24. There is another use of the word ‘reason’, in which it is opposed to *faith*. It is very improper, but common use has so authorized it that it would be folly to oppose it or to hope to remedy it. Still, it should be noted that faith is nothing but a firm assent of the mind; and if it is guided as it ought to be, one won’t have faith in anything except for good reasons; so it can’t be opposite to reason. Someone who believes without having any reason for believing may be in love with his own fancies; but he doesn’t seek truth as he ought, nor is he obedient to his Maker, who wants him to use the discerning faculties he has given him to keep him out of mistake and error. He who doesn’t do this to the best of his ability may sometimes happen on the truth; but he is right only by chance, and I don’t know whether that lucky outcome will excuse the irregularity of his way of reaching it. This at least is certain, that he will be accountable for whatever mistakes he makes; whereas someone who makes

use of the faculties God has given him, and seeks sincerely to discover truth through the abilities that he has, can have the satisfaction of knowing that even if he misses the truth

he will have the reward of having done his duty as a rational creature. . . . But since some people do oppose reason to faith, we will look at them in the following chapter.

Chapter xviii: Faith and reason, and their distinct provinces

1. I have shown •that where we lack ideas we are inevitably ignorant, and lack knowledge of all sorts, •that where we lack proofs we are ignorant and lack rational knowledge, •that insofar as we lack clear and determined specific ideas we lack knowledge and certainty, and •that we lack probability to guide our assent in matters where we have neither knowledge of our own nor testimony of others on which to base our reason.

Starting from these things, I think we can mark out the boundaries between faith and reason. The lack of such marking may have been the cause, if not of *violence*, at least of great *disputes* and perhaps also *mistakes*. Until it is settled how far we should be guided by reason, and how far by faith, it will be pointless for us to dispute and try to convince one another in matters of religion.

2. I find that every sect will gladly make use of reason when it will help them, and when it fails them they cry out *It is a matter of faith, and above reason*. I don't see how they can argue with anyone, or ever convince an opponent who uses the same plea, without setting down strict boundaries between faith and reason. That ought to be the first point established in any debate where faith comes into it.

In this context, where reason is being distinguished from

faith, I take *reason* to be the discovery of the certainty or probability of propositions or truths that the mind arrives at by inference from ideas that it has acquired by the use of its natural faculties, that is, by sensation or reflection.

Faith on the other hand is the assent to a proposition that is not made out by the inferences of reason, but upon the credit of the proposer, as coming from God in some extraordinary way of communication. [The second half of that sentence (but upon. . . etc.) is given in Locke's exact words.] This way of revealing truths to men we call 'revelation'. Using the terms in these ways, I have three main points to make, one in section 3, one in sections 4–6, the third in section 7.

3. First, I say that no man inspired by God can by any revelation communicate to others any *new* simple ideas—ones that they hadn't previously acquired from sensation or reflection. Whatever impressions the inspired person may have from the immediate hand of God, if this revelation is of new simple ideas then it can't be conveyed to anyone else by words or by any other signs. [The section continues with a statement of reasons for this, based on Locke's views about how we can get simple ideas. He also remarks that after Paul of Tarsus had been taken up into the third heaven, he could only report that there are such things 'as eye has

not seen, nor ear heard, nor has it entered into the heart of man to conceive'. The section concludes:] For our simple ideas, then, which are the foundation and only raw material of all our notions and knowledge, we must depend wholly on our reason, by which I mean our natural faculties. There is no way we can get any such ideas from **1** traditional revelation—as distinct from **2** original revelation. By **1** I mean •impressions passed on to others in words and in other ordinary ways of conveying our conceptions to one another; by **2** I mean •that first impression which is made immediately by God on the mind of any man—we can't set any limit to *that*.

4. Secondly, I say that truths that we can discover by reason, using ideas that we naturally have, can *also* be revealed and conveyed to us through revelation. So God might by revelation tell us the truth of a proposition in Euclid which men can also discover for themselves through the natural use of their faculties. In all things of this kind there is little need for revelation, because God has equipped us with natural *and surer* means to arrive at the knowledge of them: any truth that we learn from the contemplation of our own ideas will be *more certain* to us than any conveyed to us by traditional revelation. That is because our knowledge that this revelation *did* come at first from God can never be as sure as the knowledge we have from the clear and distinct perception of the agreement or disagreement of our own ideas. For example, if it were revealed centuries ago that the three angles of a triangle were equal to two right ones, I might assent to the truth of that proposition on the strength of the tradition that it was revealed; but that would never reach to the level of certainty of the knowledge of it that comes from comparing and measuring my own ideas of two right angles and of the three angles of a triangle. The same

holds for matters of fact that are knowable by our senses. For example, the history of the great flood is conveyed to us by writings that originally came from revelation. But I don't think you will say that your knowledge of the flood is as certain and clear as that of Noah, who saw it; or as you yourself would have had if you had been alive then and seen it. Your senses give you a great assurance that the story of the flood is written in the book supposedly written by Moses when he was inspired; but you have less assurance that Moses did write that book than you would have if you saw Moses write it. So your assurance of its being a revelation is less still than the assurance of your senses.

5. Thus, for propositions whose certainty is built on intuition or demonstration we don't need the help of revelation to introduce them into our minds and to gain our assent; because the natural ways of knowledge could or already did settle them there, and that is the *greatest* assurance we can have of anything that isn't *immediately* revealed to us by God. And even there our assurance can be no greater than our knowledge that it *is* a revelation from God. Nothing can, under the title of 'revelation', shake or over-rule plain knowledge or rationally lead any man to accept it as true when it directly contradicts the clear evidence of his own understanding. The faculties through which we receive such •supposed• revelations can't produce a stronger conviction than comes from the certainty of our intuitive knowledge; so we can never accept as true anything directly contrary to our clear and distinct knowledge. For example, the ideas of *one body* and *one place* so clearly agree, and the mind has so clear a perception of their agreement, that we can never assent to a proposition affirming that a single body is in two distant places at one time, however strongly it lays claim to the authority of a divine revelation. That is because we can

never be as strongly convinced

that •we are right in ascribing it to God, and
that •we understand it correctly,

as we are by our own intuitive knowledge that •one body cannot be in two places at once. And therefore no proposition can be accepted as divine revelation, or given the assent that all divine revelations deserve, if it contradicts our clear intuitive knowledge. [In the remainder of this long section Locke elaborates this position, arguing in effect that the contrary view would bring chaos into epistemology as well as implying theological absurdities—God wouldn't have given us intuition and demonstration if he hadn't intend us to rely on them.]

6. The argument up to here has shown this: even in the case of an •alleged• *immediate and original revelation* which is supposed to have been made just to you, you have the use of reason and should listen to what it says. As for those who don't claim to have received any immediate revelation, but are required to accept and obey truths •supposedly• revealed to others and passed along in an oral or written tradition, in *their* case reason has a much larger role, and is the *only* basis on which we can be induced to accept such revelations. In this context we are equating •matters of faith with •propositions accepted as divinely revealed. Now, the question

Was proposition P divinely revealed?

is not itself a matter of faith. If it were, that would be because

It was divinely revealed to us that it was divinely revealed to us that P

. Unless it is revealed to us that proposition P was communicated by divine inspiration, the question of whether to believe that P has divine authority is to be settled not by faith but by reason. . . .

7. Thirdly, there are •many things of which we have very imperfect notions or none at all, and •other things of whose past, present, or future existence we can have no knowledge through the natural use of our faculties; and all these are, when revealed, the proper matter of faith. That some of the angels rebelled against God and thereby lost their first happy state, and that the dead shall rise and live again—these and their like are beyond the discovery of reason, which makes them purely matters of faith, with which reason has nothing directly to do.

8. But when God gave us the light of reason, he wasn't tying his own hands: he can still give us, when he thinks fit, the light of revelation in matters where our natural faculties can give •only• a probable answer. So revelation, where God has been pleased to give it, must win out against the *probable* conjectures of reason. When the mind is not certain of the truth of a proposition and inclines to accept it only because it appears probable, it is bound to give it up in the face of contrary testimony that comes (the mind is satisfied) from someone who cannot err and won't deceive. But it is still for reason to judge •whether it is a revelation, and •what the words in it mean. . . .

9. •Summing up: there are two situations in which it is appropriate to believe something as a matter of faith•. First, when a proposition is revealed to us whose truth our mind can't judge by its natural faculties and notions, that is purely •a matter of faith, and above reason.

Secondly, when reason provides the mind with only *probable* grounds for believing P, grounds that allow for the possibility that not-P without this doing violence to the mind's own certain knowledge or overturning the principles of all reason, *then* an evident revelation that not-P ought to settle the matter even against probability. In such a

case, . . . reason can reach no higher than probability, so faith gives an answer where reason fell short, and revelation showed on which side the truth lay.

[Section **10** repeats the doctrines of sections 6, 8 and 9.]

11. If the domains of faith and reason are not kept distinct by these boundaries, there will be no room for reason at all in matters of religion; and those extravagant opinions and ceremonies that are to be found in various religions of the world won't merit blame. I think that this vaunting of *faith* in opposition to *reason* is a primary source of the absurdities that fill almost all the religions that possess and divide mankind. For men who are indoctrinated with the view that they mustn't consult reason in the things of religion, however much they seem to contradict common sense and

the very principles of all their knowledge, have let loose their imaginations and natural superstition which have led them into strange opinions and extravagant practices in religion. So strange and extravagant that a thoughtful man can't but stand amazed at their follies, and judge them as being so far from acceptable to the great and wise God that he can't avoid thinking them ridiculous and offensive to a sober good man. The upshot is that religion, which should most distinguish us from lower animals and ought most specially to elevate us as rational creatures above the others, is just the thing in which men often appear most irrational and more senseless than the lower animals themselves. *Credo, quia impossibile est*, 'I believe, because it is impossible', might in a good man pass for a slogan expressing his zeal; but it would be a dreadful rule for men to choose their opinions or religion by.

Chapter xix: Enthusiasm [= 'intense, fanatical confidence that one is hearing from God']

1. Anyone wanting to engage seriously in the search for truth ought first to prepare his mind with a love of it. Someone who doesn't love truth won't take much trouble to get it, or be much concerned when he misses it. Everyone in the commonwealth of learning professes himself to be a lover of truth, and every rational creature would be offended if it were thought that he is not. And yet it's true to say that very few people love truth for its own sake, even among those who persuade themselves that they do. How can anyone know whether he is seriously a lover of truth? I think there is one unerring mark of it, namely that one doesn't accept any proposition with greater assurance than is justified by the

proofs one has for it. If someone goes beyond this measure of assent, it is clear that he values truth not for its own sake but for some other hidden purpose. For the love of truth can no more

- carry my assent to a proposition above the evidence *that I have* for its truth

than it can

- make me assent to a proposition because of the evidence *that there isn't* for its truth!

The latter would amount to: loving it as a truth because it possibly or probably isn't one! For the evidence that a

proposition is true (unless it is self-evident) lies only in the proofs a man has of it; so if he assents to it with a level of assurance that goes beyond that evidence, what is drawing him into that excess of assurance is something in him other than the love of truth. Whatever credit we give to a proposition, above what it gets from the principles and proofs that support it, comes from *inclinations in that direction*, and detracts from the love of truth as such. . . .

2. This bias and corruption of our judgments is regularly accompanied by a dictatorial attitude to the beliefs of others, a readiness to tell them what they ought to believe. This is to be expected, because someone who has already imposed on his own belief is almost certain to be ready to impose on the beliefs of others. Who can reasonably expect arguments and conviction, in dealing with others, on the part of someone whose understanding isn't accustomed to them in his dealing with himself? This is someone who does violence to his own faculties, tyrannizes over his own mind, and grabs the privilege that really belongs to truth alone, which is to command assent purely by its own authority, i.e. by and in proportion to the degree of evidentness that it carries with it.

3. I shall take this opportunity to discuss a third ground of assent, which for some men has the same authority and is as confidently relied on as either *faith* or *reason*. It is *enthusiasm*, which lays reason aside and appeals to revelation without help from reason. This amounts to taking away both reason and revelation, replacing them by the ungrounded fancies of a man's own brain and making these a foundation of both opinion and conduct.

4. Reason is *natural revelation*, through which God, the eternal father of light and fountain of all knowledge, communicates to mankind that portion of truth that he has put within the reach of their natural faculties. Revelation is

natural reason enlarged by a new set of discoveries communicated immediately by God, the truth of which is supported by reason through the testimony and proofs it gives that they *do* come from God.

Thus, someone who takes away reason to make way for revelation puts out the light of both—like persuading a man to put out his eyes so that he can better receive the remote light of an invisible star through a telescope!

5. Immediate revelation is a much easier way for men to establish their opinions and regulate their conduct than the boring and not always successful labour of strict reasoning. So it is no wonder that some people have claimed to have received revelations, and have persuaded themselves that they are under the special guidance of heaven in their actions and opinions, especially in opinions that they can't account for by the ordinary methods of knowledge and principles of reason. Thus we see that in all ages men in whom melancholy has mixed with devotion, or whose self-importance has led them to think they have a greater familiarity with God than others and are more favoured by him than others are, have often flattered themselves with the conviction that they are in immediate communication with the Deity and receive frequent messages from the Divine Spirit. It must be admitted that God *can* enlighten the understanding by a ray darted into the mind immediately from the fountain of light; those people think he has promised to do that; and so—their thought goes—who has a better right to expect it than those who are his special people, chosen by him and depending on him?

6. Once their minds have been prepared in this way, any baseless opinion that comes to settle itself strongly on their imaginations is taken by them to be an illumination from the spirit of God. And when they find themselves strongly

inclined to perform some strange action, they conclude that this impulse is a call or direction from heaven, and must be obeyed.

7. This is what I take *enthusiasm* to be, when properly understood. Although it is based neither on *reason* nor on divine *revelation*, but arises from the fancies of an overheated or arrogant brain, once it gets going it works on men's thoughts and deeds more powerfully than either of those two and than both together. The impulses that men are readiest to obey are the ones they receive *from themselves*; and the whole man is sure to act more vigorously when the whole man is carried along by a natural motion. For a fanciful notion is irresistible when it is placed above common sense and neither •restrained by reason nor •checked by reflection; our mood and our wishes raise it to the level of a divine authority!

8. The odd opinions and extravagant actions that men are led into by enthusiasm provide a sufficient warning against it; but many men ·ignore the warning, and· once they have started to think they are receiving immediate revelation—•illumination without search, and •certainty without proof or examination—it is hard to cure them of this. That is because their love of something extraordinary, the sense of ease and triumph they get from having an access to knowledge that is superior to the natural access that most people have, is soothing to their laziness, ignorance, and vanity. Reason is lost on them; they are above it, ·they think. Their account of their situation runs as follows·.

I see the light that shines through my understanding, and cannot be mistaken; it is clear and visible there, like the light of bright sunshine; it shows itself, and needs no proof except its own evidentness. I feel the hand of God and the impulses of the spirit moving

within me, and I can't be mistaken in what I feel.

Thus they support themselves, and are sure that reason has nothing to do with what they see and feel in themselves.

Something that I experience through my senses admits no doubt, needs no proof. Wouldn't it be ridiculous for someone to demand *proof* that the light shines and that he sees it? It is its own proof, and can't have any other. When the spirit brings light into my mind it dispels darkness. I see it as I do the light of the sun at noon, and have no need for the twilight of reason to show it to me. This light from heaven is strong, clear, and pure carries its own demonstration with it; to examine this celestial ray by our dim candle, reason, would make as much sense as using a glow-worm to help us to discover the sun.

9. This is how these men talk. Stripped of the metaphors of 'seeing' and 'feeling', what they say amounts only to this: •they are sure because they are sure, and •their convictions are right because they hold them strongly! But the *metaphor* so imposes on them that they equate it with certainty in themselves and demonstration for others.

10. Let us calmly examine a little this 'internal light' and this 'feeling' on which they build so much. These men say they have clear light, and that they see; they have awakened senses, and they feel; they are sure that this can't be disputed, for when a man says he sees or feels, nobody can deny that he does so. But here let me ask: is this seeing

a perception •that the proposition is true or
a perception •that it is a revelation from God?

Is this feeling

a perception of •an inclination or wish to do something,
or

a perception of •the spirit of God causing that inclination?

These are two very different perceptions ·in each case·, and they must be carefully distinguished if we are not to mislead ourselves. I may perceive the truth of a proposition—for example a proposition in Euclid—without perceiving that it is an immediate revelation from God, and without its being so. Indeed, I may perceive that I didn't come by some knowledge in a natural way, and so conclude that it has been revealed to me, without perceiving that it is a revelation from *God*; because there may be Spirits that can, without being told to by God, arouse those ideas in me and set them out in such an order before my mind that I can perceive their connection. So if •the knowledge of ·the truth of· a proposition comes into my mind and I don't know how, that's not the same as perceiving that it comes from God. Much less is •a strong conviction of its truth a perception that it is from God, or even a perception that it is true.

The enthusiasts may call it 'light' and 'seeing', but I think it is merely belief and assurance. And the proposition they think has been revealed to them is not something they •know to be true, but merely something they •accept as true. When a proposition is known to be true, there is no need for revelation; it is hard to conceive how there can be a revelation to someone of what he already knows. So if it is a proposition that they are sure—but don't *know*—to be true, then what they have, whatever they may call it, is not *seeing* but *believing*. These are two wholly distinct ways by which truth comes into the mind: what I *see* I know to be so by the evidence of the thing itself; what I *believe* I take to be so upon the testimony of someone else. But I must *know* that this testimony has been given, for otherwise what ground have I for believing? I must see that it is God that reveals this to me, or else I see nothing. So the question is this:

how do I know that God is the revealer of this to me? How do I know that this impression is made on my mind by his Holy Spirit, and that therefore I ought to obey it? If I don't *know* this, my assurance—however great it is—is groundless; whatever light I claim to have is mere enthusiasm. Whether •the 'revealed' proposition is

in itself obviously true, or

clearly probable, or

not decidable by the natural ways of knowledge,

there is a different proposition which has to be well grounded and manifestly true. It is •the proposition that God is the revealer of the former proposition, and that what I take to be a revelation is certainly something put into my mind by him and not an illusion dropped there by some other spirit, or created by my own imagination. These men accept a certain proposition as true because they presume that God revealed it. So oughtn't they to examine what grounds they have for presuming that? If they don't, their confidence is *only* presumption, and this 'light' they are so dazzled with is nothing but a will-o'-the-wisp that leads them constantly round in this circle: it is a revelation because they firmly believe it, and they believe it because it is a revelation.

11. In any matter of divine revelation the only proof we need is *that it is an inspiration from God*. For he can neither deceive nor be deceived. But how can we know that a proposition in our minds is a truth put there by God—a truth that he declares to us and which we ought therefore to believe? This is where enthusiasm fails. For the enthusiasts boast of a light by which they say they are enlightened and brought into the knowledge of this or that truth. But if they know it to be a truth, they must know this either through its being self-evident to natural reason or through rational proofs that show it to be true. If they see and know it to be a

truth in either of these two ways, it is pointless for them to suppose it to be a revelation; for they know it to be true the same way that any other man naturally can know that it is so without the help of revelation. . . . If they say they know it to be true because it is a revelation from God, that is a good reason; but then we should ask how they know it to be a revelation from God. If they say 'By the light it brings with it, which shines brightly in my mind and I can't resist', I ask them to consider whether this amounts to anything more than 'It is a revelation, because I strongly believe it to be true'. For the 'light' they speak of is only their strong though baseless conviction that it is a truth. . . . What easier way can there be to run ourselves into the most extravagant errors and miscarriages than in this way to take *fancy* for our only guide, and to believe any proposition to be true, any action to be right, simply because we believe it to be so? The strength of our convictions is no evidence at all of their own correctness; crooked things can be as stiff and inflexible as straight ones, and men can be as positive and peremptory in error as in truth. [The section closes with more about strongly held errors, as evidenced by *conflicting* sects of enthusiasts.]

[Section 12 adds the example of Paul of Tarsus, who was sure he was acting rightly when he persecuted Christians.]

13. Light, true light, in the mind can only be the evidentness of the truth of a proposition; and if the proposition isn't self-evident, the only light it can have is what comes from the clearness and validity of the proofs that lead one to accept it. To talk of any other 'light' in the understanding is to put ourselves in the dark—or in the power of the Prince of darkness!—and voluntarily to delude ourselves in order to believe a lie. For if •strength of persuasion is •the light by which we must be guided, how are we to distinguish the

delusions of Satan from the inspirations of the Holy Ghost? Satan can transform himself into an angel of light. And those who are led by that *son of the morning* are as fully satisfied with the light they are getting—i.e. are as strongly persuaded that they are being enlightened by the spirit of God—as anyone who actually is so. They accept and rejoice in it, act on the basis of it, and are as sure as anyone could be (letting their own strong belief be the judge) that they are right. [In the background: 'How art thou fallen from heaven, O Lucifer, son of the morning! how art thou cut down to the ground, which didst weaken the nations!' Isaiah 14:12.]

14. So if you don't want to give yourself up to all the extravagances of delusion and error, you must make critical use of this guide of *your light within*. God, when he makes the prophet, doesn't unmake the man. He leaves all his faculties in their natural state so that he can judge whether his inspirations are of divine origin. When he illuminates the mind with •supernatural light, he doesn't extinguish •the light that is natural. If he wants us to assent to the truth of a proposition, he either makes its truth evident by the usual methods of natural reason, or else makes it known to be a truth which wants us to assent to because of his authority, and convinces us that it is from him by some marks that reason can't be mistaken about. Reason must be our last judge and guide in everything. I don't mean that we must •consult reason and •use it to• examine whether a proposition revealed from God can be justified by natural principles and •reject it if it can't. But we must •consult it and •use it to examine whether the proposition in question is a revelation from God. And if reason finds that it is revealed by God, reason then declares in its favour as much as it does for any other truth, and makes it one of her own dictates. If we have nothing by which to judge our opinions except the

strength with which we have them, every thought thrown up by a heated imagination will count as an inspiration. If reason can't examine their truth of our opinions by some external standard, inspirations will have the same measure as delusions, and truth the same as falsehood, and there will be no way to distinguish one from the other.

[In section 15 Locke writes of Old Testament prophets to whom God spoke directly, and who wanted and received extra evidence that it *was* indeed God who was speaking. His chief example:] Moses saw the bush burn without being consumed, and heard a voice coming out of it. This was different from merely finding that he very much wanted to go to Pharaoh so as to bring his countrymen out of Egypt. Yet he didn't think that this was enough to authorize him to go to Pharaoh with that message, until God had assured him of a power to carry it through by another miracle—turning his rod into a serpent—which he repeated in the presence of those to whom Moses was to testify. . . .

16. In what I have said I am far from denying that God sometimes enlightens men's minds with certain truths,

or arouses them to good actions, through the immediate influence and assistance of the Holy Spirit and without any extraordinary signs accompanying it. But in these cases too we have reason and scripture, unerring rules to know whether something comes from God. Where the truth in question conforms to the revelation in the written word of God, or the action in question conforms to the dictates of right reason or holy writ, we can be sure that we run no risk in treating it as such. Even if it isn't an immediate revelation from God operating on our minds in an extraordinary manner, we are sure it is warranted by the revelation that he *has* given us of truth. But that warrant that it is a light or motion from heaven doesn't come from the strength of our *private* conviction; it has to come from something *public*, namely the written word of God or the standard of reason that we share with all men. When reason or scripture expressly supports an opinion or action, we may accept it as having divine authority; but it doesn't get that stamp of approval from the mere strength of our own conviction. . . .

Chapter xx: Wrong assent, or error

1. Knowledge can be had only of visible and certain truth. So error isn't a fault of our knowledge, but a mistake of our judgment when it gives assent to something that isn't true. But if assent is based on likelihood, if what assent especially aims at is probability, and if probability is what I said it is in chapters xv and xvi, you will want to know how it comes

about that men sometimes accept propositions that are not probable. For there's nothing more common than contrariety of opinions; nothing more obvious than that one man wholly disbelieves what another only doubts of and a third firmly believes. The reasons for this may be very various, but I think they all come down to these four:

- 1 Lack of proofs, ·to be discussed in sections 2–4·.
- 2 Lack of ability to use them, ·section 5·.
- 3 Lack of will to use them. ·section 6·.
- 4 Wrong measures of probability, ·sections 7–17·.

2. In the first category I include not only the lack of proofs that •don't exist anywhere and so can't be had, but also the lack of proofs that •do exist or could be procured. Men lack proofs ·in the second way· when they don't have the means or opportunity to make their own experiments and observations relating to some proposition, or the means to gather the testimonies of others. That is how most of mankind are situated: they are given up to labour, and enslaved to the necessities of their low status in life—their lives are worn out in merely providing for their livelihood. These men's opportunities for knowledge and enquiry are commonly as narrow as their fortunes; and their minds are not much enriched when all their waking hours and all their effort is devoted to stilling the rumbling of their own bellies, or the cries of their children. It isn't to be expected that a man who drudges all his life in a laborious trade should know more about the variety of things done in the world than a pack-horse that is repeatedly driven to and from market along the same narrow lane knows about the geography of the country. [The remainder of the section elaborates on this theme.]

3. What shall we say then? Are most of mankind subjected by the necessities of bare subsistence to unavoidable ignorance about the things that are of greatest importance to them? (·I mean: about what they must do in order to go to heaven and avoid hell·.) Have the bulk of mankind no guide except accident and blind chance to lead them to their happiness or misery? Are the current opinions and licensed guides of each man's country sufficient evidence

and security for him to base on them his great concerns (indeed, his everlasting happiness or misery)? Can those who teach one thing in Christendom and another in Turkey be the certain and infallible oracles and standards of truth? Shall a poor peasant be eternally happy because he chanced to be born in Italy, and a day-labourer be damned eternally because he had the bad luck to be born in England? I shan't discuss the question of how willing some men may be to say some of these things, but I am sure of this: that you must allow one or other of them to be true (take your pick) or else grant that *God has equipped men with faculties sufficient to show them what to do, if only they will seriously employ them to that end when their daily tasks allow them the leisure*. No man is so wholly taken up with earning a livelihood that he has no spare time at all to think of his soul and inform himself in matters of religion. Any man could find many spare moments in which to develop his knowledge of such matters, if he cared as much about this as men do about less important matters. No-one is too enslaved to the necessities of life for *that*.

4. As well as people whose hard way of life narrows their routes to education and knowledge, there are others who are quite rich enough to own books and other devices for removing doubts and discovering truth. But they are hemmed in by the laws of their countries, and the strict guard over them by the authorities who have an interest in keeping them ignorant, for fear that if they knew more they would have less faith in the authorities. These are actually *further* from the freedom and opportunities of a fair enquiry than are the poor and wretched labourers I have just spoken of. And however high and great they may seem, they are confined to narrowness of thought and enslaved in what should be the freest part of a man, their understandings.

This is generally the case of all those who live in countries where care is taken to propagate what the authorities think is truth, without knowledge; where men are forced to be of the religion of the country, and must therefore swallow down opinions, as simple people swallow quack doctors' pills, without knowing what they are made of or how they will work, and having to settle for believing that they will effect the cure. But the men I am speaking of are in this respect much more miserable than the patients of the quack, because they aren't free to refuse to swallow something they would rather leave alone, or to choose the physician to whom they will entrust themselves.

5. Secondly in the section 1 list of causes of men's believing against probability, there are those who lack the skill to use the evidence they have regarding probabilities. People who can't carry a chain of consequences in their heads, or estimate exactly the relative weights of conflicting proofs and testimonies, making a due allowance for every factor, can easily be misled into accepting propositions that are not probable. There are one-syllogism men, and two-syllogism ones, and others that can go only one step beyond that. These can't always tell which side has the stronger support, can't constantly follow the opinion that is in itself the more probable one. Anybody who has had any conversation with other people—even if he has never been in Westminster hall or the Exchange (at one end of the spectrum) and has never visited shelters for the homeless or madhouses (at the other)—will agree that men do differ greatly in their understandings. I shan't here go into the question of the source of this great difference in men's intellects: whether it arises from a defect in the bodily organs that are specially adapted to thinking, or from a lack of use of the intellectual faculties, making them dull and sluggish, or from the

natural differences in men's souls themselves; or from some or all of these together. It is evident that the levels of men's understandings, apprehensions, and reasonings differ so much that one may, without insulting mankind, affirm that there is a greater intellectual distance between some men and others than between some men and some lower animals. How this comes about is a question of great importance, but not for my present purpose.

6. Thirdly, there are other people who lack proofs not because they are out of reach but because they won't use them. These are people who have riches and leisure enough, and are not lacking in skill or in other helps, yet get no advantage from all this. Their hot pursuit of pleasure, or constant drudgery in business, engages their thoughts elsewhere. General laziness and negligence, or an aversion to books, study and meditation in particular, keep others from any serious thoughts. Yet others, out of fear that an impartial enquiry would not favour the opinions that best suit their prejudices, lives, and plans, are satisfied with taking on trust, without examination, whatever they find convenient and in fashion. Thus most men, even of those who could do otherwise, pass their lives without encountering—let alone giving a rational assent to—probabilities they need to know, even when those probabilities lie so much within their view that they have only turn their eyes in that direction to be convinced of them. We know some men won't read a letter that they think brings bad news; many men refuse to keep their accounts up to date, or even to think about their estates, when they have reason to fear that their affairs are in poor shape. How can men whose plentiful fortunes allow them leisure to improve their understandings satisfy themselves with lazy ignorance? I don't know. But I think that a man must have a low opinion of his soul if he lays out all his

income in provisions for his body, using none of it to procure the means and helps of knowledge; if he takes great care to appear always in a neat and splendid outside, and would be ashamed to be seen in coarse clothes or a patched coat, yet contentedly allows *his mind* to appear out of doors in a piebald costume of coarse patches and borrowed shreds such as it has been clothed in by chance or by his country-tailor (I mean the common opinion of those he has conversed with). . . . Those who call themselves gentlemen should reflect on the fact that however sure they are that their birth and fortune entitle them to credit, respect, power and authority, they will find all these carried away from them by men of lower condition who surpass them in knowledge. Those who are blind will always be led by those who see, or else fall into the ditch. And the most enslaved person is the one who isn't free in his understanding.

I have shown some of the causes of wrong assent, and how it happens that probable doctrines are not always received with an assent proportional to the reasons that can be had for their probability. But so far I have discussed only cases where the proofs do exist but don't appear to the person who embraces the error.

7. Fourthly, there remains the last sort of belief contrary to probability, which occurs when people who have the real probabilities plainly laid before them nevertheless don't accept the conclusion, and instead either suspend their assent or give it to the less probable opinion. This is the danger that threatens those who adopt wrong measures of probability. These wrong measures are:

- 1** Propositions that are not in themselves certain and evident, but doubtful and false, accepted as principles; ·discussed in sections 8–10·.
- 2** Received hypotheses; ·section 11·.

- 3** Predominant passions or inclinations; ·sections 12–16·.
- 4** Authority; ·section 17·.

8. The first and firmest ground of probability is the conformity something has to our own knowledge, especially the part of our knowledge that we have made our own and continue to regard as principles. These have so much influence on our opinions that it is usually by them that we judge concerning truth, and we measure probability in terms of them so strictly that if something is inconsistent with them—that is, with our 'principles'—we count it not merely as improbable but as impossible. The reverence we give to these principles is so great, and their authority so supreme, that the testimony of other men and even the evidence of our own senses are often rejected when they threaten to testify to something contrary to these established rules. (I shan't here discuss how far this is due to the doctrine of innate principles, and the doctrine that principles are not to be proved or questioned.) I freely grant that one truth can't contradict another; but I venture to warn that everyone ought to be very careful about anything he accepts as a principle, examining it strictly and seeing whether he *certainly knows* it to be true through its own evidentness or whether he merely *strongly believes* it to be true on the authority of others. Anyone who swallows wrong principles, blindly giving himself up to the authority of some opinion that isn't in itself evidently true, puts into his understanding a strong bias that will inevitably lead his assent astray.

9. Children commonly receive propositions into their minds (especially propositions about religious matters) from their parents, nurses, or those around them; and when these have worked their way into the child's unwary and unbiassed understanding and held on there ever more tightly, they gradually come to be *riveted* there by long habit and upbringing,

so that eventually they are fixed beyond any possibility of being pulled out again. And this holds, whether they are true or false. When the child has become an adult, he has no memory of acquiring these beliefs and doesn't know how he came by them. When he reflects on his opinions, he finds that these early-fixed 'principles' go as far back in the history of his mind as does his memory; and so he is apt to revere them as sacred things, and not to allow them to be profaned, touched, or questioned. He regards them as sacred oracles set up in his mind immediately by God himself, to be the great and unerring deciders of truth and falsehood, and the judges to which he should appeal in controversies of any sort.

10. When someone has arrived at this view of his principles (*any* principles), it is easy to imagine how he will react to any proposition—however clearly it has been proved—that invalidates their authority, or in any way conflicts with these internal oracles; whereas the grossest absurdities and improbabilities, as long as they are agreeable to such principles, are smoothly swallowed and easily digested. [The section continues with colourful remarks about errors and conflicts that arise from this attitude. Locke uses the example of the 'intelligent Romanist' who, because of childhood indoctrination, can 'easily swallow the doctrine of transubstantiation—not only against all probability, but even against the clear evidence of his senses—and believe to be flesh something that he sees to be bread'. He adds that it is impossible to argue such a person into true beliefs unless he can be 'persuaded to examine even those very principles'.]

11. Secondly, we come to people whose minds have been moulded by a received hypothesis so that they have exactly its size and shape. Unlike the previous group, these people will admit the matters of fact that their opponents bring

against them, differing from the opponents only in how they *explain* the matters of fact. They don't openly defy their senses, as the former group do. They can bring themselves to listen to opposing information a little more patiently; but they won't incorporate it in their explanations of things, and they give no weight to probabilities that tend to show that things did not come about in exactly the way they have insisted they did. A learned professor would find it intolerable—a shame that his scarlet gown would blush at—to have his authority of forty years' standing, carved out of hard rock Greek and Latin with much expense of time and candle, and confirmed by general tradition and a reverend beard, overturned in an instant by an upstart innovator! Can we expect him to admit that what he taught his pupils thirty years ago was all error and mistake, and that he sold them hard words and ignorance at a very high price? Who will ever be prevailed on by cogent arguments to strip himself of all his old opinions and claims to knowledge and learning, and turn himself out stark naked, looking for new notions? The only *arguments* that can be used will lead such a person to treat his doctrines in the way a cold wind leads a traveller to treat his cloak—wrapping them around him all the tighter!

We can include under this 'wrong hypothesis' heading the errors that arise when a true hypothesis, or right principle, isn't rightly understood. There is nothing more familiar than this. The instances of men contending for different opinions that they all derive from the infallible truth of the scripture, are an undeniable proof of it. . . .

12. Thirdly, probabilities that go against men's appetites and prevailing passions encounter the same fate. Let ever so much probability hang on one side of a greedy man's reasoning, and money on the other—it is easy to foresee which way the balance will swing! Earthly minds, like mud-

walls, resist the strongest cannons; and though perhaps sometimes the force of a clear argument may make some impression, yet they nevertheless stand firm and keep out the enemy truth that would capture or disturb them. Tell a man who is passionately in love that his mistress has been unfaithful to him, confront him with a score of witnesses to her falsehood, and it is ten to one that three kind words of hers will ·in his mind· outweigh all their testimonies, What suits our wishes is easily believed—as I think everyone has more than once experienced. Men can't always *openly* defy or resist the force of manifest probabilities that go against them, yet they don't yield to the argument. Although it is the nature of the understanding constantly to settle for the more probable side, a man has a power to suspend and restrain its enquiries, and not permit a full and satisfactory examination; and until such an examination is made, there will always be two ways left of evading the most apparent probabilities.

13. The arguments are mostly put forward in words, and the first evasive tactic is to allege that there may be a fallacy latent in them, and—when the argument is very long—that some of the stages in it may be incoherent. Very few discourses are so short, clear and consistent that one can't plausibly enough raise this doubt about fallacy and incoherence. When it can be raised the doubter can, without being accused of dishonesty or unreasonableness, set himself free ·from the force of the prevailing probability·, using the old reply, 'Though I can't answer, I won't yield'.

14. The second tactic for evading manifest probabilities is to withhold assent on the grounds that: 'I don't yet know everything that can be said on the contrary side. So although I am beaten I don't have to yield, because I don't know what forces there are in reserve behind.' This is such a wide open

refuge against conviction that it is hard to determine when a man is quite out of reach of it.

15. Still, there are limits to it; and when a man has carefully enquired into all the grounds of probability and unlikeliness, done his best to inform himself of all the relevant details, and done the calculation on each side, he can in most cases come to acknowledge on which side the greater over-all probability lies. ·And in some cases he will find that· he can't refuse his assent. I think we can conclude that when there are sufficient grounds to suspect either that there is a verbal or logical fallacy in the proof of some proposition, or that there are equally good proofs on the contrary side, one can voluntarily choose between assent, suspense of judgment, and dissent. But •where the proofs make the proposition highly probable, and there isn't sufficient ground to suspect either that there is discoverable fallacy of words or that equally valid though still undiscovered proofs are latent on the other side—*then*, I think, a man who has weighed the proofs can hardly refuse his assent to the side on which the greater probability appears. Is it probable that a random jumble of printing letters should often fall into an order such that they would print onto a page a coherent paragraph? Or that a group of atoms driven by blind chance and not guided by an understanding agent should frequently constitute the bodies of some species of animals? Nobody who thinks about questions like these can have a moment's hesitation in answering, or answer with less than total confidence. Again, •when something is attested to by witnesses and is in its own nature neither probable nor improbable, and when there is no room for the supposition that there is equally strong testimony against it—for example whether there was 1700 years ago such a man in Rome as Julius Caesar—in all such cases, I think, it isn't in any rational man's power

to refuse his assent; and his assent *necessarily* follows and accepts such probabilities. In other less clear cases, I think it is in man's power to suspend his assent, and perhaps be satisfied with the proofs that he has, if they favour the opinion that suits his inclination or interest, and so stop from further search. But that a man should assent to the side that appears to him to be the less probable seems to me utterly out of the question; he can no more do *that* than he can believe the same thing to be probable and improbable at the same time.

16. Just as knowledge is no more a matter of choice than perception is, so also, I think, assent is no more up to us than knowledge is. When the agreement of a pair of ideas appears to my mind, whether immediately or with the help of reason, I can no more refuse to perceive it—no more avoid knowing it—than I can avoid seeing the objects that I turn my open eyes towards in daylight. And I can't deny my assent to what on full examination I find to be the most probable. But though we can't •hold back our knowledge once the agreement has been perceived, or •withhold our assent once the probability has clearly appeared through careful thought about all aspects of it, still we *can* hold back both knowledge and assent by •stopping our enquiry and not employing our faculties in the search of truth. If we didn't have this power, there would never be anything to blame in ignorance, error, or infidelity.

We can, then, sometimes prevent or suspend our assent; but no-one who is well read in modern and ancient history can doubt that there is such a place as Rome or that there was such a man as Julius Caesar. Indeed there are millions of truths that don't matter to a man, or that he thinks don't matter to him: Was our king Richard III hunch-backed? Was Roger Bacon a mathematician or a magician? With questions

like these, where the assent one way or the other is of no importance to the interests of anyone, it isn't surprising that the mind gives itself up to the common opinion, or surrenders to the first comer. Opinions such as these are of so little weight and significance that, like dust in a sunbeam, their influence is rarely noticed. They are there by chance, as it were, and the mind lets them float freely. But when the mind judges that a given proposition is important, where the difference between assenting and not assenting has a great deal riding on it, then the mind sets itself seriously to enquire and examine the probability; and then, I think, it is not for us to *choose* which side to accept if the probabilities clearly favour one. The greater probability in that case will determine the assent; and a man can no more •avoid taking it to be true where he perceives the greater probability than he can •avoid knowing it to be true where he perceives the agreement or disagreement of two ideas. . . .

17. The fourth and last wrong measure of probability that I shall discuss keeps more people in ignorance or error than do the other three combined. I mentioned it in the foregoing chapter: it is the practice of giving our assent to the common received opinions of our friends, our party, our neighbourhood, or our country. How many men have no other ground for their beliefs than the supposed honesty or learning or number of members of their profession? As if honest or bookish men couldn't err, or truth should be established by majority vote! Yet most men are satisfied with this. 'The tenet has had the support of reverend antiquity, it comes to me with the passport of former ages, so I can safely accept it. Other men have been and are of the same opinion, so it is reasonable for me to embrace it too.' To settle one's opinions in such a way as *this* is worse than settling them by tossing a coin! All men are liable to error, and most

men are tempted to it by passion or interest. If we could see the secret motives that influence the men of reputation and learning in the world, and the leaders of parties, we wouldn't *always* find that they were led to their favoured doctrines by embracing truth for its own sake! This at least is certain: there is no opinion so absurd that no-one has accepted it on this ground. There is no error that hasn't had its supporters. . . .

18. Despite the great noise that is made about errors and opinions, I must be fair to mankind and say: There aren't so many men with errors and wrong opinions as is commonly supposed. I'm not thinking here of men who embrace the truth, but rather of ones who have no thought, no opinion at all, regarding the doctrines they make such a fuss about. For if we were to interrogate most partisans of most sects, so far from finding evidence that they acquired their opinions on the basis of examining arguments and the appearance of probability, we wouldn't even find that they *have* any opinions of their own on the matters they are so zealous

about! They are determined to stick to a party that they have been drawn to by upbringing or self-interest; and once they are in it they will, like the common soldiers of an army, show their courage and ardour as their leaders tell them to, without ever *examining* or even *knowing* the cause they are defending. If a man's life shows that he has no serious regard for religion, why should we think that he racks his brains about the opinions of his church, and troubles himself to examine the grounds for this or that doctrine? It is enough for him to obey his leaders, to have his hand and his tongue ready for the support of the common cause, in this way winning the approval of those who can give him credit, promotion, or protection in that society. Thus men become supporters of, and combatants for, opinions that they were never convinced of—indeed, ones that they never even had floating in their heads! I'm not playing down how many improbable or erroneous opinions there are out there in the world; but I am saying that there are fewer people that actually assent to them, and mistake them for truths, than there are generally thought to be.

Chapter xxi: The division of the sciences

1. All that can fall within the range of human understanding is in three categories. **1** The nature of things as they are in themselves, their relations, and their manner of operation. **2** What man himself ought to do, as a thinking and willing agent, for the attainment of any end, especially happiness. **3** The ways and means by which the knowledge of each of those two is attained and communicated. I think that science

[= 'high-level disciplined knowledge'] can properly be divided into these three sorts.

2. First, the knowledge of things as they are in their own beings—their constitution, properties and operations. I am including here not only matter and body, but also spirits, which also have their proper natures, constitutions, and

operations. This, in a slightly enlarged sense of the word, I call *physike* [Locke gives it in Greek], or natural philosophy. This aims at bare speculative truth [= ‘truth about •what is in fact the case’, as distinct from •what it would be good to do and from •what must be the case], and anything that can give the mind of man any such truth belongs to natural philosophy, whether it concern God himself, angels, spirits, bodies, or any of their states or qualities.

3. Secondly, *praktike* [Greek again], the skill of applying our own powers and actions in the right way for the attainment of things that are good and useful. The most considerable branch of this is ethics, which is the seeking out of the rules and measures of human actions that lead to happiness, and of the means to practise them. This does not aim at •mere speculation and knowledge of truth, but rather at •*right* and the conduct suitable to it.

4. The third branch of science may be called *semiotike* [Greek], or the doctrine of signs. Because these are mostly words, this part of science is aptly enough termed also ‘logic’. [Locke gives the word in Greek; it comes from *logos*, which can mean ‘word’.] The business of this is to study the nature of the signs that the mind makes use of for understanding things and for conveying its knowledge to others. None of the things the mind contemplates is present to the understanding (except *itself*); so it must have present to it something that functions as a sign or representation of the thing it is thinking about; and this is an *idea*. Because the scene of ideas that makes

one man’s thoughts can’t be laid open to the immediate view of anyone else, or stored anywhere but in the memory which isn’t a very secure repository, we need signs for our ideas so as to communicate our thoughts to one another and record them for our own use. The signs that men have found most convenient, and therefore generally make use of, are articulate sounds. So the study of ideas and words, as the great instruments of knowledge, makes an honourable part of the agenda of those who want to command a view of human knowledge across its whole extent. If they were carefully weighed, and studied as they deserve, words and ideas might present us with a sort of logic and criticism different from what we have encountered up to now.

5. This seems to me the first and most general division of the objects of our understanding, and the most natural. For a man can employ his thoughts about nothing but •the contemplation of things themselves, for the discovery of truth, and •the things in his own power, namely his own actions, for the attainment of his own ends, and •the signs the mind makes use of in both of the foregoing, and the right way to order them to achieve clarity. These three—things as they are in themselves knowable, actions as they depend on us for our happiness, and the right use of signs in pursuing knowledge—are utterly different from one another. So they have seemed to me to be the three great provinces of the intellectual world, wholly separate and distinct one from another.