An Enquiry Concerning Human Understanding

DAVID HUME
1711–1776

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The 1777 text

Rendered into modern English with AI (Claude) and edited



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An Enquiry Concerning Human Understanding · David Hume (1711–1776)

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INTRODUCTION

David Hume's first book, *A Treatise of Human Nature* (1739), was, in his words, "dead-born from the press." So he rewrote its central arguments as a shorter, livelier book: the *Enquiry*, first published in 1748. It became one of the most influential works of philosophy in English.

Hume asks how much we can really know. Every idea, he argues, traces back to experience. We never actually observe one thing *causing* another, only one thing regularly following another; our expectation that the future will resemble the past rests on habit, not reason. From there he takes on free will, the minds of animals, miracles, and the limits of skepticism itself.

The right-hand column is Hume in modern English: the same arguments, examples and wit, in sentences a reader today can move through easily. The left-hand column is the text as Hume last corrected it.

Of the different Species of Philosophy

Section I
Hume contrasts easy and abstruse philosophy and defends careful inquiry into human nature.

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[1] The study of human nature can be pursued in two different ways. Each has its own merit, and each can help to entertain, instruct, and improve humankind. The first treats human beings chiefly as creatures made for action, guided in what they do by taste and feeling. We pursue one thing and avoid another according to the value these things seem to have and the light in which they appear to us. Since virtue is agreed to be the most valuable thing of all, philosophers of this kind paint her in the most attractive colors. They borrow every resource of poetry and eloquence, and they treat their subject in an easy, accessible way, the way best suited to please the imagination and engage the feelings. They pick the most striking observations and examples from everyday life and set opposite characters in pointed contrast. Luring us onto the path of virtue with visions of glory and happiness, they then guide our steps along it with the soundest advice and the most illustrious examples. They make us *feel* the difference between vice and virtue. They stir our feelings and give them direction. If they can only bend our hearts toward a love of integrity and true honor, they consider the whole purpose of their labors fully achieved.

[2] The other kind of philosopher regards human beings as reasoning rather than acting creatures, and tries to shape our understanding more than to improve our conduct. These philosophers treat human nature as a subject for theory. They exam-

ine it closely, looking for the principles that govern our understanding, arouse our feelings, and make us approve or blame any particular object, action, or piece of behavior. They think it a disgrace to all learning that philosophy has not yet settled, beyond dispute, the foundations of ethics, reasoning, and criticism, and that it goes on forever talking about truth and falsehood, vice and virtue, beauty and ugliness, without being able to say where these distinctions come from. They take on this hard task undeterred by any difficulty. Working from particular cases to general principles, they keep pushing on toward principles more general still, and are not satisfied until they reach those basic principles that, in every science, mark the limit of human curiosity. Their speculations may seem abstract, even unintelligible, to ordinary readers, but they are aiming at the approval of the learned and the wise. They consider the labor of a whole lifetime well repaid if they can uncover some hidden truths that may help to instruct future generations.

[3] There is no doubt that most people will always prefer the easy, accessible philosophy to the precise and difficult kind, and many will recommend it as not only more pleasant but more useful. It enters more into everyday life. It shapes the heart and the feelings, and by touching the principles that move people to act, it reforms their conduct and brings them closer to the ideal of perfection it describes. The difficult philosophy, by contrast, rests on a cast of mind that cannot take part in business and action. It vanishes the moment the philosopher steps out of the shade into the open daylight, and its principles have little lasting hold on how we actually behave. The feelings of the heart, the stirrings of the passions, the force of our emotions, scatter all its conclusions and turn the profound philosopher back into an ordinary person.

[4] It must also be admitted that the most lasting fame, and the most deserved, has gone to the easy philosophy. Abstract reasoners seem so far to have enjoyed only a passing reputation, owing to the whims or ignorance of their own age, and have been unable to keep it before a fairer-minded posterity. It is easy

for a profound philosopher to make a mistake in his subtle reasoning, and one mistake inevitably breeds another as he pushes on to further consequences, undeterred from accepting any conclusion by how strange it looks or how sharply it contradicts popular opinion. But a philosopher whose only aim is to present the common sense of humankind in more beautiful and engaging colors goes no further if he happens to fall into error. He appeals again to common sense and to the mind's natural feelings, returns to the right path, and keeps himself safe from any dangerous illusions. Cicero's fame flourishes today, while Aristotle's has entirely decayed. La Bruyère has crossed the seas and still keeps his reputation, while Malebranche's glory is confined to his own nation and his own age. And Addison, perhaps, will still be read with pleasure when Locke is entirely forgotten.[1]

The pure philosopher is generally not much welcomed in the world. He is thought to contribute nothing to the benefit or pleasure of society, since he lives cut off from other people and is wrapped up in principles and ideas equally far from their understanding. On the other hand, the pure ignoramus is despised even more. In an age and nation where the sciences flourish, nothing is thought a surer sign of a narrow, ungenerous mind than to have no taste at all for those noble pleasures. The ideal character is supposed to lie between these extremes. Such a person has an equal ability and taste for books, company, and business. In conversation, he shows the discernment and delicacy that come from literary culture; in business, the integrity and precision that are the natural result of sound philosophy. To spread and cultivate so accomplished a character, nothing is more useful than writing in the easy style and manner: writing that does not draw too far away from life, that needs no deep study or seclusion to be understood, and that sends the reader back among people full of noble feelings and wise advice, applicable to every circumstance of human life. Through such

1 La Bruyère was a French moralist and essayist; Malebranche a French metaphysician; Joseph Addison an English essayist, co-founder of *The Spectator*.

writing, virtue becomes lovable, learning pleasant, company instructive, and solitude entertaining.

Man is a reasoning being, and as such he gets his proper food and nourishment from knowledge. But the limits of human understanding are so narrow that we can hope for little satisfaction here, either in how much we can learn or in how certain it is. Man is a social being, no less than a reasoning one. But he cannot always find pleasant and amusing company, or keep his appetite for it. Man is also an active being, and both from that disposition and from the many necessities of human life, he must submit to business and work. But the mind needs some relaxation and cannot always stay bent on care and effort. It seems, then, that nature has marked out a mixed kind of life as the one best suited to the human race. She has quietly warned us not to let any one of these inclinations *pull* us too far, so that we become unfit for other pursuits and pleasures. "Indulge your passion for knowledge," she says, "but let your knowledge be human, and such as bears directly on action and society. Abstruse thought and profound research I forbid, and I will punish them severely: with the brooding melancholy they bring, with the endless uncertainty they entangle you in, and with the cold reception your supposed discoveries will meet when you announce them. Be a philosopher; but amid all your philosophy, be still a man."

[5] If most people were content simply to prefer the easy philosophy to the abstract and profound kind, without heaping blame or contempt on the latter, it might be reasonable to go along with this general opinion and let everyone enjoy his own taste without argument. But things often go further than that, even to the outright rejection of all profound reasoning, or what is commonly called *metaphysics*. So let us now consider what can reasonably be said in its defense.

We may begin by noting one considerable advantage of precise and abstract philosophy: it serves the easy, humane kind, which without it can never achieve enough exactness in its sentiments, precepts, or reasoning. All literature is nothing but pic-

tures of human life in its various attitudes and situations. These pictures inspire different feelings in us, of praise or blame, admiration or ridicule, according to the qualities of what they set before us. An artist will be better equipped to succeed at this if, besides refined taste and quick perception, he has a precise knowledge of the inner workings: the operations of the understanding, the workings of the passions, and the various kinds of feeling that distinguish vice from virtue. However laborious this inward inquiry may seem, it becomes to some degree necessary for anyone who wants to succeed in describing the obvious, outward appearances of life and manners. The anatomist puts the most hideous and unpleasant objects before our eyes, yet his science is useful to the painter even in depicting a Venus or a Helen. While the painter uses all the richest colors of his art and gives his figures the most graceful and engaging airs, he must still keep in mind the inner structure of the human body, the position of the muscles, the framework of the bones, and the function and shape of every part and organ. Precision always helps beauty, and sound reasoning always helps refined feeling. It is futile to exalt the one by disparaging the other.

Besides, we may observe that in every art or profession, even those most concerned with life and action, a spirit of precision, however acquired, brings them all closer to perfection and makes them serve the interests of society better. And though a philosopher may live far from business, the spirit of philosophy, if carefully cultivated by a number of people, must gradually spread through the whole of society and give a similar correctness to every art and occupation. The politician will gain more foresight and subtlety in dividing and balancing power; the lawyer, more method and finer principles in his reasoning; and the general, more regularity in his discipline and more caution in his plans and operations. The greater stability of modern governments compared with ancient ones, and the greater precision of modern philosophy, have improved by similar steps, and will probably go on improving.

[6] Even if these studies offered no benefit beyond satisfying an innocent curiosity, that should not be despised. It adds one more to the few safe and harmless pleasures granted to the human race. The sweetest and most inoffensive path through life runs through the avenues of science and learning, and anyone who can clear an obstacle from that path, or open up a new view along it, deserves to that extent to be counted a benefactor of humankind. And though these inquiries may seem laborious and tiring, some minds are like some bodies: blessed with vigorous, robust health, they need hard exercise, and take pleasure in what most people would find a burden and a chore. Obscurity, it is true, is painful to the mind as well as to the eye. But to bring light out of obscurity, however much work it takes, must be a delight and a joy.

But the obscurity of profound and abstract philosophy is criticized not only as laborious and tiring, but as the inevitable source of uncertainty and error. And here lies the fairest and most plausible objection to a large part of metaphysics: that it is not really a science at all. Instead, it arises either from the fruitless efforts of human vanity, trying to break into subjects utterly beyond the reach of the understanding, or from the cunning of popular superstitions, which cannot defend themselves on fair ground and so raise these tangled thickets to hide and protect their weakness. Driven out of the open country, these robbers flee into the forest and lie in wait to break in on any unguarded approach to the mind and overwhelm it with religious fears and prejudices. Even the stoutest opponent, if he relaxes his guard for a moment, is overpowered. And many, out of cowardice and folly, open the gates to the enemy and willingly receive them with reverence and submission, as their rightful rulers.

[7] But is this a good enough reason for philosophers to give up such inquiries and leave superstition in possession of her hideout? Isn't it right to draw the opposite conclusion, and see that we must carry the war into the enemy's most secret strongholds? It is futile to hope that people, after repeated disappointment, will finally abandon such airy sciences and discover the

proper domain of human reason. For one thing, many people have too obvious an interest in endlessly reviving these topics. For another, blind despair can never reasonably have a place in the sciences. However unsuccessful earlier attempts may have been, there is always room to hope that the hard work, good luck, or sharper insight of later generations may reach discoveries unknown to earlier ages. Every adventurous mind will still leap at the difficult prize, and will be spurred on rather than discouraged by the failures of those who came before, hoping that the glory of achieving so hard a feat is reserved for him alone. The only way to free learning once and for all from these abstruse questions is to inquire seriously into the nature of human understanding, and to show, by an exact analysis of its powers and capacities, that it is in no way fitted for such remote and abstruse subjects. We must put up with this effort now in order to live at ease ever after. We must cultivate true metaphysics with some care in order to destroy the false and adulterated kind. Laziness, which protects some people from this deceptive philosophy, is outweighed in others by curiosity. And despair, which may win out at some moments, can give way later to confident hopes and expectations. Precise and sound reasoning is the only universal remedy, suited to all people and all temperaments. It alone can overthrow that abstruse philosophy and metaphysical jargon which, mixed up with popular superstition, makes it almost impenetrable to careless thinkers and gives it the air of science and wisdom.

[8] Besides this advantage, of rejecting after careful inquiry the most uncertain and unpleasant part of learning, there are many positive benefits from a precise examination of the powers and faculties of human nature. It is remarkable that the operations of the mind, though they are more intimately present to us than anything else, seem shrouded in obscurity whenever we make them the object of reflection. The eye cannot easily make out the lines and boundaries that separate and distinguish them. They are too fine to stay long in the same aspect or position, and must be grasped in an instant by a superior insight, which comes

from nature and is improved by habit and reflection. So it is no small part of science simply to know the different operations of the mind: to separate them from one another, class them under their proper headings, and correct all the apparent disorder they seem to lie in when we make them the object of reflection and inquiry. This task of ordering and distinguishing, which has no special merit when done with external bodies, the objects of our senses, rises in value when directed at the operations of the mind, in proportion to the difficulty and effort it takes. And if we can go no further than this mental geography, this mapping of the distinct parts and powers of the mind, it is at least satisfying to get that far. And the more obvious this science may seem (and it is by no means obvious), the more contemptible any ignorance of it must be thought in anyone who claims to be learned or a philosopher.

Nor can anyone suspect that this science is uncertain or fanciful, unless we adopt a skepticism so extreme that it undermines all theorizing, and even all action. It cannot be doubted that the mind has various powers and faculties, that these powers are distinct from one another, and that what is really distinct in immediate perception can be distinguished by reflection. It follows that there is truth and falsehood in every proposition on this subject, and a truth and falsehood that are not beyond the reach of human understanding. There are many obvious distinctions of this kind, such as those between the will and the understanding, or between the imagination and the passions, which anyone at all can grasp. The finer, more philosophical distinctions are no less real and certain, though harder to grasp. Some examples of success in these inquiries, especially recent ones, may give us a better idea of how certain and solid this branch of learning is. Shall we think it worth a philosopher's effort to give us a true system of the planets, and to fix the position and order of those distant bodies, while we pretend to ignore those who so successfully map the parts of the mind, which concerns us so intimately?

[9] But may we not hope that philosophy, if carefully cultivated and encouraged by public interest, can carry its inquiries still further, and discover, at least to some degree, the hidden springs and principles that drive the human mind in its operations? Astronomers had long been content to prove, from the observed phenomena, the true motions, order, and size of the heavenly bodies. Then at last a philosopher arose who seems, by the happiest reasoning, to have also determined the laws and forces that govern and direct the revolutions of the planets. The same has been done for other parts of nature.[2] And there is no reason to despair of equal success in our inquiries into the powers and organization of the mind, if they are pursued with equal ability and caution. It is likely that one operation and principle of the mind depends on another, which in turn may be reducible to one still more general and universal. Exactly how far these inquiries can be carried will be hard for us to determine before a careful attempt, or even after one. This much is certain: attempts of this kind are made every day, even by those who philosophize most carelessly. And nothing is more necessary than to undertake the project with thorough care and attention, so that if it lies within the reach of human understanding it may at last be happily achieved, and if not, it may at least be rejected with some confidence and security. This last outcome is surely not desirable, and should not be accepted too hastily. For how much would it take away from the beauty and value of this kind of philosophy? Moral philosophers, considering the vast number and variety of actions that arouse our approval or dislike, have always been in the habit of looking for some common principle on which this variety of feelings might depend. And though they have sometimes gone too far, out of passion for some single general principle, it must be admitted that they are right to expect some general principles to which all the vices and virtues can properly be reduced. Critics, logicians, and even political theorists have made the same effort. Nor have their attempts been entirely unsuccessful, though perhaps more time,

2 The philosopher is Isaac Newton.

greater precision, and more intense application may bring these sciences still closer to perfection. To give up all such ambitions at once may fairly be thought more rash, hasty, and dogmatic than even the boldest and most assertive philosophy that has ever tried to impose its crude doctrines and principles on humankind.

10 So what if these reasonings about human nature seem abstract and hard to understand? That gives no reason to suppose they are false. On the contrary, it seems impossible that something that has so far escaped so many wise and profound philosophers could be very obvious and easy. And whatever effort these inquiries may cost us, we may think ourselves well rewarded, in pleasure as well as profit, if they let us add anything to our stock of knowledge on subjects of such immense importance.

Still, the abstractness of these speculations is no recommendation. It is rather a drawback, and this difficulty may perhaps be overcome by care and skill and by avoiding all unnecessary detail. So in the following inquiry we have tried to throw some light on subjects that uncertainty has so far kept the wise away from, and obscurity the ignorant. We will be happy if we can join the boundaries of the different kinds of philosophy, reconciling profound inquiry with clarity, and truth with novelty! And happier still if, reasoning in this easy manner, we can undermine the foundations of an abstruse philosophy that seems so far to have served only as a shelter for superstition and a cover for absurdity and error!

Of the Origin of Ideas

Section II
Hume argues that every idea is copied from an earlier impression.

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[11] Everyone will readily agree that there is a considerable difference between the perceptions of the mind when a person feels the pain of excessive heat, or the pleasure of moderate warmth, and when he later recalls this sensation in memory or anticipates it in imagination. These faculties may mimic or copy the perceptions of the senses, but they can never fully match the force and vividness of the original feeling. The most we say of them, even when they work at their most vigorous, is that they represent their object so vividly that we could *almost* say we feel or see it. But unless the mind is disordered by disease or madness, they can never become so vivid that the two kinds of perception are completely indistinguishable. All the colors of poetry, however splendid, can never paint natural objects so well that the description is mistaken for a real landscape. The most vivid thought is still weaker than the dullest sensation.

We can see a similar distinction running through all the other perceptions of the mind. A man in a fit of anger is moved in a very different way from someone who merely thinks about that emotion. If you tell me that someone is in love, I easily understand what you mean and form an accurate idea of his condition, but I can never mistake that idea for the real turmoil and agitation of the passion. When we reflect on our past feelings and emotions, our thought is a faithful mirror and copies its objects truly. But the colors it uses are faint and dull compared

with those our original perceptions were clothed in. It takes no fine discernment or metaphysical cast of mind to notice the difference between them.

[12] So we can divide all the perceptions of the mind into two classes or kinds, distinguished by their different degrees of force and vividness. The less forceful and lively ones are commonly called *Thoughts* or *Ideas*. The other kind has no name in our language, or in most others, I suppose because nobody needed a general term for them except for philosophical purposes. So let us take a small liberty and call them *Impressions*, using the word in a somewhat unusual sense. By the term *impression*, then, I mean all our more lively perceptions, when we hear, or see, or feel, or love, or hate, or desire, or will. Impressions are distinguished from ideas, which are the less lively perceptions we are aware of when we reflect on any of the sensations or feelings just mentioned.

[13] At first sight nothing may seem more unlimited than human thought. It not only escapes all human power and authority, but is not even confined within the limits of nature and reality. Forming monsters and joining mismatched shapes and appearances costs the imagination no more trouble than picturing the most natural and familiar objects. And while the body is confined to one planet, crawling over it with pain and difficulty, thought can carry us in an instant to the most distant regions of the universe, or even beyond the universe into the boundless chaos where nature is supposed to lie in total confusion. What has never been seen or heard of can still be conceived. Nothing is beyond the power of thought except what implies an outright contradiction.

But though our thought seems to have this unlimited freedom, we will find on closer examination that it is really confined within very narrow limits. All this creative power of the mind amounts to nothing more than the ability to combine, rearrange, enlarge, or shrink the materials supplied to us by the senses and experience. When we think of a golden mountain, we are only joining two consistent ideas, *gold* and *mountain*, which

we already knew. We can conceive a virtuous horse because we can conceive virtue from our own feelings, and we can join this to the form and shape of a horse, an animal familiar to us. In short, all the materials of thinking come from our outward or inward sensations. Only the mixing and combining of them belongs to the mind and will. Or, to put it in philosophical language: all our ideas, or weaker perceptions, are copies of our impressions, or more lively ones.

[14] To prove this, I hope the following two arguments will be enough. First, when we analyze our thoughts or ideas, however complex or elevated, we always find that they break down into simple ideas that were copied from some earlier feeling or sentiment. Even the ideas that at first seem furthest from this origin turn out, on closer inspection, to come from it. The idea of God, meaning an infinitely intelligent, wise, and good being, arises from reflecting on the operations of our own mind and enlarging those qualities of goodness and wisdom without limit. We can pursue this inquiry as far as we like, and we will always find that every idea we examine is copied from a similar impression. Anyone who claims this is not universally true, or that it has exceptions, has one easy way to refute it: produce the idea that, in their view, does not come from this source. It will then be up to us, if we want to defend our doctrine, to produce the impression, or lively perception, that corresponds to it.

[15] Second: if a defect in a sense organ leaves someone incapable of some kind of sensation, we always find that he is equally incapable of the corresponding ideas. A blind man can form no notion of colors, nor a deaf man of sounds. Restore to either of them the sense he lacks, and by opening this new channel for sensations you also open a channel for ideas, and he has no trouble conceiving these objects. It is the same if the object suited to produce a sensation has never been applied to the organ. A Laplander or an African has no notion of the taste of wine. There are few if any cases of a similar deficiency in the mind, where someone has never felt, or is wholly incapable of, a feeling or passion that belongs to our species. Still, we find the

same thing happening to a lesser degree. A gentle person can form no idea of deep-rooted vengefulness or cruelty, and a selfish heart cannot easily conceive the heights of friendship and generosity. It is readily granted that other beings may have many senses of which we can have no conception, because the ideas of them have never been introduced to us in the only way an idea can enter the mind: through actual feeling and sensation.

16 There is, however, one contrary phenomenon that may prove it is not absolutely impossible for ideas to arise independently of their corresponding impressions. I think everyone will readily grant that the various distinct ideas of color that enter through the eye, or of sound that come through the ear, really are different from one another, though they also resemble one another. Now if this is true of different colors, it must be no less true of the different shades of the same color. Each shade produces a distinct idea, independent of the rest. For if this were denied, it would be possible, by a continuous gradation of shades, to run a color imperceptibly into the one most remote from it. And if you will not allow any of the intermediate shades to be different, you cannot, without absurdity, deny that the extremes are the same. Suppose, then, that someone has had his sight for thirty years and has become thoroughly familiar with colors of every kind, except for one particular shade of blue, say, which he has never happened to come across. Place before him all the different shades of that color except that single one, running gradually from the deepest to the lightest. Obviously he will notice a gap where that shade is missing, and will see that the distance between the neighboring colors is greater at that spot than anywhere else. Now I ask: can he, from his own imagination, fill this gap and call up for himself the idea of that particular shade, even though his senses have never given it to him? I think few people will deny that he can. And this may serve as proof that simple ideas are not always, in every case, derived from corresponding impressions. But this instance is so unusual

that it is hardly worth noticing, and does not justify changing our general principle on its account alone.

[17] Here, then, is a proposition that not only seems simple and intelligible in itself, but, if properly used, could make every dispute equally intelligible and banish all the jargon that has so long taken over metaphysical reasoning and brought it into disgrace. All ideas, especially abstract ones, are naturally faint and obscure. The mind has only a slender hold on them. They are easily confused with other, similar ideas. And when we have often used a term, even without any clear meaning, we tend to imagine that some definite idea is attached to it. Impressions, on the other hand, that is, all sensations, outward or inward, are strong and vivid. The boundaries between them are more precisely fixed, and it is not easy to make any error or mistake about them. So whenever we suspect that a philosophical term is being used without any meaning or idea (as happens all too often), we need only ask: *from what impression is that supposed idea derived?* And if none can be pointed to, this will confirm our suspicion. By bringing ideas into so clear a light, we may reas-

onably hope to settle every dispute that may arise about their nature and reality.[1]

1 HUME'S NOTE. Those who denied innate ideas probably meant no more than that all ideas are copies of our impressions. It must be admitted, though, that the terms they used were not chosen carefully enough, or defined precisely enough, to prevent all misunderstanding of their doctrine. For what does *innate* mean? If innate is equivalent to natural, then all the perceptions and ideas of the mind must be granted to be innate or natural, in whatever sense we take that word, whether as opposed to what is unusual, artificial, or miraculous. If innate means present from birth, the dispute seems trivial. It is not worth asking when thinking begins, whether before, at, or after birth. Again, LOCKE and others seem to use the word *idea* in a very loose sense, to stand for any of our perceptions, our sensations and passions as well as our thoughts. Now in this sense I should like to know what it could mean to claim that self-love, or resentment of injuries, or the passion between the sexes is not innate.

But if we take the terms *impressions* and *ideas* in the sense explained above, and understand by *innate* what is original, not copied from any earlier perception, then we may say that all our impressions are innate and our ideas are not.

To be frank, I must admit my opinion that LOCKE was lured into this question by the scholastics, who use undefined terms and drag their disputes out to tedious length without ever touching the point at issue. A similar ambiguity and roundaboutness seems to run through that philosopher's reasoning on this subject, as on most others.

TRANSLATOR'S NOTE. The scholastics ("schoolmen") were the medieval university philosophers and theologians.

Of the Association of Ideas

Section III
Hume identifies three principles connecting ideas: resemblance, contiguity, and cause and effect.

[18] Clearly there is a principle of connection between the different thoughts or ideas of the mind: as they appear in memory or imagination, they introduce one another with a certain degree of method and regularity. In our more serious thinking or conversation this is so noticeable that any thought that breaks into the regular track or chain of ideas is immediately noticed and rejected. And even in our wildest and most wandering daydreams, even in our dreams, we will find on reflection that the imagination did not run entirely at random, but that some connection held among the different ideas that followed one another. If the loosest and freest conversation were written down, we would immediately notice something connecting it through all its turns. Or where this was missing, the person who broke the thread of discussion could still tell you that a train of thought had been quietly running through his mind, gradually leading him away from the subject. Among different languages, even where we cannot suspect the slightest connection or contact, it turns out that the words expressing the most complex ideas still correspond fairly closely to one another. This is sure proof that the simple ideas contained in the complex ones were bound together by some universal principle with equal influence over all humankind.

[19] Though it is too obvious to escape notice that different ideas are connected, I do not find that any philosopher has tried to list

or classify all the principles of association, a subject that nonetheless seems worth our curiosity. To me there appear to be only three principles of connection among ideas: *Resemblance*, *Contiguity* in time or place, and *Cause or Effect*.

That these principles serve to connect ideas will not, I think, be much doubted. A picture naturally leads our thoughts to the original.[1] The mention of one room in a building naturally prompts a question or remark about the others.[2] And if we think of a wound, we can hardly help reflecting on the pain that follows it.[3] But that this list is complete, and that there are no other principles of association besides these, may be hard to prove to the reader's satisfaction, or even to one's own. All we can do in such cases is to run through a number of instances, carefully examining the principle that binds the different thoughts together, and never stop until we have made the principle as general as possible.[4] The more instances we examine, and the more care we take, the more confident we will be that the list we draw from the whole is complete.

1 HUME'S NOTE. Resemblance.
2 HUME'S NOTE. Contiguity.
3 HUME'S NOTE. Cause and effect.
4 HUME'S NOTE. For instance, Contrast or Contrariety is also a connection among ideas. But it may perhaps be regarded as a mixture of *Causation* and *Resemblance*. Where two objects are contrary, one destroys the other, that is, it is the cause of its annihilation; and the idea of an object's annihilation implies the idea of its prior existence.

Sceptical Doubts concerning the Operations of the Understanding

Section IV

Hume argues that inferences from experience about matters of fact are not founded on reason.

PART I

Hume divides knowledge into relations of ideas and matters of fact, and grounds causal reasoning in experience.

[20] All the objects of human reason or inquiry can naturally be divided into two kinds: *Relations of Ideas* and *Matters of Fact*. To the first kind belong the sciences of geometry, algebra, and arithmetic, and in short every statement that is certain either intuitively or by demonstration. *That the square of the hypotenuse is equal to the squares of the other two sides* is a proposition expressing a relation between these figures. *That three times five is equal to half of thirty* expresses a relation between these numbers. Propositions of this kind can be discovered by the mere operation of thought, without depending on anything that exists anywhere in the universe. Even if there had never been a circle or triangle in nature, the truths demonstrated by Euclid would keep their certainty and evidence forever.

[21] Matters of fact, the second kind of object of human reason, are not established in the same way, and our evidence for their truth, however strong, is not of the same nature. The contrary of every matter of fact is still possible, because it can never imply a contradiction, and the mind conceives it just as easily and distinctly as if it matched reality perfectly. *That the sun will not rise*

tomorrow is no less intelligible a proposition, and implies no more contradiction, than the statement *that it will rise*. So it would be futile to try to demonstrate that it is false. If it were demonstrably false, it would imply a contradiction, and the mind could never distinctly conceive it.

So it may be worth our curiosity to ask what kind of evidence assures us of any real existence and matter of fact beyond the present testimony of our senses or the records of our memory. Notably, this part of philosophy has been little cultivated by either the ancients or the moderns. Our doubts and errors in pursuing so important an inquiry may therefore be all the more excusable, since we are making our way along such difficult paths without any guide or direction. They may even prove useful, by arousing curiosity and destroying that unquestioning faith and complacency which is the bane of all reasoning and free inquiry. Discovering flaws in the accepted philosophy, if there are any, will not, I think, be discouraging. As usual, it will rather be an incentive to attempt something fuller and more satisfactory than has yet been offered to the public.

[22] All reasoning about matters of fact seems to be based on the relation of *Cause and Effect*. Only by means of that relation can we go beyond the evidence of our memory and senses. If you asked someone why he believes some matter of fact that is not present, for instance that his friend is in the country, or in France, he would give you a reason, and this reason would be some other fact, such as a letter received from him, or knowledge of his earlier plans and promises. A man who found a watch or some other machine on a desert island would conclude that there had once been people on that island. All our reasoning about facts is of the same kind. And here it is always assumed that there is a connection between the present fact and the one inferred from it. If nothing bound them together, the inference would be entirely shaky. Hearing a distinct voice and rational speech in the dark assures us that some person is present. Why? Because these are effects of the human makeup and structure, and closely connected with it. If we dissect all

other reasoning of this kind, we will find that it rests on the relation of cause and effect, and that this relation is either near or remote, direct or collateral. Heat and light are collateral effects of fire, and either effect can rightly be inferred from the other.

[23] If we want to satisfy ourselves about the nature of the evidence that assures us of matters of fact, then, we must ask how we come to know cause and effect.

I will venture to assert, as a general proposition admitting no exceptions, that knowledge of this relation is never attained by reasoning *a priori*. It arises entirely from experience, when we find that particular objects are constantly conjoined with one another. Present an object to a person of the strongest natural reason and abilities: if the object is entirely new to him, he will not be able, by the most careful examination of its perceptible qualities, to discover any of its causes or effects. Adam, even if we suppose his rational faculties were entirely perfect from the very start, could not have inferred from the fluidity and transparency of water that it would suffocate him, or from the light and warmth of fire that it would burn him up. No object ever reveals, through the qualities that appear to the senses, either the causes that produced it or the effects that will arise from it. Nor can our reason, unaided by experience, ever draw any inference about real existence and matters of fact.

[24] This proposition, *that causes and effects are discoverable not by reason but by experience*, will readily be accepted for objects we remember having once been completely unfamiliar with, since we must be aware of how utterly unable we then were to predict what would come of them. Give two smooth pieces of marble to someone with no background in natural science: he will never discover that they will stick together so that it takes great force to pull them straight apart, while they offer so little resistance to sideways pressure. Events that bear little resemblance to the ordinary course of nature are also readily admitted to be known only by experience. Nobody imagines that the explosion of gunpowder, or the attraction of a magnet, could ever have been discovered by arguments *a priori*. Likewise, when an effect is

thought to depend on intricate machinery or a hidden structure of parts, we have no trouble attributing all our knowledge of it to experience. Who would claim he can give the ultimate reason why milk or bread is proper food for a human being, but not for a lion or a tiger?

But at first sight the same truth may not seem equally evident for events that have been familiar to us since we first came into the world, that closely resemble the whole course of nature, and that are thought to depend on the simple qualities of objects, without any hidden structure of parts. We tend to imagine that we could discover these effects by the mere operation of reason, without experience. We fancy that if we were suddenly brought into this world, we could have inferred right away that one billiard ball would pass on motion to another by striking it, and that we would not have needed to wait for the event to pronounce on it with certainty. Such is the influence of custom that where it is strongest, it not only covers up our natural ignorance but even hides itself, and seems not to be at work at all, precisely because it is present in the highest degree.

[25] But the following reflections may perhaps be enough to convince us that all the laws of nature, and all the operations of bodies without exception, are known only by experience. Suppose some object were presented to us, and we were asked to say what effect would result from it without consulting past observation. How, I ask you, would the mind have to go about this? It would have to invent or imagine some event and ascribe it to the object as its effect. And clearly this invention would have to be entirely arbitrary. The mind can never find the effect in the supposed cause, however carefully it scrutinizes and examines it. For the effect is totally different from the cause, and so can never be discovered in it. Motion in the second billiard ball is a quite distinct event from motion in the first, and there is nothing in the one to give the slightest hint of the other. A stone or piece of metal lifted into the air and left without support immediately falls. But considering the matter *a priori*, is there anything we find in this situation that could give rise to the idea of a

downward motion, rather than an upward or any other motion, in the stone or metal? And just as, without consulting experience, our first imagining or inventing of a particular effect in any natural operation is arbitrary, so we must regard the supposed tie or connection between cause and effect as arbitrary too, the tie that binds them together and makes it impossible for any other effect to result from that cause. When I see a billiard ball moving in a straight line toward another, for instance, suppose that motion in the second ball does happen to occur to me as the result of their contact or impact. Can't I still conceive that a hundred different events might just as well follow from that cause? Might not both balls stay perfectly still? Couldn't the first ball bounce straight back, or glance off the second in any line or direction? All these suppositions are consistent and conceivable. Why, then, should we prefer one of them, which is no more consistent or conceivable than the rest? No reasoning *a priori* will ever show us any basis for that preference.

In short, every effect is an event distinct from its cause. It therefore could not be discovered in the cause, and our first invention or conception of it, *a priori*, must be entirely arbitrary. And even once it has been suggested, its conjunction with the cause must seem equally arbitrary, since there are always many other effects that, to reason, must look every bit as consistent and natural. It is useless, then, to claim we can determine any single event, or infer any cause or effect, without the help of observation and experience.

[26] This shows us why no philosopher who is rational and modest has ever claimed to identify the ultimate cause of any natural process, or to show exactly how the power works that produces any single effect in the universe. It is admitted that the most human reason can do is to reduce the principles that produce natural phenomena to greater simplicity, and to trace the many particular effects back to a few general causes, by reasoning from analogy, experience, and observation. But as for the causes of these general causes, we would search for them in vain. No particular explanation of them will ever satisfy us.

These ultimate springs and principles are completely closed off from human curiosity and inquiry. Elasticity, gravity, the cohesion of parts, the transfer of motion by impact: these are probably the ultimate causes and principles we will ever discover in nature. We may count ourselves lucky enough if, by careful inquiry and reasoning, we can trace particular phenomena back to these general principles, or close to them. The most perfect natural science only holds off our ignorance a little longer, just as perhaps the most perfect philosophy of human nature, or metaphysics, serves only to uncover larger portions of it. So the recognition of human blindness and weakness is the outcome of all philosophy. It meets us at every turn, however hard we try to dodge or avoid it.

[27] Nor can geometry, when it is called in to help natural science, ever remedy this defect or lead us to knowledge of ultimate causes, for all the precision of reasoning for which it is so rightly celebrated. Every branch of applied mathematics proceeds on the assumption that nature operates according to certain established laws. Abstract reasoning is then used either to help experience discover these laws, or to work out their effect in particular cases, where that effect depends on some precise degree of distance and quantity. Thus it is a law of motion, discovered by experience, that the momentum or force of any moving body is proportional to its mass multiplied by its velocity. It follows that a small force can remove the greatest obstacle or lift the greatest weight if, by some device or machinery, we can increase that force's velocity enough to overpower what opposes it. Geometry helps us apply this law by giving us the exact dimensions of all the parts and shapes that can go into any kind of machine. But the discovery of the law itself is owed entirely to experience, and all the abstract reasoning in the world could never take us one step toward knowing it. When we reason *a priori*, considering an object or cause purely as it appears to the mind, independent of all observation, it could never suggest to us the notion of some distinct object, such as its effect—much less show us an inseparable and inviolable connection between

them. It would take a very shrewd person to discover by reasoning that crystal is the effect of heat, and ice the effect of cold, without already being familiar with how these qualities operate.[1]

PART II

Hume argues that no reasoning shows why the future should resemble the past.

[28] But we have not yet reached any reasonably satisfying answer to the question we started with. Each solution raises a new question as hard as the last, and leads us on to further inquiry. When we ask, *What is the nature of all our reasoning about matters of fact?* the right answer seems to be that it is founded on the relation of cause and effect. When we then ask, *What is the foundation of all our reasoning and conclusions about that relation?* the answer can be given in one word: experience. But if we keep up our probing mood and ask, *What is the foundation of all conclusions from experience?* we raise a new question, which may be harder to answer and explain. Philosophers who give themselves airs of superior wisdom and self-sufficiency have a hard time when they meet people of an inquisitive turn, who push them out of every corner they retreat into and are sure in the end to drive them into some dangerous dilemma. The best way to avoid this embarrassment is to be modest in our claims, and even to point out the difficulty ourselves before anyone raises it against us. That way we can make a kind of virtue of our very ignorance.

In this section I will content myself with an easy task, and will claim only to give a negative answer to the question just posed. I say, then, that even after we have experience of cause and effect in operation, our conclusions from that experience are *not* founded on reasoning, or on any process of the understanding. This answer I must try both to explain and to defend.

[29] It must certainly be granted that nature has kept us at a great distance from all her secrets. She has given us knowledge

1 Glass ("crystal") is made by melting sand and other materials at high heat.

of only a few surface qualities of objects, while hiding from us the powers and principles on which those objects' influence entirely depends. Our senses tell us the color, weight, and consistency of bread, but neither sense nor reason can ever tell us the qualities that make it fit to nourish and sustain a human body. Sight or touch gives us an idea of the actual motion of bodies. But of that wonderful force or power that would carry a moving body on forever in continual change of place, and that bodies never lose except by passing it on to others, we cannot form the faintest conception. Yet despite this ignorance of natural powers[2] and principles, whenever we see similar perceptible qualities we always assume they have similar hidden powers, and we expect effects like those we have experienced to follow from them. If we are offered something with the same color and consistency as the bread we have eaten before, we don't hesitate to repeat the experiment, and we confidently foresee the same nourishment and sustenance. Now this is a process of the mind, of thought, and I would very much like to know its foundation. Everyone agrees that there is no known connection between the perceptible qualities and the hidden powers. So the mind is not led to conclude that they are constantly and regularly conjoined by anything it knows about their nature. As for past *experience*, it can be granted to give *direct* and *certain* information only about the exact objects, and the exact period of time, that came within its view. But why this experience should be extended to future times, and to other objects that for all we know may be similar only in appearance—this is the main question I want to press. The bread I ate before nourished me. That is, a body with such-and-such perceptible qualities was, at that time, endowed with such-and-such hidden powers. But does it follow that other bread must nourish me at another time, and that similar perceptible qualities must always be accompanied by similar hidden powers? The conclusion seems in no way

2 HUME'S NOTE. The word "power" is used here in a loose, popular sense. A more precise explanation of it would add further support to this argument. See Section 7.

necessary. At the very least, it must be admitted that the mind is drawing a conclusion here. A certain step is being taken—a process of thought, an inference—and it needs explaining. These two propositions are far from being the same: *I have found that such an object has always been accompanied by such an effect*, and *I foresee that other objects, similar in appearance, will be accompanied by similar effects*. I will grant, if you like, that the second may rightly be inferred from the first. In fact I know that it always is inferred. But if you insist that the inference is made by a chain of reasoning, I ask you to produce that reasoning. The connection between these propositions is not intuitive. Some middle term is needed that would allow the mind to draw such an inference, if it really is drawn by reasoning and argument. What that middle term is, I confess, is beyond me. And the burden of producing it falls on those who claim that it really exists and is the source of all our conclusions about matters of fact.

30 This negative argument will surely become fully convincing over time, if many sharp and able philosophers turn their inquiries this way and no one is ever able to find any connecting proposition or intermediate step that supports the understanding in reaching this conclusion. But since the question is still new, not every reader will trust his own insight far enough to conclude that an argument doesn't exist just because it has escaped his search. For this reason it may be necessary to take on a harder task: to go through all the branches of human knowledge and try to show that none of them can supply such an argument.

All reasoning can be divided into two kinds: demonstrative reasoning, which concerns relations of ideas, and probable reasoning, which concerns matters of fact and existence. That there are no demonstrative arguments in this case seems evident. There is no contradiction in supposing that the course of nature might change, and that an object apparently like those we have experienced might be accompanied by different or opposite effects. Can't I clearly and distinctly conceive of something falling from the clouds that resembles snow in every other respect,

yet tastes of salt or feels like fire? Is there any more intelligible proposition than the claim that all the trees will flourish in December and January and wither in May and June? Now whatever is intelligible and can be distinctly conceived implies no contradiction, and can never be proved false by any demonstrative argument or abstract reasoning *a priori*.

So if we are led by arguments to trust past experience and make it the standard of our future judgment, these arguments must be merely probable—that is, arguments about matters of fact and real existence, according to the division just made. But there is no argument of this kind, as must be clear if our account of that sort of reasoning is accepted as solid and satisfactory. We have said that all arguments about existence are founded on the relation of cause and effect; that our knowledge of that relation comes entirely from experience; and that all our conclusions from experience proceed on the assumption that the future will conform to the past. To try to prove this last assumption by probable arguments, or arguments about existence, must therefore obviously be going in a circle, and taking for granted the very point in question.

[31] In fact, all arguments from experience are founded on the similarity we find among natural objects, which leads us to expect effects similar to those we have found to follow from such objects. No one but a fool or a madman will ever dispute the authority of experience, or reject that great guide of human life. Still, a philosopher may surely be allowed enough curiosity at least to examine the principle of human nature that gives experience this mighty authority, and lets us profit from the similarity nature has placed among different objects. From causes that appear *similar* we expect similar effects. This sums up all our conclusions from experience. Now it seems clear that if this conclusion were formed by reason, it would be as perfect at the start, from a single instance, as after however long a course of experience. But the case is quite otherwise. Nothing is so alike as eggs, yet expects the same taste and flavor in all of them. Only after a long run of uniform trials of any kind do we

come to rely firmly and securely on a particular outcome. Now where is the process of reasoning that draws one conclusion from a single instance, and a conclusion so different from a hundred instances that are in no way different from that single one? I ask this as much to be informed as to raise difficulties. I cannot find, I cannot imagine, any such reasoning. But I keep my mind open to instruction, if anyone will kindly offer it.

[32] Suppose someone says that from a number of uniform trials we *infer* a connection between the perceptible qualities and the hidden powers. This, I must admit, seems to be the same difficulty in different words. The question still comes back: on what process of argument is this *inference* founded? Where is the middle term, the intervening ideas, that join propositions so far apart? It is admitted that the color, consistency, and other perceptible qualities of bread do not in themselves appear to have any connection with the hidden powers of nourishment and sustenance. Otherwise we could infer those hidden powers the moment these perceptible qualities first appeared, without the help of experience—contrary to the view of every philosopher and contrary to plain fact. Here, then, is our natural state of ignorance about the powers and influence of all objects. How does experience remedy it? It only shows us a number of uniform effects resulting from certain objects, and teaches us that those particular objects, at that particular time, were endowed with such powers and forces. When a new object with similar perceptible qualities comes along, we expect similar powers and forces, and look for a similar effect. From something with the same color and consistency as bread we expect the same nourishment and sustenance. But this is surely a step or progression of the mind that needs explaining. When someone says, *I have found, in all past instances, such perceptible qualities conjoined with such hidden powers,* and when he says, *Similar perceptible qualities will always be conjoined with similar hidden powers,* he is not repeating himself. These propositions are not the same in any respect. You say that the one is an inference from the other. But you must admit that the inference is not intuitive, nor is it

demonstrative. What kind of inference is it, then? To say it is based on experience is begging the question. For all inferences from experience assume, as their foundation, that the future will resemble the past, and that similar powers will be conjoined with similar perceptible qualities. If there is any suspicion that the course of nature may change, and that the past may be no guide to the future, all experience becomes useless and can support no inference or conclusion. It is impossible, therefore, for any argument from experience to prove this resemblance of the past to the future, since all such arguments rest on the assumption of that resemblance. However regular the course of things may have been so far, that alone, without some new argument or inference, does not prove that it will continue so in the future. It's no use claiming you have learned the nature of bodies from past experience. Their hidden nature, and with it all their effects and influence, may change without any change in their perceptible qualities. This happens sometimes, with some objects. Why couldn't it happen always, with all objects? What logic, what process of argument, protects you against this supposition? My own conduct, you say, refutes my doubts. But you mistake the point of my question. As someone who acts in the world, I am quite satisfied on this score. But as a philosopher with some share of curiosity—I won't say skepticism—I want to learn the foundation of this inference. No reading, no inquiry, has yet been able to remove my difficulty or satisfy me on a matter of such importance. What better can I do than put the difficulty before the public, even if I have little hope of getting a solution? This way, even if we don't increase our knowledge, we will at least be aware of our ignorance.

[33] I admit that anyone who concludes that an argument doesn't exist because it has escaped his own investigation is guilty of unpardonable arrogance. I also admit that even if all the learned, over several ages, had searched fruitlessly into some subject, it might still be rash to conclude positively that the subject must be beyond all human understanding. Even if we examine every source of our knowledge and conclude that

none is suited to such a subject, there may still be a suspicion that our list is incomplete, or our examination inaccurate. But with regard to the present subject, there are some considerations that seem to clear away any charge of arrogance or suspicion of error.

It is certain that the most ignorant and dull-witted peasants—indeed infants, indeed even animals—improve by experience, and learn the qualities of natural objects by observing the effects that follow from them. When a child has felt pain from touching a candle flame, he will be careful not to put his hand near any candle, and will expect a similar effect from a cause that is similar in its perceptible qualities and appearance. So if you claim that the child's understanding is led to this conclusion by some process of argument or reasoning, I may fairly ask you to produce that argument. And you have no excuse for refusing so reasonable a request. You can't say that the argument is obscure and may have escaped your search, since you admit it is within the grasp of a mere infant. If you hesitate even a moment, therefore, or if after reflection you come up with some intricate or profound argument, you have in effect given up the question. You have admitted that it is not reasoning that leads us to suppose the past resembles the future, and to expect similar effects from causes that appear similar. This is the proposition I meant to establish in this section. If I am right, I don't claim to have made any great discovery. And if I am wrong, I must admit I am a very slow student indeed, since I cannot now find an argument that I was apparently perfectly familiar with long before I was out of the cradle.

Sceptical Solution of these Doubts

Section V
Hume argues that custom or habit drives our inferences from experience and explains belief.

PART I

Hume holds that custom, not reason, leads us from past experience to expectations about the future.

34 The passion for philosophy, like the passion for religion, seems prone to this drawback: though it aims to improve our character and root out our vices, if handled unwisely it may only feed some dominant inclination, and push the mind more resolutely toward the side our natural temperament already *pulls* it too far. For instance, while we aspire to the lofty steadiness of the philosophical sage, and try to confine our pleasures entirely within our own minds, we may end by making our philosophy like that of Epictetus and the other *Stoics*: only a more refined form of selfishness. We may reason ourselves out of all virtue, and out of all social enjoyment too.[1] While we study attentively the vanity of human life, and turn all our thoughts to the empty, fleeting nature of wealth and honors, we may all the while be flattering our natural laziness. Hating the bustle of the world and the drudgery of business, it looks for a rational pretext to indulge itself fully and without restraint. There is, however, one kind of philosophy that seems little prone to this drawback, because it sides with no unruly passion of the human

1 Epictetus (c. 50–135 AD) was a Greek Stoic philosopher who taught that happiness depends only on what lies within our own control.

mind and cannot blend with any natural affection or inclination. That is the Academic, or skeptical, philosophy.[2] The Academics always talk of doubt and suspending judgment, of the danger of hasty decisions, of confining the inquiries of the understanding within very narrow limits, and of giving up all speculation that lies outside common life and practice. Nothing, then, could be more opposed than this philosophy to the mind's lazy complacency, its rash arrogance, its lofty pretensions, and its superstitious credulity. It humbles every passion except the love of truth—and that passion never is, and never can be, carried too far. It is surprising, therefore, that this philosophy, which in almost every case must be harmless and innocent, should be the target of so much groundless criticism and abuse. But perhaps the very thing that makes it so innocent is what chiefly exposes it to public hatred and resentment. Since it flatters no unruly passion, it wins few supporters. Since it opposes so many vices and follies, it makes plenty of enemies, who brand it as licentious, profane, and irreligious.

Nor need we fear that this philosophy, while it tries to limit our inquiries to common life, will ever undermine the reasoning of common life, or push its doubts so far as to destroy all action along with all speculation. Nature will always assert her rights, and win out in the end over any abstract reasoning whatever. Suppose we conclude, for instance, as in the previous section, that in all reasoning from experience the mind takes a step that is not supported by any argument or process of the understanding. There is no danger that this reasoning, on which almost all knowledge depends, will ever be affected by such a discovery. If the mind is not led by argument to take this step, it must be moved by some other principle of equal weight and authority. And that principle will keep its influence as long as

2 "Academic" skepticism, named for Plato's Academy in its later phase, is a moderate skepticism that doubts dogmatic certainty but accepts acting on probabilities; "Pyrrhonian" skepticism, after Pyrrho of Elis (c. 360–270 BC), is radical skepticism that suspends judgment on everything.

human nature stays the same. What that principle is may well be worth the trouble of investigating.

[35] Suppose a person endowed with the strongest powers of reason and reflection were suddenly brought into this world. He would, of course, immediately observe a continual succession of objects, one event following another, but he would not be able to discover anything further. At first he would not be able, by any reasoning, to arrive at the idea of cause and effect, since the particular powers by which all natural processes are carried out never appear to the senses. Nor is it reasonable to conclude, merely because one event precedes another in one instance, that the one is the cause and the other the effect. Their conjunction may be arbitrary and accidental. There may be no reason to infer the existence of one from the appearance of the other. In short, without more experience, such a person could never use conjecture or reasoning about any matter of fact, or be sure of anything beyond what was immediately present to his memory and senses.

Suppose, next, that he has gained more experience, and has lived in the world long enough to observe that familiar objects or events are constantly conjoined. What follows from this experience? He immediately infers the existence of one object from the appearance of the other. Yet for all his experience he has not acquired any idea or knowledge of the hidden power by which the one object produces the other. Nor is it any process of reasoning that leads him to draw this inference. But he still finds himself compelled to draw it. And even if he were convinced that his understanding plays no part in the operation, he would go on thinking in just the same way. There is some other principle that makes him reach this conclusion.

[36] That principle is custom, or habit. Whenever repeating a particular act or operation produces a tendency to repeat it again, without our being driven by any reasoning or process of the understanding, we always say that this tendency is the effect of *custom*. In using that word we don't claim to have given the ultimate reason for such a tendency. We only point to a principle

of human nature that everyone acknowledges and that is well known by its effects. Perhaps we can push our inquiries no further, nor claim to give the cause of this cause, but must rest content with it as the most fundamental principle we can identify behind all our conclusions from experience. It is satisfaction enough that we can get this far, without complaining that our faculties are too narrow to take us any further. And we are certainly putting forward a very intelligible proposition here, if not a true one, when we say that after the constant conjunction of two objects—heat and flame, for instance, or weight and solidity—we are led by custom alone to expect the one when the other appears. This hypothesis even seems to be the only one that explains the puzzle of why we draw from a thousand instances an inference we cannot draw from one instance that is in no respect different from them. Reason is incapable of any such variation. The conclusions reason draws from examining one circle are the same ones it would reach by surveying every circle in the universe. But no one who has seen only one body move after being struck by another could infer that every other

body will move after a similar impact. All inferences from

experience, therefore, are effects of custom, not of reasoning.[3]

Custom, then, is the great guide of human life. It is the one principle that makes our experience useful to us, and makes us expect in the future a train of events similar to those that have appeared in the past.

Without the influence of custom, we would be entirely ignorant of every matter of fact beyond what is immediately present to memory and the senses. We would never know how to fit means to ends, or how to use our natural powers to produce any effect. All action would come to an immediate end, along with most speculation.

[37] But here it is worth noting that although our conclusions from experience take us beyond memory and the senses, and assure us of facts that happened in the most distant places and the most remote ages, some fact must always be present to the senses or memory for us to start from in drawing these conclusions. Someone who found the remains of grand buildings in an empty country would conclude that the country had once been settled and developed by civilized inhabitants. But if nothing of that kind came before him, he could never draw such an inference. We learn the events of past ages from history. But to do so we must read the volumes that contain this information, and from there trace our inferences back from one testimony to another, until we reach the eyewitnesses and onlookers of those distant events. In short, if we do not start from some fact present to memory or the senses, our reasoning would be merely hypothetical. However well the individual links were connected to one another, the whole chain of inferences would have nothing to hold it up, and we could never reach knowledge of any real existence by means of it. If I ask why you believe some particular matter of fact that you report, you must give me a reason, and that reason will be some other fact connected with it. But since you cannot go on like this *in infinitum* [to infinity], you must eventually end with some fact present to your

3 HUME'S NOTE. Nothing is more common than for writers, even on questions of *human conduct*, *politics*, or *physics*, to distinguish between *reason* and *experience*, and to assume that these kinds of arguments are entirely different from each other. The former are taken to be the pure product of our intellectual faculties, which, by considering the nature of things *a priori* and examining the effects that must follow from their operation, establish particular principles of science and philosophy. The latter are supposed to come entirely from sense and observation, by which we learn what has actually resulted from the operation of particular objects, and so are able to infer what will result from them in the future. Thus, for instance, the limits and restraints of civil government and a legal constitution may be defended either from *reason*—which, reflecting on the great frailty and corruption of human nature, teaches that no one can safely be trusted with unlimited authority—or from *experience* and history, which tell us of the enormous abuses that ambition, in every age and country, has been found to make of so imprudent a trust.

memory or senses—or else admit that your belief has no founda-

The same distinction between reason and experience holds in all our deliberations about the conduct of life. The experienced statesman, general, doctor, or merchant is trusted and followed, while the untried novice, however naturally gifted, is ignored and looked down on. It is granted that reason may form very plausible guesses about the consequences of a particular course of action in particular circumstances. But it is still considered imperfect without the help of experience, which alone can give stability and certainty to the maxims we derive from study and reflection.

But although this distinction is so universally accepted, in both the active and the speculative spheres of life, I will not hesitate to declare that it is, at bottom, mistaken—or at least superficial.

If we examine the arguments in any of the fields just mentioned that are supposed to be the pure product of reasoning and reflection, we will find that they end, in the last analysis, in some general principle or conclusion for which we can give no reason except observation and experience. The only difference between them and the maxims commonly taken to be the result of pure experience is this: the former cannot be established without some process of thought, some reflection on what we have observed, in order to sort out its circumstances and trace its consequences. In the latter, the event we have experienced is exactly and completely like the one we infer as the result of a given situation. The history of a Tiberius or a Nero makes us dread a similar tyranny if our monarchs were freed from the restraints of laws and senates. But observing any fraud or cruelty in private life is enough, with a little thought, to give us the same fear, since it serves as an instance of the general corruption of human nature and shows us the danger we run by placing complete trust in mankind. In both cases, it is experience that is ultimately the foundation of our inference and conclusion.

No one is so young and inexperienced that he has not formed, from observation, many sound general maxims about human affairs and the conduct of life. But it must be admitted that when he comes to put them into practice, he will be extremely prone to error, until time and further experience both broaden these maxims and teach him how to use and apply them properly. In every situation or incident there are many particular and seemingly trivial circumstances that even the most talented person is apt to overlook at first, though the soundness of his conclusions, and so the wisdom of his conduct, depend entirely on them. Not to mention that, for a young beginner, the general observations and maxims don't always come to mind on the right occasions, nor can they be applied at once with the necessary calm and discernment. The truth is that an inexperienced reasoner would be no reasoner at all if he were absolutely without experience. When we call someone that, we mean it only in a comparative sense: we suppose he has experience, but to a smaller and less complete degree.

tion at all.

[38] What, then, is the conclusion of the whole matter? A simple one, though admittedly rather far from the usual theories of philosophy. All belief about matters of fact or real existence comes simply from some object present to memory or the senses, together with a customary conjunction between that object and some other. To put it another way: having found in many instances that two kinds of objects—flame and heat, say, or snow and cold—have always been conjoined, if flame or snow is presented to the senses again, the mind is carried by custom to expect heat or cold, and to *believe* that such a quality really exists and will make itself felt if we come closer. This belief is the necessary result of putting the mind in such circumstances. In that situation it is an operation of the soul as unavoidable as feeling love when we receive kindness, or hatred when we suffer injury. All these operations are a kind of natural instinct, which no reasoning or process of thought and understanding can either produce or prevent.

At this point it would be quite reasonable for us to stop our philosophical investigations. In most questions we can never take a single step further, and in every question we must end up here eventually, after our most restless and curious inquiries. Still, our curiosity will be forgivable, perhaps even praiseworthy, if it carries us on to further research and makes us examine more closely the nature of this *belief*, and of the *customary conjunction* from which it comes. In this way we may find some explanations and analogies that will satisfy—at least those who love the abstract sciences and can enjoy speculations that, however precise, may still keep some degree of doubt and uncertainty. As for readers of a different taste, the rest of this section is not meant for them, and the inquiries that follow can be understood perfectly well if it is skipped.

PART II

Hume argues that belief is a more vivid, steady feeling than fiction, produced by custom.

[39] Nothing is freer than the human imagination. Though it cannot go beyond the original stock of ideas supplied by the internal and external senses, it has unlimited power to mix, combine, separate, and divide these ideas into every variety of fiction and fantasy. It can invent a sequence of events with every appearance of reality, assign them a particular time and place, conceive them as existing, and picture them to itself with every detail that belongs to a historical fact it believes with the greatest certainty. What, then, is the difference between such a fiction and belief? It does not lie simply in some special idea attached to a conception that commands our assent, and missing from every known fiction. For since the mind has authority over all its ideas, it could attach this particular idea to any fiction at will, and so be able to believe whatever it pleased—contrary to what we find in everyday experience. In our imagination we can join a man's head to a horse's body, but it is not in our power to believe that such an animal has ever really existed.

It follows that the difference between *fiction* and *belief* lies in some sentiment or feeling that is attached to the latter and not the former, which does not depend on the will and cannot be summoned at pleasure. Like all other sentiments, it must be aroused by nature, and must arise from the particular situation the mind is in at a given moment. Whenever an object is presented to memory or the senses, the force of custom immediately carries the imagination to conceive the object usually conjoined with it. And this conception comes with a feeling or sentiment different from the idle daydreams of fancy. In this consists the whole nature of belief. For since there is no matter of fact we believe so firmly that we cannot conceive the opposite, there would be no difference between the conception we assent to and the one we reject, were it not for some sentiment that distin-

guishes them. If I see one billiard ball moving toward another on a smooth table, I can easily conceive of it stopping on contact. This conception implies no contradiction. Yet it feels very different from the conception in which I picture the impact and the transfer of motion from one ball to the other.

40 If we tried to give a *definition* of this sentiment, we might find it a very difficult, if not impossible, task—just as if we tried to define the feeling of cold or the passion of anger to a creature that had never experienced them. *Belief* is the true and proper name for this feeling, and no one is ever at a loss about the meaning of that term, because everyone is at every moment conscious of the sentiment it stands for. Still, it may not be out of place to attempt a *description* of this sentiment, in the hope of finding some analogies that may explain it more fully. I say, then, that belief is nothing but a more vivid, lively, forceful, firm, steady conception of an object than the imagination alone is ever able to reach. This string of terms may seem very unphilosophical, but it is meant only to express that act of the mind which makes realities, or what we take for realities, more present to us than fictions, makes them weigh more in our thought, and gives them greater influence on the passions and the imagination. As long as we agree about the thing, there is no need to quarrel about the words. The imagination commands all its ideas, and can join, mix, and vary them in every possible way. It can conceive fictitious objects with every circumstance of place and time. It can set them, so to speak, before our eyes, in their true colors, just as they might have existed. But since this faculty of imagination can never by itself arrive at belief, it is clear that belief does not consist in the particular nature or order of our ideas, but in the *manner* in which we conceive them, and in how they *feel* to the mind. I admit that it is impossible to explain this feeling or manner of conception perfectly. We can use words that express something close to it. But its true and proper name, as we said before, is *belief*, a term everyone understands well enough in ordinary life. And in philosophy we can go no further than to say that *belief* is some-

thing felt by the mind that distinguishes the ideas of judgment from the fictions of the imagination. It gives them more weight and influence, makes them seem more important, impresses them on the mind, and makes them the governing principle of our actions. Suppose, for instance, I hear the voice of someone I know, and the sound seems to come from the next room. This impression on my senses immediately carries my thought to that person, along with everything around him. I picture them to myself as existing right now, with the same qualities and relations I previously knew them to have. These ideas take a firmer hold on my mind than ideas of an enchanted castle. They feel very different, and have a much greater influence of every kind, whether in giving pleasure or pain, joy or sorrow.

Let us, then, take in the full scope of this doctrine, and grant that the sentiment of belief is nothing but a conception more intense and steady than what accompanies the mere fictions of the imagination, and that this *manner* of conception arises from a customary conjunction of the object with something present to memory or the senses. On these assumptions, I think it will not be hard to find other operations of the mind analogous to it, and to trace these phenomena back to still more general principles.

[41] We have already observed that nature has established connections among particular ideas, so that as soon as one idea occurs to us it brings in its counterpart and draws our attention toward it by a gentle, imperceptible movement. We reduced these principles of connection, or association, to three: *resemblance*, *contiguity*, and *causation*. These are the only bonds that unite our thoughts and produce the orderly train of reflection or conversation that takes place, to a greater or lesser degree, among all human beings. Now a question arises on which the solution of the present difficulty will depend. Does it happen with all these relations that when one of the objects is presented to the senses or memory, the mind is not only carried to conceive its counterpart, but arrives at a steadier and stronger conception of it than it could otherwise have reached? This seems to

be the case with the belief that arises from the relation of cause and effect. And if the same holds for the other relations, or principles of association, this may be established as a general law that operates in all the workings of the mind.

As our first experiment for the present purpose, then, we may observe that when we see a picture of an absent friend, our idea of him is clearly enlivened by the *resemblance*, and every feeling that idea gives rise to, whether joy or sorrow, gains new force and vigor. Two things work together to produce this effect: a relation and a present impression. Where the picture bears no resemblance to him, or at least was not meant to portray him, it never so much as turns our thoughts to him. And where the picture is absent as well as the person, though the mind may pass from the thought of one to the thought of the other, it feels its idea weakened rather than enlivened by that transition. We enjoy looking at a picture of a friend when it is in front of us. But when it is taken away, we would rather think of him directly than through the reflection of an image that is just as distant and dim.

The ceremonies of the Roman Catholic religion may be seen as examples of the same kind. The devotees of that superstition usually defend the mummeries they are reproached for by saying that they feel the good effect of these outward motions, postures, and actions in enlivening their devotion and quickening their fervor, which would otherwise fade if directed entirely toward distant and immaterial objects. We represent the objects of our faith, they say, in perceptible symbols and images, and by the immediate presence of these symbols we make those objects more present to us than we could by intellectual contemplation alone. Perceptible objects always have a greater influence on the imagination than any others, and they readily pass this influence on to the ideas they are related to and resemble. I will infer only this from these practices and this reasoning: the effect of resemblance in enlivening ideas is very common. And since in every case a resemblance and a present impression must work

together, we have an abundant supply of experiments to prove the reality of the principle stated above.

[42] We can strengthen these experiments with others of a different kind, by considering the effects of *contiguity* as well as *resemblance*. It is certain that distance weakens the force of every idea, and that as we approach an object—even before it shows itself to our senses—it acts on the mind with an influence that imitates an immediate impression. Thinking of any object readily carries the mind to what is contiguous to it, but only the actual presence of an object carries it there with superior vividness. When I am a few miles from home, anything connected with it affects me more closely than when I am two hundred leagues away. Yet even at that distance, thinking about anything in the neighborhood of my friends or family naturally brings them to mind. But in this second case both objects in the mind are ideas. So although the transition between them is easy, that

transition alone cannot give either idea any greater vividness, for lack of an immediate impression.[4]

[43] No one can doubt that causation has the same influence as the other two relations, resemblance and contiguity. Superstitious people are fond of the relics of saints and holy men for the same reason that they seek out symbols and images: to enliven their devotion and give themselves a closer and stronger conception of those exemplary lives they want to imitate. Now clearly one of the best relics a devotee could get hold of would be something a saint made with his own hands. And if his clothes and furniture are ever regarded in this light, it is because they were once at his disposal and were moved and handled by him. In that respect they count as imperfect effects of him, connected to him by a shorter chain of consequences than any of those by which we learn that he really existed.

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4 HUME'S NOTE. 'Naturane nobis, inquit, datum dicam, an errore quodam, ut, cum ea loca videamus, in quibus memoria dignos viros acceperimus multum esse versatos, magis moveamur, quam siquando eorum ipsorum aut facta audiamus aut scriptum aliquod legamus? Velut ego nunc moveor. Venit enim mihi Plato in mentem, quem accepimus primum hic disputare solitum: cuius etiam illi hortuli propinqui non memoriam solum mihi afferunt, sed ipsum videntur in conspectu meo hic ponere. Hic Speusippus, hic Xenocrates, hic eius auditor Polemo; cuius ipsa illa sessio fuit, quam videmus. Equidem etiam curiam nostram, Hostiliam dico, non hanc novam, quae mihi minor esse videtur postquam est maior, solebam intuens, Scipionem, Catonem, Laelium, nostrum vero in primis avum cogitare.' ['Should I say it is a gift of nature,' he said, 'or some sort of illusion, that when we see the places where we are told memorable men spent much of their time, we are more moved than when we hear about their deeds or read something they wrote? That is just how I am moved now. For Plato comes to my mind, who we are told was the first to hold discussions here. Those little gardens nearby do not merely remind me of him; they seem to set the man himself before my eyes. Here Speusippus taught, here Xenocrates, here his pupil Polemo, and that is the very bench he sat on. In the same way, when I used to look at our own senate-house—the Curia Hostilia, I mean, not this new one, which seems smaller to me since it was enlarged—I would think of Scipio, Cato, Laelius, and above all of my own grandfather.'] 'Tanta vis admonitionis est in locis; ut non sine causa ex his memoriae deducta sit disciplina.' ['Places have such power to remind us that it is not without reason that the art of memory has been built on them.']

Cicero, De Finibus [On the Ends of Good and Evil], Book V.

TRANSLATOR'S NOTE. The speaker is Piso, in Cicero's dialogue, standing in the grounds of Plato's Academy at Athens; Speusippus, Xenocrates and Polemo were Plato's successors there.

Suppose we were introduced to the son of a friend who had long been dead or absent. This object would clearly revive its correlative idea at once, and call back to our thoughts all our past intimacy and familiarity in livelier colors than they would otherwise have had. This is another phenomenon that seems to prove the principle stated above.

[44] Notice that in these phenomena belief in the correlative object is always presupposed; without it the relation could have no effect. The influence of the picture assumes that we *believe* our friend once existed. Being near home can never stir up our ideas of home unless we *believe* that home really exists. Now I claim that this belief, where it reaches beyond memory and the senses, is of a similar nature to the transition of thought and vividness of conception explained here, and arises from similar causes. When I throw a piece of dry wood into a fire, my mind is immediately led to conceive that it will increase the flame, not put it out. This transition of thought from the cause to the effect does not come from reason. It originates entirely in custom and experience. And because it starts from an object present to the senses, it makes the idea or conception of flame stronger and livelier than any loose, drifting daydream of the imagination. That idea arises immediately. The thought moves to it instantly and passes on to it all the force of conception that comes from the impression present to the senses. When a sword is pointed at my chest, doesn't the idea of a wound and pain strike me more forcefully than when I am offered a glass of wine, even if that idea should happen to occur to me after the wine appears? But what is there in the whole business to produce such a strong conception, except a present object and a customary transition to the idea of another object that we are used to finding conjoined with it? This is the entire operation of the mind in all our conclusions about matters of fact and existence, and it is satisfying to find some analogies that help explain it. In every case, the transition from a present object gives strength and solidity to the related idea.

Here, then, is a kind of pre-established harmony between the course of nature and the succession of our ideas. The powers and forces that govern the course of nature are wholly unknown to us; yet we find that our thoughts and conceptions have still kept pace with nature's other works. Custom is the principle that has brought about this correspondence, which is so necessary to the survival of our species and to the regulation of our conduct in every circumstance and occurrence of human life.[5] If the presence of an object had not instantly called up the ideas of the objects usually conjoined with it, all our knowledge would have been confined to the narrow sphere of our memory and senses. We could never have fitted means to ends, or used our natural powers either to produce good or to avoid harm. Those who enjoy discovering and contemplating *final causes*—the purposes things serve—have plenty here to fill them with wonder and admiration.

45 I will add, as further confirmation of this theory, that this operation of the mind—inferring like effects from like causes, and *vice versa*—is so essential to the survival of every human being that it is unlikely it could have been entrusted to the unreliable deductions of our reason. Reason is slow in its workings. It does not appear at all during the first years of infancy. And at best, at every age and stage of human life, it is extremely liable to error and mistake. It fits better with nature's usual wisdom to secure so necessary an act of the mind by some instinct or mechanical tendency—one that can be infallible in its workings, can show itself from the first appearance of life and thought, and can be independent of all the labored deductions of the understanding. Nature has taught us to use our limbs without giving us any knowledge of the muscles and nerves that move them. In the same way, she has implanted in us an instinct that carries our thought forward along a course corresponding to the one she has established among external objects—even though

5 "Pre-established harmony" is Leibniz's term for the divinely arranged agreement between mind and body.

we are ignorant of the powers and forces on which that regular course and succession of objects wholly depends.

Of Probability

Section VI
Hume explains how probability of chances and of causes produces degrees of belief.

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[46] Though there is no such thing as *chance* in the world, our ignorance of the real cause of an event has the same influence on the understanding as chance would have, and produces a similar kind of belief or opinion.

[9] Mr. Locke divides all arguments into demonstrative and probable. On that view we would have to say that it is only probable that all men must die, or that the sun will rise tomorrow. But to bring our language closer to ordinary usage, we should divide arguments into *demonstrations*, *proofs*, and *probabilities*—meaning by proofs those arguments from experience that leave no room for doubt or opposition.

There is certainly a probability that arises from a greater number of chances on one side. As that superiority grows and increasingly outweighs the opposing chances, the probability grows in proportion, producing a still higher degree of belief or assent in favor of the side where we find the superiority. Suppose a die were marked with one figure or number of spots on four sides, and with another figure or number of spots on the remaining two. It would be more probable that the first would turn up than the second. But if it had a thousand sides marked the same way and only one side different, the probability would be much higher, and our belief or expectation of the outcome much steadier and more secure. This process of thought or reasoning may seem trivial and obvious. But to those who look at it

more closely, it may perhaps offer material for some interesting speculation.

It seems clear that when the mind looks ahead to discover what may result from a throw of such a die, it regards each particular side's turning up as equally probable. That is the very nature of chance: to make all the particular events it covers entirely equal. But finding that more sides point to one outcome than to the other, the mind is carried to that outcome more often, and meets it more frequently as it runs over the various possibilities or chances on which the final result depends. This convergence of several views on one particular outcome immediately produces, by an inexplicable contrivance of nature, the feeling of belief, and gives that outcome the advantage over its rival, which is backed by fewer views and comes to mind less often. If we grant that belief is nothing but a firmer and stronger conception of an object than accompanies the mere fictions of the imagination, this operation can perhaps be explained to some extent. The convergence of these several views or glimpses stamps the idea more strongly on the imagination. It gives the idea greater force and vigor, makes its influence on the passions and emotions more noticeable, and, in a word, produces that reliance or security which constitutes the nature of belief and opinion.

[47] The probability of causes works the same way as the probability of chance. Some causes are entirely uniform and constant in producing a particular effect, and no case has yet been found of any failure or irregularity in their operation. Fire has always burned, and water has always suffocated, every human being. The production of motion by impact and by gravity is a universal law that has so far admitted no exception. But other causes have been found more irregular and uncertain. Rhubarb has not always worked as a laxative, nor opium as a sleeping drug, for everyone who has taken them. It is true that when a cause fails to produce its usual effect, scientists do not attribute this to any irregularity in nature. They assume that some hidden causes in the particular structure of the parts have blocked the

operation. Still, our reasonings and conclusions about the outcome are the same as if this principle did not apply. Since custom leads us to transfer the past to the future in all our inferences, where the past has been entirely regular and uniform we expect the outcome with the greatest confidence and leave no room for any contrary supposition. But where different effects have been found to follow from causes that are, to all *appearance*, exactly alike, all these various effects must come to mind as we transfer the past to the future, and must enter into our calculation when we judge the probability of the outcome. We give preference to the effect that has been found most usual, and believe that it will occur. But we must not overlook the other effects. We must give each of them a particular weight and authority, in proportion to how frequently we have found it to occur. In almost every country in Europe it is more probable that there will be frost sometime in January than that the weather will stay mild the whole month—though this probability varies with climate, and approaches certainty in the more northern kingdoms. Here, then, it seems clear that when we transfer the past to the future to determine what effect will result from a cause, we transfer all the different outcomes in the same proportions in which they appeared in the past. We conceive one, say, as having happened a hundred times, another ten times, and another once. Since a great many views here converge on one outcome, they strengthen and confirm it in the imagination. They produce the feeling we call *belief*, and give its object preference over the contrary outcome, which is not backed by an equal number of experiences and does not come to mind as often when we transfer the past to the future. Let anyone try to explain this operation of the mind on any of the established philosophical systems, and he will see the difficulty. For my part, I will be content if these hints stir the curiosity of philosophers and make them see how inadequate all the usual theories are in dealing with such intriguing and lofty subjects.

Of the Idea of necessary Connexion

Section VII
Hume traces the idea of necessary connection to the mind's habit of expectation.

PART I

Hume looks for the source of the idea of power in bodies, the will and God, and finds none.

[48] The great advantage the mathematical sciences have over the sciences of human nature is this: the ideas of mathematics, being perceptible to the senses, are always clear and definite. The smallest difference between them is immediately noticeable, and the same terms always express the same ideas, without ambiguity or variation. An oval is never mistaken for a circle, nor a hyperbola for an ellipse. The isosceles and scalene triangles are separated by sharper boundaries than vice and virtue, or right and wrong. If a term is defined in geometry, the mind readily and automatically substitutes the definition for the term on every occasion. Or even when no definition is used, the object itself can be presented to the senses and so be grasped steadily and clearly. But the finer feelings of the mind, the operations of the understanding, the various agitations of the passions—though really distinct in themselves—easily slip away from us when we examine them by reflection. Nor can we call up the original object whenever we need to contemplate it. In this way ambiguity gradually creeps into our reasonings. Similar objects are readily taken to be the same, and the conclusion ends up very far from the premises.

Still, one can safely say that if we look at these sciences in the right light, their advantages and disadvantages nearly balance out and put them on an equal footing. If the mind finds it easier to keep the ideas of geometry clear and definite, it must also carry out a much longer and more intricate chain of reasoning, and compare ideas much further removed from one another, to reach the more abstruse truths of that science. And if ideas about human nature tend, without extreme care, to fall into obscurity and confusion, the inferences in these inquiries are always much shorter, and the intermediate steps leading to the conclusion much fewer, than in the sciences of quantity and number. In fact, there is hardly a proposition in Euclid so simple that it does not have more parts than any reasoning about human nature that doesn't wander off into fantasy and conceit. When we trace the principles of the human mind through a few steps, we may be well satisfied with our progress, considering how soon nature bars all our inquiries into causes and forces us to acknowledge our ignorance. So the chief obstacle to progress in the sciences of human nature and metaphysics is the obscurity of the ideas and the ambiguity of the terms. The main difficulty in mathematics is the length of the inferences and the range of thought needed to reach any conclusion. And perhaps our progress in natural science is held back mainly by the lack of suitable experiments and phenomena, which are often discovered by chance and cannot always be found when needed, even by the most diligent and careful inquiry. Since the study of human nature seems so far to have advanced less than either geometry or physics, we may conclude that, if there is any difference among these sciences in this respect, the difficulties blocking the progress of the study of human nature require greater care and ability to overcome.

[49] There are no ideas in metaphysics more obscure and uncertain than those of *power*, *force*, *energy*, or *necessary connection*, which we have to deal with constantly in all our inquiries. In this section, therefore, we will try to pin down, if possible, the

precise meaning of these terms, and so remove some of the obscurity so widely complained of in this kind of philosophy.

It seems a proposition that will not be much disputed that all our ideas are nothing but copies of our impressions—in other words, that we cannot *think* of anything we have not previously *felt*, whether by our external or our internal senses. I have tried[1] to explain and prove this proposition, and I have expressed the hope that by applying it properly people may achieve greater clarity and precision in philosophical reasoning than they have managed so far. Complex ideas may perhaps be well known through definition, which is nothing but a list of the parts, or simple ideas, that make them up. But when we have pushed our definitions back to the simplest ideas and still find some ambiguity and obscurity, what recourse do we have then? By what device can we throw light on these ideas and make them completely precise and definite to our understanding? Produce the impressions or original feelings from which the ideas are copied. These impressions are all strong and perceptible. They leave no room for ambiguity. They are not only in full light themselves but can throw light on their corresponding ideas, which lie in obscurity. By this means we may perhaps obtain a new microscope, or a new kind of optics, through which, in the sciences of human nature, the tiniest and simplest ideas can be magnified until they are easily grasped and are as well known as the coarsest and most perceptible ideas we could inquire into.

[50] To become fully acquainted with the idea of power or necessary connection, then, let us examine its impression. And to find that impression with more certainty, let us look for it in every source from which it could possibly come.

When we look around at external objects and consider how causes operate, we are never able, in a single instance, to discover any power or necessary connection—any quality that binds the effect to the cause and makes the one an infallible consequence of the other. We find only that the one does in fact follow the other. The impact of one billiard ball is accompanied by

1 HUME'S NOTE. Section II.

motion in the second. That is all that appears to the *outward* senses. The mind gets no feeling or *inward* impression from this succession of objects. Consequently, there is nothing in any single, particular instance of cause and effect that can suggest the idea of power or necessary connection.

From the first appearance of an object we can never guess what effect will result from it. But if the mind could discover the power or energy of a cause, we could foresee the effect even without experience, and could pronounce on it with certainty from the start, by sheer force of thought and reasoning.

In reality, no piece of matter ever reveals, by its perceptible qualities, any power or energy, or gives us grounds to imagine that it could produce anything, or be followed by any other object we could call its effect. Solidity, extension, motion—these qualities are all complete in themselves, and never point to any other event that might result from them. The scenes of the universe are constantly shifting, and one object follows another in an unbroken succession. But the power or force that drives the whole machine is entirely hidden from us, and never shows itself in any of the perceptible qualities of bodies. We know that heat is in fact a constant companion of flame. But what the connection between them is, we have no basis even to guess or imagine. It is impossible, therefore, for the idea of power to be derived from observing bodies in single instances of their operation, because no bodies ever reveal any power that could be the source of this idea.[2]

51 Since external objects, as they appear to the senses, give us no idea of power or necessary connection through their operation in particular instances, let us see whether this idea comes from reflection on the operations of our own minds, and is copied from some internal impression. It may be said that we are conscious of internal power at every moment, since we feel

2 HUME'S NOTE. Mr. Locke, in his chapter on power, says that we find from experience that there are various new productions in nature, conclude that there must somewhere be a power capable of producing them, and by this reasoning arrive at last at the idea of power. But no reasoning can ever give us a new, original, simple idea, as Locke himself admits. So this can never be the origin of that idea.

that by a simple command of our will we can move the parts of our body or direct the faculties of our mind. An act of will produces motion in our limbs, or raises a new idea in our imagination. This influence of the will we know through consciousness. From this, it may be said, we get the idea of power or energy, and are certain that we ourselves and all other intelligent beings possess power. This idea, then, is an idea of reflection, since it arises from reflecting on the operations of our own mind and on the command the will exercises over both the organs of the body and the faculties of the soul.

[52] Let us examine this claim, beginning with the influence of the will over the organs of the body. This influence, we may observe, is a fact that, like all other natural events, can be known only by experience. It can never be foreseen from any apparent energy or power in the cause that connects it with the effect and makes the one an infallible consequence of the other. The motion of our body follows the command of our will. Of this we are conscious every moment. But the means by which this is brought about—the energy by which the will performs so extraordinary an operation—is so far from being something we are immediately conscious of that it must forever escape our most diligent inquiry.

For, *first*, is there any principle in all of nature more mysterious than the union of soul and body, by which a supposedly spiritual substance gains such influence over a material one that the most refined thought can move the crudest matter? If we were empowered by a secret wish to move mountains or steer the planets in their orbits, that sweeping authority would be no more extraordinary, and no further beyond our understanding. But if we perceived any power or energy in the will through consciousness, we would have to know that power. We would have to know its connection with the effect. We would have to know the secret union of soul and body, and the nature of both these substances, by which the one is able to act on the other in so many instances.

Secondly, we cannot move all the organs of the body with equal authority, though we can give no reason except experience for so remarkable a difference between one and another. Why does the will have influence over the tongue and the fingers, but not over the heart or the liver? This question would never puzzle us if we were conscious of a power in the first case and not in the second. We would then see, independently of experience, why the will's authority over the organs of the body is confined within such particular limits. Being fully acquainted in that case with the power or force by which the will operates, we would also know why its influence extends exactly to those boundaries and no further.

A man suddenly struck with paralysis in a leg or arm, or who has recently lost those limbs, often tries at first to move them and use them for their usual purposes. Here he is just as conscious of a power to command those limbs as a man in perfect health is conscious of a power to move any limb that remains in its natural state and condition. But consciousness never deceives. Consequently, in neither case are we ever conscious of any power. We learn the influence of our will from experience alone. And experience teaches us only how one event constantly follows another, without informing us of the secret connection that binds them together and makes them inseparable.

Thirdly, we learn from anatomy that the immediate object of power in voluntary motion is not the limb itself that is moved, but certain muscles and nerves and animal spirits, and perhaps something still more minute and more unknown, through which the motion is passed along step by step before it reaches the limb whose motion is the immediate object of the will. Could there be a surer proof that the power by which this whole operation is carried out, far from being directly and fully known by an inward feeling or consciousness, is mysterious and unintelligible to the last degree?[3] Here the mind wills a certain event. Immediately another event, unknown to us and totally different

3 "Animal spirits" were, in the physiology of the time, a subtle fluid thought to carry signals through the nerves.

from the one intended, is produced. This event produces another, equally unknown, until at last, through a long succession, the desired event is produced. But if the original power were felt, it would have to be known. And if it were known, its effect would also have to be known, since all power is relative to its effect. And *vice versa*: if the effect is not known, the power cannot be known or felt. How, indeed, can we be conscious of a power to move our limbs, when we have no such power, but only a power to move certain animal spirits, which do eventually produce the motion of our limbs, but act in a way wholly beyond our comprehension?

From all this, therefore, we may conclude—without rashness, I hope, though with confidence—that our idea of power is not copied from any feeling or consciousness of power within ourselves when we initiate bodily motion or use our limbs for their proper functions. That their motion follows the command of the will is a matter of common experience, like other natural events. But the power or energy by which this is brought about, like that in other natural events, is unknown and inconceivable.[4]

53 Shall we then say that we are conscious of a power or energy in our own minds when, by an act or command of the will, we call up a new idea, fix the mind on contemplating it, turn it over on every side, and finally dismiss it for some other idea once we think we have examined it carefully enough? I

4 HUME'S NOTE. It may be claimed that the resistance we meet in bodies, which often forces us to exert our strength and summon up all our power, gives us the idea of force and power. It is this *nisus*, or strong effort, of which we are conscious, that is the original impression from which this idea is copied. But, first, we attribute power to a vast number of things where we can never suppose any such resistance or exertion of force takes place: to the Supreme Being, who never meets with any resistance; to the mind in its command over its ideas and limbs in ordinary thinking and movement, where the effect follows immediately on the will, without any exertion or summoning up of force; and to inanimate matter, which is incapable of this feeling. *Secondly*, this feeling of an effort to overcome resistance has no known connection with any event. What follows it we know by experience, but could not know *a priori*. It must be admitted, however, that the bodily *nisus* we experience, though it cannot give us any accurate or precise idea of power, plays a large part in the popular, imprecise idea that people form of it.

believe the same arguments will show that even this command of the will gives us no real idea of force or energy.

First, it must be granted that when we know a power, we know the very feature of the cause that enables it to produce the effect, for these are supposed to be the same thing. We must therefore know both the cause and the effect, and the relation between them. But do we claim to be acquainted with the nature of the human soul and the nature of an idea, or with the aptitude of the one to produce the other? This is a genuine creation, a production of something out of nothing—which implies a power so great that it might seem, at first sight, beyond the reach of any being less than infinite. At the very least it must be admitted that such a power is not felt, or known, or even conceivable by the mind. We feel only the event—namely, the existence of an idea following a command of the will. But the way this operation is carried out, the power that produces it, is entirely beyond our comprehension.

Secondly, the mind's command over itself is limited, just as its command over the body is. And these limits are not known by reason, or by any acquaintance with the nature of cause and effect, but only by experience and observation, as with all other natural events and the operation of external objects. Our authority over our feelings and passions is much weaker than our authority over our ideas, and even the latter is confined within very narrow bounds. Will anyone claim to give the ultimate reason for these bounds, or show why the power falls short in one case and not in another?

Thirdly, this self-command varies greatly from one time to another. A man in good health has more of it than one wasting away with illness. We are more in control of our thoughts in the morning than in the evening, and when fasting than after a big meal. Can we give any reason for these variations other than experience? Where, then, is the power we claim to be conscious of? Isn't there here, in a spiritual or a material substance or both, some secret mechanism or structure of parts on which the effect depends—one that, being entirely unknown to us, makes

the power or energy of the will equally unknown and incomprehensible?

Willing is surely an act of the mind we know well enough. Reflect on it. Consider it from every side. Do you find anything in it like this creative power by which it raises a new idea out of nothing and, with a kind of *Fiat* ["Let there be"], imitates the omnipotence of its Maker—if I may put it that way—who called all the various scenes of nature into existence? Far from our being conscious of this energy in the will, it takes experience as certain as the experience we actually have to convince us that such extraordinary effects ever result from a simple act of will.

[54] Most people never find any difficulty in explaining the more common and familiar operations of nature—such as the falling of heavy bodies, the growth of plants, the reproduction of animals, or the nourishment of bodies by food. They suppose that in all these cases they perceive the very force or energy of the cause by which it is connected with its effect and is forever infallible in its operation. Through long habit they acquire such a cast of mind that when the cause appears they immediately and confidently expect its usual companion, and can hardly conceive that any other event could result from it. It is only when they come across extraordinary phenomena, such as earthquakes, plagues, and portents of every kind, that they find themselves at a loss to assign a proper cause and to explain how the effect is produced by it. In such difficulties people usually resort to some invisible intelligent principle[5] as the immediate cause of the event that surprises them, which they think cannot be accounted for by the ordinary powers of nature. But philosophers, who push their scrutiny a little further, see at once that even in the most familiar events the energy of the cause is as unintelligible as in the most unusual, and that experience teaches us only the frequent *conjunction* of objects, without our

5 HUME'S NOTE. *Theos apo mēchanēs* [a god from the machine].

TRANSLATOR'S NOTE. The *deus ex machina,* a god lowered onto the stage in ancient drama to resolve the plot.

ever being able to grasp anything like a *connection* between them.

[55] Here, then, many philosophers think reason obliges them to resort on every occasion to the same principle that ordinary people appeal to only in cases that seem miraculous and supernatural. They hold that mind and intelligence are not only the ultimate and original cause of all things, but the immediate and sole cause of every event that appears in nature. They claim that the objects commonly called *causes* are in reality nothing but *occasions*, and that the true and direct source of every effect is not any power or force in nature but a volition of the Supreme Being, who wills that such particular objects should forever be conjoined with each other.[6] Instead of saying that one billiard ball moves another by a force it has received from the author of nature, they say it is God himself who, by a particular volition, moves the second ball—prompted to do so by the impact of the first ball, in keeping with the general laws he has set for himself in governing the universe. But as philosophers advance further in their inquiries, they discover that just as we are totally ignorant of the power on which the interaction of bodies depends, we are no less ignorant of the power on which the action of mind on body, or of body on mind, depends. Nor can we, either from our senses or from consciousness, identify the ultimate principle in one case any more than in the other. The same ignorance therefore drives them to the same conclusion. They assert that God is the immediate cause of the union between soul and body. It is not the sense organs, stirred up by external objects, that produce sensations in the mind; it is a particular volition of our omnipotent Maker that excites a given sensation in response to a given motion in the organ. Likewise, it is not any energy in the will that produces movement in our limbs. It is God himself who is pleased to back up our will, which is powerless in itself, and to command the motion we mistakenly attribute to our own power and efficacy. Nor do philosophers stop at this conclusion.

6 This is "occasionalism," a doctrine associated above all with the French Cartesian Nicolas Malebranche (1638–1715).

They sometimes extend the same inference to the mind itself, in its internal operations. Our mental vision, or conception of ideas, is nothing but a revelation made to us by our Maker. When we deliberately turn our thoughts to some object and call up its image in the imagination, it is not the will that creates that idea. It is the universal Creator who reveals it to the mind and makes it present to us.

[56] Thus, according to these philosophers, everything is full of God. Not content with the principle that nothing exists except by his will, and nothing has any power except by his permission, they strip nature and all created beings of every power, in order to make their dependence on God still more palpable and immediate. They fail to see that by this theory they diminish, rather than magnify, the grandeur of the very attributes they are so eager to celebrate. Surely it shows more power in God to delegate a certain degree of power to lesser creatures than to produce everything by his own immediate volition. It shows more wisdom to design the fabric of the world from the start with such perfect foresight that, by itself and by its own operation, it serves all the purposes of providence, than for the great Creator to be obliged every moment to adjust its parts, and to animate with his breath all the wheels of that stupendous machine.

But if we want a more philosophical refutation of this theory, perhaps the following two reflections will do.

[57] *First,* it seems to me that this theory of the universal energy and operation of the Supreme Being is too bold ever to convince anyone who is sufficiently aware of the weakness of human reason and the narrow limits within which it works in all its operations. However logical the chain of arguments leading to it, there must arise a strong suspicion, if not complete certainty, that it has carried us far beyond the reach of our faculties, when it leads to conclusions so extraordinary and so remote from common life and experience. We are in fairyland long before we reach the last steps of our theory, and *there* we have no reason to trust our usual methods of argument, or to think our usual analogies and probabilities carry any authority. Our plumb line is

too short to sound such immense depths. And however much we may flatter ourselves that we are guided at every step by a kind of plausibility and experience, we can be sure that this imagined experience has no authority when we apply it to subjects lying wholly outside the sphere of experience. But we will have occasion to touch on this later.[7]

Secondly, I cannot see any force in the arguments on which this theory is based. We are ignorant, it is true, of the way in which bodies act on one another; their force or energy is entirely incomprehensible. But are we not equally ignorant of the way, or the force, by which a mind—even the supreme mind—acts either on itself or on body? Where, I ask you, do we get any idea of it? We have no feeling or consciousness of this power in ourselves. And we have no idea of the Supreme Being except what we learn from reflecting on our own faculties. So if our ignorance were a good reason for rejecting anything, we would be led to the principle of denying all energy in the Supreme Being just as much as in the crudest matter. We surely understand the operations of the one as little as those of the other. Is it harder to conceive that motion might arise from impact than

7 HUME'S NOTE. Section XII.

that it might arise from volition? All we know is our profound ignorance in both cases.[8]

PART II

Hume traces the idea of necessary connection to a feeling of customary expectation and defines cause twice.

58 But to hurry this argument, which has already run on far too long, to a conclusion: we have searched in vain for an idea of power or necessary connection in every source we could suppose it to come from. It appears that in single instances of the operation of bodies, even our closest scrutiny can never discover anything but one event following another. We are unable to grasp any force or power by which the cause operates, or any connection between it and its supposed effect. The same difficulty arises when we consider the operations of mind on body. We observe the motion of the body following the volition of the

8 HUME'S NOTE. I need not examine at length the *vis inertiae* [force of inertia] that is so much talked about in the new science and is ascribed to matter. We find by experience that a body at rest or in motion continues forever in its present state until moved from it by some new cause, and that a body that is struck takes as much motion from the striking body as it acquires itself. These are facts. When we call this a *vis inertiae,* we are only labeling these facts, without claiming to have any idea of the inert power—just as, when we talk of gravity, we mean certain effects without understanding that active power. It was never Sir Isaac Newton's intention to strip secondary causes of all force or energy, though some of his followers have tried to establish that theory on his authority. On the contrary, that great scientist resorted to an ethereal active fluid to explain his universal attraction—though he was cautious and modest enough to admit that it was a mere hypothesis, not to be insisted on without more experiments. I must confess there is something a little odd in the fate of opinions. Descartes hinted at the doctrine of the universal and sole efficacy of God without insisting on it. Malebranche and other Cartesians made it the foundation of their entire philosophy. In England, however, it had no authority. Locke, Clarke, and Cudworth never so much as notice it, but assume throughout that matter has a real, though subordinate and derived, power. By what means has it become so widespread among our modern metaphysicians?

TRANSLATOR'S NOTE. "Second causes" are ordinary natural causes, as distinct from God, the first cause.

TRANSLATOR'S NOTE. Samuel Clarke (1675–1729) and Ralph Cudworth (1617–1688) were English philosophical theologians.

mind, but we cannot observe or conceive the tie that binds the motion and the volition together, or the energy by which the mind produces this effect. The will's authority over its own faculties and ideas is not one bit more comprehensible. So, on the whole, there does not appear, anywhere in nature, a single instance of connection that we can conceive. All events seem entirely loose and separate. One event follows another, but we can never observe any tie between them. They seem *conjoined*, but never *connected*. And since we can have no idea of anything that has never appeared to our outward senses or inward feeling, the necessary conclusion *seems* to be that we have no idea of connection or power at all, and that these words are completely meaningless, whether used in philosophical reasoning or in common life.

[59] But there is still one way of avoiding this conclusion, and one source we have not yet examined. When any natural object or event is presented to us, we cannot, by any shrewdness or insight, discover or even guess without experience what event will result from it, or extend our foresight beyond the object immediately present to memory and the senses. Even after one instance or experiment in which we have observed a particular event follow another, we are not entitled to form a general rule or predict what will happen in similar cases. It is rightly considered unpardonable rashness to judge the whole course of nature from a single experiment, however accurate or certain. But when one particular kind of event has always, in every instance, been conjoined with another, we no longer hesitate to predict the one when the other appears, and to use the only kind of reasoning that can assure us of any matter of fact or existence. We then call the one object the *cause* and the other the *effect*. We suppose there is some connection between them—some power in the one by which it infallibly produces the other and operates with the greatest certainty and the strongest necessity.

It appears, then, that this idea of a necessary connection among events arises from a number of similar instances of the

constant conjunction of these events. Nor can that idea ever be suggested by any one of these instances, examined in every possible light and from every angle. But there is nothing in a number of instances that differs from each single instance, which is supposed to be exactly similar—except that after a repetition of similar instances, the mind is carried by habit, when one event appears, to expect its usual companion and to believe that it will exist. This connection, then, which we *feel* in the mind—this customary transition of the imagination from one object to its usual companion—is the feeling or impression from which we form the idea of power or necessary connection. There is nothing more to it. Examine the subject from every side; you will never find any other origin for that idea. This is the sole difference between a single instance, from which we can never get the idea of connection, and a number of similar instances, which suggest it. The first time a man saw motion passed on by impact, as when two billiard balls collide, he could not declare that the one event was *connected* with the other, but only that it was *conjoined* with it. After he has observed several instances of this kind, he then declares them to be *connected*. What change has occurred to give rise to this new idea of *connection*? Nothing, except that he now *feels* these events to be connected in his imagination, and can readily predict the existence of one from the appearance of the other. So when we say that one object is connected with another, all we mean is that they have acquired a connection in our thought, and give rise to this inference, by which each becomes evidence of the other's existence. This conclusion is somewhat extraordinary, but it seems to rest on sufficient evidence. Nor will that evidence be weakened by any general distrust of the understanding, or by skeptical suspicion of every conclusion that is new and extraordinary. No conclusions could suit skepticism better than those that uncover the weakness and narrow limits of human reason and capacity.

60 And what stronger example could there be of the understanding's surprising ignorance and weakness than this one? For surely, if there is any relation among objects that it matters to us

to know perfectly, it is cause and effect. All our reasoning about matters of fact or existence rests on it. Only by means of it do we gain any assurance about objects beyond the present testimony of our memory and senses. The only immediate use of all the sciences is to teach us how to control and regulate future events through their causes. So our thoughts and inquiries are busy with this relation every moment. Yet the ideas we form of it are so imperfect that it is impossible to give any accurate definition of cause, except one drawn from something external and foreign to it. Similar objects are always conjoined with similar objects. This we know from experience. In keeping with this experience, then, we may define a cause as *an object followed by another, where all objects similar to the first are followed by objects similar to the second*. Or in other words, *where, if the first object had not existed, the second never would have*. The appearance of a cause always carries the mind, by a customary transition, to the idea of the effect. This too we know from experience. So, in keeping with this experience, we may form a second definition of cause, and call it *an object followed by another, whose appearance always carries the thought to that other*. But though both definitions are drawn from circumstances foreign to the cause, we cannot remedy this defect or arrive at any more perfect definition, one that would pick out the feature in the cause that gives it a connection with its effect. We have no idea of this connection. We do not even have any distinct notion of what it is we want to know when we try to conceive it. We say, for instance, that the vibration of this string is the cause of this particular sound. But what do we mean by that statement? Either we mean *that this vibration is followed by this sound, and that all similar vibrations have been followed by similar sounds*; or we mean *that this vibration is followed by this sound, and that when the one appears, the mind runs ahead of the senses and immediately forms an idea of the other*. We may view

the relation of cause and effect in either of these two lights. Beyond them, we have no idea of it.[9]

61 To recap the reasoning of this section, then: Every idea is copied from some preceding impression or feeling, and where we cannot find an impression, we may be sure there is no idea. In any single instance of the operation of bodies or minds, there is nothing that produces any impression, and so nothing that can suggest any idea of power or necessary connection. But when many uniform instances appear, and the same object is always followed by the same event, we begin to form the notion of cause and connection. We then *feel* a new sentiment or impression, namely a customary connection in the thought or imagination between one object and its usual companion, and

9 HUME'S NOTE. On these explanations and definitions, the idea of *power* is just as relative as the idea of *cause*. Both refer to an effect, or to some other event constantly conjoined with the first. When we consider the *unknown* feature of an object that fixes and determines the degree or quantity of its effect, we call that its power. Accordingly, all philosophers agree that the effect is the measure of the power. But if they had any idea of power as it is in itself, why couldn't they measure it in itself? The dispute over whether the force of a body in motion is proportional to its velocity or to the square of its velocity would not then need to be settled by comparing its effects over equal or unequal times. It could be settled by direct measurement and comparison.

As for the frequent use of words like force, power, energy, and so on, which turn up everywhere in ordinary conversation as well as in philosophy: that proves nothing about our being acquainted, in any case, with the principle that connects cause and effect, or being able to give an ultimate account of how one thing produces another. As commonly used, these words carry very loose meanings, and the ideas behind them are very uncertain and confused. No animal can set external bodies in motion without the sensation of a *nisus*, or effort. And every animal has a sensation or feeling from the stroke or blow of an external object in motion. These sensations are merely animal, and from them we can draw no inference *a priori*. Yet we tend to transfer them to inanimate objects, and to suppose that these have some such feelings whenever they transmit or receive motion. With energies that are exerted without our attaching any idea of transmitted motion to them, we consider only the constant conjunction of the events we have experienced. And because we *feel* a customary connection between the ideas, we transfer that feeling to the objects. Nothing is more common than to project onto external bodies every internal sensation they cause in us.

TRANSLATOR'S NOTE. This was the "vis viva" controversy between followers of Descartes (force as mass times velocity) and of Leibniz (force as mass times velocity squared).

this feeling is the source of the idea we are looking for. For since this idea arises from a number of similar instances and not from any single one, it must arise from the respect in which the many instances differ from each individual instance. But this customary connection, or transition of the imagination, is the only respect in which they differ. In every other detail they are alike. The first instance we ever saw of motion transmitted by the collision of two billiard balls (to return to this obvious illustration) is exactly like any instance that might occur to us now, except for one thing. At first we could not *infer* one event from the other, whereas now, after such a long course of uniform experience, we can. I don't know whether the reader will easily grasp this reasoning. I am afraid that if I multiplied words about it, or turned it this way and that to show it in more lights, it would only become more obscure and tangled. In all abstract reasoning there is one point of view which, if we can manage to hit on it, will do more to illuminate the subject than all the eloquence and fluent expression in the world. That point of view is what we should try to reach, saving the flowers of rhetoric for subjects better suited to them.

Of Liberty and Necessity

Section VIII
Hume argues that liberty and necessity are compatible and both are needed for morality.

PART I

Hume argues that liberty and necessity, properly defined, are compatible and everyone has always accepted both.

62 In questions that have been debated and argued with great eagerness since science and philosophy first began, one might reasonably expect that the disputants would at least have agreed on the meaning of all their terms, and that in the course of two thousand years our inquiries would have managed to move from words to the true and real subject of the controversy. After all, how easy it might seem to give exact definitions of the terms used in reasoning, and to make those definitions, not the mere sound of words, the object of future scrutiny and examination. But if we look at the matter more closely, we will be inclined to draw quite the opposite conclusion. From the mere fact that a controversy has been kept going for a long time and is still undecided, we may presume that there is some ambiguity in its language, and that the disputants attach different ideas to the terms they use. For the faculties of the mind are supposed to be naturally alike in everyone; otherwise nothing could be more pointless than reasoning or arguing together. So if people attached the same ideas to their terms, they could not possibly hold different opinions on the same subject for so long—especially when they share their views, and each side turns in every direction looking for arguments that might give them victory

over their opponents. True, if people try to discuss questions that lie entirely beyond the reach of human capacity, such as the origin of worlds, or the order of the intellectual system or the realm of spirits, they may beat the air for a long time in fruitless contests and never reach any definite conclusion. But if the question concerns some subject of ordinary life and experience, one would think that nothing could keep the dispute undecided for so long except some ambiguous expressions that hold the opponents at a distance and keep them from coming to grips with each other.

63 This has been the case with the long-disputed question of liberty and necessity, and to such a remarkable degree that, unless I am much mistaken, we will find that all mankind, learned and ignorant alike, have always held the same opinion on this subject, and that a few intelligible definitions would have ended the whole controversy at once. I admit that this dispute has been so thoroughly worked over on all sides, and has led philosophers into such a labyrinth of obscure sophistry, that it is no wonder if a sensible reader, looking after his own ease, turns a deaf ear to any proposal to raise the question, since he can expect neither instruction nor entertainment from it. But the way the argument is framed here may perhaps win back his attention. It is more novel, it promises at least some resolution of the controversy, and it will not much disturb his ease with any intricate or obscure reasoning.

I hope, then, to show that everyone has always agreed on the doctrine of necessity and on the doctrine of liberty, in any reasonable sense that can be given to those terms, and that the whole controversy has so far turned merely on words. We will begin by examining the doctrine of necessity.

64 Everyone agrees that matter, in all its operations, is driven by a necessary force, and that every natural effect is so precisely determined by the energy of its cause that, in those particular circumstances, no other effect could possibly have resulted. The laws of nature prescribe the degree and direction of every motion so exactly that a living creature could as soon arise from

the collision of two bodies as motion of any other degree or direction than the one actually produced. So if we want to form an accurate and precise idea of *necessity*, we must consider where that idea comes from when we apply it to the operation of bodies.

It seems obvious that if all the scenes of nature were continually shifting in such a way that no two events bore any resemblance to each other—if every object were entirely new, unlike anything seen before—we would never in that case have acquired the slightest idea of necessity, or of any connection among these objects. On that supposition we could say that one object or event followed another, but not that one was produced by the other. The relation of cause and effect would be utterly unknown to mankind. From that moment on, inference and reasoning about the operations of nature would come to an end, and memory and the senses would remain the only channels through which knowledge of any real existence could reach the mind. Our idea of necessity and causation, then, arises entirely from the uniformity we can observe in the operations of nature, where similar objects are constantly conjoined, and the mind is determined by custom to infer the one from the appearance of the other. These two circumstances make up the whole of the necessity we ascribe to matter. Beyond the constant *conjunction* of similar objects, and the resulting *inference* from one to the other, we have no notion of any necessity or connection.

So if it turns out that all mankind have always granted, without any doubt or hesitation, that these two circumstances are present in the voluntary actions of human beings and in the operations of the mind, it must follow that all mankind have always agreed on the doctrine of necessity, and that until now they have been arguing merely because they did not understand each other.

[65] As to the first circumstance, the constant and regular conjunction of similar events, the following considerations may satisfy us. Everyone acknowledges that there is great uniformity in human actions across all nations and ages, and that human

nature remains the same in its principles and workings. The same motives always produce the same actions. The same events follow from the same causes. Ambition, greed, self-love, vanity, friendship, generosity, public spirit: these passions, mixed in various proportions and spread through society, have been from the beginning of the world, and still are, the source of every action and enterprise ever observed among mankind. Would you like to know the feelings, inclinations, and way of life of the Greeks and Romans? Study carefully the temperament and actions of the French and English. You cannot go far wrong in applying to the former *most* of the observations you have made about the latter. Mankind is so much the same in all times and places that history tells us nothing new or strange on this score. Its chief use is simply to reveal the constant and universal principles of human nature, by showing people in every variety of circumstance and situation, and supplying us with materials from which we can make our observations and become familiar with the regular springs of human action and behavior. These records of wars, intrigues, factions, and revolutions are so many collections of experiments, from which the political theorist or student of human nature establishes the principles of his science—in the same way that the physician or natural scientist learns about plants, minerals, and other external objects through the experiments he performs on them. The earth, water, and other elements that Aristotle and Hippocrates examined are no more like those we observe today than the men Polybius and Tacitus described are like those who now govern the world.

Suppose a traveler, back from a distant country, told us about people wholly unlike any we had ever known: people entirely free of greed, ambition, or revenge, who knew no pleasure but friendship, generosity, and public spirit. From these details alone we would immediately detect the falsehood and prove him a liar, just as surely as if he had stuffed his story with centaurs and dragons, miracles and prodigies. And if we want to expose a forgery in history, there is no more convincing argu-

ment than to prove that the actions attributed to someone are directly contrary to the course of nature, and that no human motives could ever have led him to act that way in those circumstances. Quintus Curtius's truthfulness is just as suspect when he describes Alexander's supernatural courage, which drove him to charge whole multitudes single-handed, as when he describes the supernatural strength and agility that let him hold them off. So readily and universally do we recognize uniformity in human motives and actions, as well as in the operations of bodies.[1]

Hence, too, the value of the experience gained through a long life and a wide variety of business and company, in teaching us the principles of human nature and guiding our future conduct as well as our thinking. With this guide, we climb up from people's actions, words, and even gestures to a knowledge of their inclinations and motives, and climb back down again from our knowledge of their motives and inclinations to the interpretation of their actions. The general observations stored up over a course of experience give us the key to human nature and teach us to unravel all its intricacies. Pretexts and appearances no longer fool us. Public declarations pass for the plausible gloss on a cause. And though virtue and honor are granted their proper weight and authority, the perfect selflessness so often claimed is never expected of crowds and parties, seldom of their leaders, and hardly even of individuals of any rank or station. But if there were no uniformity in human actions—if every experiment of this kind we could make were irregular and anomalous—it would be impossible to collect any general observations about mankind, and no experience, however carefully digested by reflection, would ever be of any use. Why is the old farmer more skilled at his work than the young beginner, if not because there is a certain uniformity in how sun, rain, and earth act to make crops grow, and experience teaches the veteran the rules that govern and direct this process?

1 Quintus Curtius Rufus was a Roman historian who wrote a colorful life of Alexander the Great.

[66] We must not, however, expect this uniformity of human actions to go so far that everyone, in the same circumstances, will always act in exactly the same way, with no allowance for differences of character, prejudice, and opinion. Uniformity in every detail like that is found nowhere in nature. On the contrary, observing the variety of conduct among different people allows us to form a greater variety of maxims, which still presuppose a degree of uniformity and regularity.

Do people's manners differ in different ages and countries? We learn from this the great force of custom and education, which mold the human mind from infancy and form it into a fixed and settled character. Is the behavior and conduct of one sex very unlike that of the other? Is it not from this that we come to know the different characters nature has stamped on the sexes, and which she preserves with constancy and regularity? Do the actions of the same person vary a great deal over the different periods of life, from infancy to old age? This gives room for many general observations about the gradual change in our feelings and inclinations, and about the different maxims that prevail at different ages of human life. Even the traits peculiar to each individual have a uniform influence. Otherwise our acquaintance with people and our observation of their conduct could never teach us their dispositions, or help guide our behavior toward them.

[67] I grant that it is possible to find some actions that seem to have no regular connection with any known motives, and that are exceptions to all the standards of conduct ever established for governing people. But if we want to know what judgment to form of such irregular and extraordinary actions, we may consider the views commonly held about the irregular events that appear in the course of nature and in the operations of external objects. Not all causes are conjoined with their usual effects with the same uniformity. A craftsman who handles only dead matter may fail to achieve his aim, just as the statesman may who directs the conduct of sentient and intelligent agents.

Ordinary people, who take things at first appearance, attribute the uncertainty of events to an uncertainty in the causes, which makes them often fail to have their usual influence even when nothing impedes their operation. But philosophers observe that almost every part of nature contains a vast variety of springs and principles hidden from us by their smallness or remoteness. So they find it at least possible that the variation in events may come not from any contingency in the cause but from the secret operation of opposing causes. This possibility is turned into certainty by further observation, when they notice that on close scrutiny a contrariety of effects always reveals a contrariety of causes, and arises from their opposing one another. A peasant can give no better reason for a clock or watch stopping than to say that it doesn't usually run right. But a craftsman easily sees that the same force in the spring or pendulum always has the same influence on the wheels, and fails to have its usual effect perhaps because of a grain of dust that brings the whole mechanism to a halt. From observing a number of parallel instances, philosophers form the maxim that the connection between all causes and effects is equally necessary, and that its apparent uncertainty in some instances comes from the secret opposition of contrary causes.

So, for example, when the usual symptoms of health or sickness in the human body defy our expectations, when medicines don't work with their usual power, when irregular events follow from some particular cause, the philosopher and the physician are not surprised. Nor are they ever tempted to deny, in general, the necessity and uniformity of the principles that run the body's economy. They know that a human body is an enormously complicated machine; that many hidden powers lurk in it, altogether beyond our comprehension; that it must often seem to us very uncertain in its operations; and that therefore the irregular events that show themselves on the outside are no proof that the laws of nature are not being observed with the greatest regularity in its internal workings and government.

[68] The philosopher, if he is consistent, must apply the same reasoning to the actions and choices of intelligent agents. The most irregular and unexpected decisions people make can often be explained by those who know every detail of their character and situation. A person of obliging disposition gives a peevish answer—but he has a toothache, or hasn't had his dinner. A dull fellow shows unusual liveliness in his manner—but he has just had a sudden stroke of good fortune. And even when an action, as sometimes happens, cannot be specifically explained, either by the person himself or by anyone else, we know in general that people's characters are, to a certain degree, inconstant and irregular. This is, in a way, the constant character of human nature, though it applies more particularly to some people who have no fixed rule for their conduct but carry on in a continual course of whim and inconstancy. The internal principles and motives may operate uniformly despite these apparent irregularities, just as the winds, rain, clouds, and other variations of the weather are supposed to be governed by steady principles, though these are not easily discovered by human insight and inquiry.

[69] It appears, then, not only that the conjunction between motives and voluntary actions is as regular and uniform as that between cause and effect in any part of nature, but also that this regular conjunction has been universally acknowledged by mankind and has never been disputed, either in philosophy or in ordinary life. Now, since we draw all our inferences about the future from past experience, and since we conclude that objects we have found always conjoined will always be conjoined, it may seem unnecessary to prove that this experienced uniformity in human actions is a source from which we draw *inferences* about them. But to present the argument in a greater variety of lights, we will also dwell, though briefly, on this second point.

People depend on one another so much in every society that hardly any human action is entirely complete in itself, or is performed without some reference to the actions of others, which are needed to make it fully achieve the agent's purpose. The

poorest craftsman, working alone, at least expects the protection of the magistrate to secure him the enjoyment of the fruits of his labor. He also expects that when he takes his goods to market and offers them at a reasonable price, he will find buyers, and that with the money he earns he will be able to get others to supply him with the goods he needs to live. The more people extend their dealings and make their relations with others more complicated, the greater the variety of voluntary actions they build into their plans, expecting those actions, from the appropriate motives, to cooperate with their own. In all these conclusions they take their bearings from past experience, just as in their reasoning about external objects, and they firmly believe that people, like all the elements, will go on operating as they always have. A manufacturer counts on the labor of his employees to get a job done as much as on the tools he uses, and would be equally surprised if his expectations were disappointed. In short, this inference and reasoning from experience about the actions of others enters so deeply into human life that no one, while awake, goes a moment without using it. Don't we have reason, then, to claim that all mankind have always agreed on the doctrine of necessity, as defined and explained above?

[70] Nor have philosophers ever held a different opinion from ordinary people on this point. For, besides the fact that almost every action of their lives presupposes that opinion, there are few theoretical branches of learning to which it is not essential. What would become of *history* if we could not rely on the historian's truthfulness, based on our experience of mankind? How could *politics* be a science if laws and forms of government did not have a uniform influence on society? Where would *ethics* find its foundation if particular characters had no definite, reliable power to produce particular feelings, and if these feelings had no constant effect on actions? And by what right could we exercise *criticism* on any poet or man of letters if we could not pronounce the conduct and feelings of his characters either natural or unnatural for such people in such circumstances? It seems almost impossible, then, to engage in science or action of

any kind without acknowledging the doctrine of necessity, and this *inference* from motives to voluntary actions, from character to conduct.

And indeed, when we consider how neatly *physical* evidence and evidence about *human affairs* link together and form a single chain of argument, we will not hesitate to grant that they are of the same nature and derived from the same principles. A prisoner who has neither money nor influence sees that escape is impossible as clearly when he considers the stubbornness of his jailer as when he considers the walls and bars around him. And in all his attempts to gain his freedom, he prefers to work on the stone and iron of the one rather than on the inflexible nature of the other. The same prisoner, when led to the scaffold, foresees his death as surely from the steadiness and loyalty of his guards as from the operation of the axe or the wheel. His mind runs along a certain train of ideas: the soldiers' refusal to let him escape; the executioner's action; the separation of head and body; bleeding, convulsive movements, and death. Here is a connected chain of natural causes and voluntary actions, yet the mind feels no difference between them as it passes from one link to the next. Nor is it any less certain of the outcome than if it were connected with the objects present to memory or the senses by a chain of causes cemented together by what we like to call *physical* necessity. The same experienced union has the same effect on the mind whether the united objects are motives, choices, and actions, or shape and motion. We may change the names of things, but their nature and their effect on the understanding never change.

Suppose a man I know to be honest and wealthy, and with whom I am close friends, comes into my house, where I am surrounded by my servants. I am quite sure that he is not going to stab me before he leaves in order to rob me of my silver inkstand, and I no more suspect this than I suspect that the house itself, which is new and solidly built on good foundations, will fall down. *"But he may have been seized by a sudden, unknown fit of madness."* So may a sudden earthquake strike, and shake the

house and bring it down around my ears. I will therefore change the suppositions. I will say instead that I know for certain he is not going to put his hand into the fire and hold it there until it burns away. This, I think, I can predict with the same confidence as that, if he throws himself out of the window and meets no obstruction, he will not hang for a moment in the air. No suspicion of an unknown madness can give the slightest possibility to the first event, which is so contrary to all the known principles of human nature. A man who leaves his purse full of gold on the pavement at Charing Cross at noon might as well expect it to fly away like a feather as expect to find it untouched an hour later. More than half of human reasoning involves inferences of a similar kind, carrying greater or lesser degrees of certainty in proportion to our experience of how people usually behave in such situations.[2]

71 I have often wondered what could possibly be the reason why all mankind, though they have always, without hesitation, acknowledged the doctrine of necessity in all their practice and reasoning, have nevertheless shown such reluctance to acknowledge it in words, and have instead shown an inclination, in every age, to profess the opposite opinion. I think it can be explained as follows. If we examine the operations of bodies, and the production of effects from their causes, we will find that all our faculties can never take our knowledge of this relation any further than simply observing that particular objects are *constantly conjoined*, and that the mind is carried by a *customary transition* from the appearance of one to belief in the other. But although this conclusion about human ignorance is the result of the strictest scrutiny of the subject, people still have a strong tendency to believe that they see further into the powers of nature, and perceive something like a necessary connection between cause and effect. Then, when they turn to reflect on the operations of their own minds and *feel* no such connection between the motive and the action, they are inclined to suppose that there is a difference between effects that come from mater-

2 Charing Cross was one of the busiest spots in central London.

ial force and effects that come from thought and intelligence. But once we are convinced that we know nothing more about causation of any kind than the *constant conjunction* of objects and the resulting *inference* of the mind from one to another, and once we find that these two circumstances are universally granted to be present in voluntary actions, we may more easily be led to admit that the same necessity is common to all causes. And though this reasoning may contradict the systems of many philosophers by ascribing necessity to the decisions of the will, we will find on reflection that they disagree with it only in words, not in what they actually think. Necessity, in the sense in which it is taken here, has never yet been rejected, and I think never can be rejected, by any philosopher. It may perhaps be claimed only that the mind can perceive, in the operations of matter, some further connection between cause and effect—a connection that does not exist in the voluntary actions of intelligent beings. Now, whether this is so or not can only come out through examination. And it is up to these philosophers to make good their claim by defining or describing that necessity and pointing it out to us in the operations of material causes.

[72] It would seem, in fact, that people start at the wrong end of this question of liberty and necessity when they begin by examining the faculties of the soul, the influence of the understanding and the operations of the will. Let them first take up a simpler question, namely the operations of bodies and of brute, unthinking matter, and see whether they can form any idea of causation and necessity there other than a constant conjunction of objects and the subsequent inference of the mind from one to the other. If these circumstances in reality make up the whole of the necessity we conceive in matter, and if they are also universally acknowledged to be present in the operations of the mind, the dispute is over—or at least it must be admitted to be merely verbal from then on. But as long as we rashly suppose that we have some further idea of necessity and causation in the operations of external objects, while at the same time we can find nothing further in the voluntary actions of the mind, there is no

possibility of bringing the question to any definite resolution, since we are proceeding on so mistaken an assumption. The only way to undeceive ourselves is to go further back: to examine how narrow the reach of science is when applied to material causes, and to convince ourselves that all we know of them is the constant conjunction and inference mentioned above. We may find it hard to bring ourselves to set such narrow limits to human understanding. But afterward we will find no difficulty in applying this doctrine to the actions of the will. For since it is evident that these actions are regularly conjoined with motives, circumstances, and characters, and since we always draw inferences from the one to the other, we will be obliged to acknowledge in words the necessity we have already admitted in every

deliberation of our lives and in every step of our conduct and behavior.[3]

[73] But to continue this project of reconciliation on the question of liberty and necessity—the most contentious question in metaphysics, the most contentious of sciences—it will not take many words to prove that all mankind have always agreed on the doctrine of liberty as well as on that of necessity, and that here too the whole dispute has so far been merely verbal. For what do we mean by liberty when we apply it to voluntary actions? Surely we cannot mean that actions have so little connection with motives, inclinations, and circumstances that the one does not follow from the other with a certain degree of uni-

3 HUME'S NOTE. The prevalence of the doctrine of liberty can be explained by another cause as well: namely, a false sensation or apparent experience that we have, or may have, of liberty or indifference in many of our actions. The necessity of any action, whether of matter or of mind, is not, strictly speaking, a quality in the agent. It is a quality in whatever thinking or intelligent being may consider the action, and it consists chiefly in the determination of his thoughts to infer the existence of that action from some preceding objects. Likewise liberty, when opposed to necessity, is nothing but the lack of that determination—a certain looseness or indifference that we feel in passing, or not passing, from the idea of one object to the idea of whatever follows it. Now we may notice that when we *reflect* on human actions, we seldom feel any such looseness or indifference, but can usually infer them with considerable certainty from their motives and from the agent's dispositions. Yet it often happens that when we are *performing* the actions ourselves, we are aware of something like it. And since things that resemble each other are easily mistaken for each other, this feeling has been used as a demonstrative, and even intuitive, proof of human liberty. We feel that our actions are subject to our will on most occasions, and we imagine we feel that the will itself is subject to nothing. That is because, when someone denies it and we are provoked to test it, we feel that the will moves easily in every direction, and produces an image of itself (a *velleity*, as the scholastics call it) even on the side where it did not settle. We persuade ourselves that this image, or faint motion, could at that moment have been carried through into the thing itself, because if anyone denies it, we find on a second try that now it can. We fail to consider that here the whimsical desire to show our liberty is the motive of our actions. And it seems certain that, however much we may imagine we feel a liberty within ourselves, an onlooker can usually infer our actions from our motives and character. Even where he cannot, he concludes in general that he could, if he were perfectly acquainted with every circumstance of our situation and temperament, and with the most secret springs of our constitution and disposition. Now this is the very essence of necessity, according to the doctrine set out above.

TRANSLATOR'S NOTE. A "velleity" is a faint, incomplete act of willing.

formity, and that the one provides no inference by which we can conclude the existence of the other. For these are plain and acknowledged matters of fact. By liberty, then, we can mean only *a power of acting or not acting, according to the determinations of the will*: that is, if we choose to stay still, we can; if we choose to move, we can do that too. Now everyone agrees that this hypothetical liberty belongs to everyone who is not a prisoner in chains. Here, then, there is nothing to dispute.

[74] Whatever definition of liberty we give, we should take care that it meets two requirements: *first*, that it be consistent with plain matters of fact; *second*, that it be consistent with itself. If we meet these requirements and make our definition intelligible, I am convinced that all mankind will be found to hold one opinion about it.

Everyone agrees that nothing exists without a cause of its existence, and that chance, strictly examined, is a merely negative word and does not signify any real power that exists anywhere in nature. But it is claimed that some causes are necessary and some are not. Here is where definitions pay off. Let anyone *define* a cause without including, as part of the definition, a *necessary connection* with its effect, and let him show clearly the origin of the idea the definition expresses, and I will readily give up the whole controversy. But if the explanation given above is accepted, this must be completely impossible. If objects did not have a regular conjunction with one another, we would never have formed any notion of cause and effect. And this regular conjunction produces that inference of the understanding which is the only connection we can have any grasp of. Whoever attempts a definition of cause that leaves out these circumstances will be forced to use either unintelligible terms or

terms synonymous with the one he is trying to define.[4] And if the definition given above is accepted, liberty, when opposed to necessity rather than to constraint, is the same thing as chance, which everyone agrees has no existence.

PART II

Hume argues that necessity and liberty support morality, and considers whether God becomes the author of sin.

[75] There is no method of reasoning more common, and yet none more blameworthy, than trying to refute a hypothesis in a philosophical dispute by claiming that it has dangerous consequences for religion and morality. When an opinion leads to absurdities, it is certainly false. But it is not certain that an opinion is false because it has dangerous consequences. Such tactics, therefore, ought to be avoided entirely, since they do nothing to discover the truth and serve only to make one's opponent odious. I make this observation in general, without claiming any advantage from it. I freely submit to an examination of this kind, and I will venture to assert that the doctrines of necessity and of liberty, as explained above, are not only consistent with morality but absolutely essential to its support.

Necessity may be defined in two ways, matching the two definitions of *cause*, of which it is an essential part. It consists either in the constant conjunction of like objects, or in the inference of the understanding from one object to another. Now necessity in both these senses (which are in fact the same at bottom) has universally, though tacitly, been granted to belong to the human will—in the universities, in the pulpit, and in ordinary life. No one has ever claimed to deny that we can draw infer-

4 HUME'S NOTE. Thus if a cause is defined as *that which produces something*, it is easy to see that *producing* is synonymous with *causing*. Likewise, if a cause is defined as *that by which something exists*, this is open to the same objection. For what is meant by these words, *by which*? If it had been said that a cause is *that* after which *something constantly exists*, we would have understood the terms. For this, indeed, is all we know of the matter. And this constancy forms the very essence of necessity; we have no other idea of it.

ences about human actions, and that those inferences rest on the experienced union of like actions with like motives, inclinations, and circumstances. The only point on which anyone can differ is this. Perhaps he will refuse to call this property of human actions by the name of necessity—but as long as the meaning is understood, I hope the word can do no harm. Or perhaps he will maintain that it is possible to discover something more in the operations of matter. But this, it must be admitted, can make no difference to morality or religion, whatever difference it may make to natural science or metaphysics. We may be mistaken here in asserting that there is no idea of any other necessity or connection in the actions of bodies. But surely we ascribe nothing to the actions of the mind beyond what everyone does grant, and must readily grant. We change nothing in the accepted orthodox view of the will; we change only the view of material objects and causes. Nothing, then, could be more innocent, at least, than this doctrine.

[76] Since all laws are founded on rewards and punishments, it is taken as a fundamental principle that these motives have a regular and uniform influence on the mind, both producing good actions and preventing bad ones. We may give this influence whatever name we like. But since it is usually conjoined with the action, it must be regarded as a *cause,* and seen as an instance of the necessity we are trying to establish here.

The only proper object of hatred or vengeance is a person or creature endowed with thought and consciousness. And when criminal or harmful actions arouse that passion, they do so only through their relation or connection to the person. Actions by their very nature are temporary and perishing. Where they do not proceed from some *cause* in the character and disposition of the person who performed them, they can bring him neither honor, if good, nor disgrace, if evil. The actions themselves may be blameworthy. They may be contrary to all the rules of morality and religion. But the person is not answerable for them. And since they came from nothing in him that is lasting and constant, and leave nothing of that kind behind, he cannot possibly

become the object of punishment or vengeance on their account. According to the principle that denies necessity, and consequently causes, a man is as pure and untainted after committing the most horrible crime as at the first moment of his birth. His character is in no way involved in his actions, since they are not derived from it, and the wickedness of the one can never be used as proof of the depravity of the other.

People are not blamed for actions they perform unknowingly and by accident, whatever the consequences. Why? Only because the principles behind these actions are momentary and end with the actions themselves. People are blamed less for actions they perform hastily and without premeditation than for actions that come from deliberation. Why is that? Only because a hasty temper, though a constant cause or principle in the mind, works only at intervals and does not infect the whole character. Again, repentance wipes out every crime, if it comes with a reformation of life and manners. How is this to be explained? Only by holding that actions make a person criminal just insofar as they are evidence of criminal principles in the mind. When those principles change, so that the actions stop being real evidence of them, the actions also stop being criminal. But unless we accept the doctrine of necessity, they never were real evidence, and so they never were criminal.

[77] It will be just as easy to prove, using the same arguments, that *liberty*—in the sense defined above, on which everyone agrees—is also essential to morality. Where it is missing, no human action can have any moral quality, or be the object of either approval or disapproval. Actions engage our moral feelings only insofar as they are signs of a person's inner character, passions, and affections. So they cannot possibly earn either praise or blame when they come not from those sources but entirely from external force.

[78] I don't claim to have anticipated or answered every objection to this theory of necessity and liberty. I can foresee others, drawn from topics I have not dealt with here. It may be said, for instance, that if voluntary actions are subject to the same laws

of necessity as the workings of matter, then there is an unbroken chain of necessary causes, preordained and predetermined, running from the original cause of everything to every single volition of every human being. No contingency anywhere in the universe; no indifference; no liberty. While we act, we are at the same time acted upon. The ultimate author of all our volitions is the Creator of the world, who first set this immense machine in motion and placed every being in the particular position from which every later event must follow by inescapable necessity. So either human actions can have no moral wickedness at all, since they come from so good a cause; or, if they are wicked, they must implicate our Creator in the same guilt, since he is admitted to be their ultimate cause and author. A man who sets off a mine is answerable for all the consequences, whether the fuse he used was long or short. In the same way, wherever a continuous chain of necessary causes is fixed, the Being—finite or infinite—who produces the first link is also the author of all the rest, and must bear the blame and receive the praise that belong to them. Our clear and unalterable ideas of morality establish this rule, for unquestionable reasons, when we examine the consequences of any human action. And those reasons must carry even greater force when applied to the volitions and intentions of a Being infinitely wise and powerful. Ignorance or powerlessness may be pleaded as an excuse for so limited a creature as man. But our Creator has no such imperfections. He foresaw, he ordained, he intended all those human actions that we so rashly call criminal. We must therefore conclude either that they are not criminal, or that God, not man, is accountable for them. But both of these positions are absurd and impious. It follows that the doctrine from which they are deduced cannot possibly be true, since it is open to all the same objections. An absurd consequence, if it follows necessarily, proves the original doctrine absurd—just as criminal actions make their original cause criminal, if the connection between them is necessary and inevitable.

This objection has two parts, which we will examine separately. *First*: if human actions can be traced back by a necessary chain to God, they can never be criminal, because of the infinite perfection of the Being they come from, who can intend nothing but what is wholly good and praiseworthy. Or, *second*: if they are criminal, we must withdraw the attribute of perfection we ascribe to God, and admit that he is the ultimate author of guilt and moral wickedness in all his creatures.

[79] The answer to the first objection seems obvious and convincing. Many philosophers, after a careful scrutiny of all the phenomena of nature, conclude that the WHOLE, considered as one system, is at every moment of its existence ordered with perfect benevolence, and that the greatest possible happiness will in the end result for all created beings, with no admixture of positive or absolute evil or misery. Every physical evil, they say, is an essential part of this benevolent system. Not even God himself, considered as a wise agent, could remove it without letting in greater evil or shutting out the greater good that will come from it. From this theory some philosophers, the ancient *Stoics* among them, drew a source of consolation in every affliction. They taught their pupils that the evils they suffered were in reality goods for the universe, and that from a broad enough view, one that could take in the whole system of nature, every event would become an object of joy and exultation. But though this line of thought is attractive and lofty, in practice it soon proved weak and ineffective. You would surely irritate rather than soothe a man suffering the racking pains of gout if you lectured him on the rightness of the general laws that produced the poisonous humors in his body and carried them through the proper channels to the sinews and nerves, where they now cause such acute torment. These broad views may for a moment please the imagination of a theorist sitting in comfort and safety. But they cannot stay steadily in his mind even when he is untroubled by pain or passion—much less hold their ground when attacked by such

powerful opponents.[5] Our feelings take a narrower and more natural view of their object. With an economy better suited to the weakness of human minds, they attend only to the beings around us, and are moved by events as they seem good or bad for our own small circle.

80 The case is the same with *moral* evil as with *physical* evil. We cannot reasonably suppose that remote considerations, which have so little effect in the one case, will have more influence in the other. The human mind is so formed by nature that, when it encounters certain characters, dispositions, and actions, it immediately feels approval or blame. No emotions are more essential to its makeup. The characters that win our approval are chiefly those that contribute to the peace and security of human society, just as the characters that provoke blame are chiefly those that tend to public harm and disorder. So we may reasonably suppose that moral sentiments arise, directly or indirectly, from our awareness of these opposing interests. What if philosophical reflection arrives at a different opinion or conjecture—that everything is right with respect to the WHOLE, and that the qualities that disturb society are, on the whole, just as beneficial and just as suited to nature's original purpose as those that more directly promote its happiness and welfare? Can such remote and uncertain speculations outweigh the feelings that arise from a natural and immediate view of things? When a man is robbed of a large sum, is his distress at the loss in any way lessened by these lofty reflections? Why, then, should his moral resentment of the crime be thought incompatible with them? Why shouldn't acknowledging a real distinction between vice and virtue be reconcilable with every speculative system of philosophy, just as acknowledging a real distinction between physical beauty and ugliness is? Both distinctions rest on the natural feelings of the human mind. And those feelings cannot be controlled or altered by any philosophical theory or speculation whatever.

5 Hume is using the old medical theory of "humors," bodily fluids whose imbalance was thought to cause disease.

[81] The *second* objection does not admit of so easy and satisfying an answer. It is not possible to explain clearly how God can be the indirect cause of all human actions without being the author of sin and moral wickedness. These are mysteries that mere natural reason, unaided, is quite unfit to handle. Whatever system it adopts, it will find itself caught in inextricable difficulties, and even contradictions, at every step it takes on such subjects. To reconcile the indifference and contingency of human actions with God's foreknowledge, or to defend absolute divine decrees while still freeing God from being the author of sin—these tasks have so far proved beyond all the power of philosophy. Philosophy will be fortunate if it learns from this how rash it is to pry into these sublime mysteries, and if it leaves a scene so full of obscurity and perplexity and returns, with suitable modesty, to its true and proper territory: the examination of ordinary life. There it will find difficulties enough to occupy its inquiries, without setting out on so boundless an ocean of doubt, uncertainty, and contradiction!

Of the Reason of Animals

Section IX
Hume argues that animals, like humans, learn from experience by custom and instinct.

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[82] All our reasoning about matters of fact rests on a kind of analogy, which leads us to expect from any cause the same events we have seen result from similar causes. Where the causes are entirely similar, the analogy is perfect, and the inference drawn from it is regarded as certain and conclusive. No one who sees a piece of iron ever doubts that it will have weight and hold together, as in every other case he has ever observed. But where the objects are not so exactly alike, the analogy is less perfect and the inference less conclusive—though it still has some force, in proportion to the degree of likeness. By this kind of reasoning, anatomical observations made on one animal are extended to all animals. When the circulation of the blood, for instance, is clearly proven to occur in one creature, such as a frog or a fish, that creates a strong presumption that the same principle holds in all. These analogical observations can be carried further, even into the science we are now pursuing. Any theory that explains the workings of the understanding, or the origin and connection of the passions in human beings, will gain additional authority if we find that the same theory is needed to explain the same phenomena in all other animals. Let us try this out on the hypothesis by which, in the preceding discussion, we tried to account for all reasoning from experience. It is hoped that this new point of view will confirm all our earlier observations.

[83] *First*, it seems evident that animals, like people, learn many things from experience, and infer that the same events will always follow from the same causes. By this principle they become familiar with the more obvious properties of external objects. From birth onward they gradually build up a store of knowledge about the nature of fire, water, earth, stones, heights, depths, and so on, and about the effects these produce. Here the ignorance and inexperience of the young are plainly distinguishable from the cunning and shrewdness of the old, who have learned by long observation to avoid what hurt them and to pursue what gave them ease or pleasure. A horse used to the field learns how high he can properly jump, and will never attempt what is beyond his strength and ability. An old greyhound will leave the more tiring part of the chase to the younger dogs, and position himself to meet the hare when she doubles back. The guesses he makes on this occasion are based on nothing but his observation and experience.

This is even more evident from the effects of training and education on animals. With the proper use of rewards and punishments, they can be taught any course of action, even one quite contrary to their natural instincts and inclinations. Isn't it experience that makes a dog fear pain when you threaten him, or raise the whip to beat him? Isn't it experience, even, that makes him answer to his name, and infer from such an arbitrary sound that you mean him rather than any of his companions, and intend to call him, when you say it in a certain way, with a certain tone and accent?

In all these cases we can see that the animal infers some fact beyond what directly strikes its senses, and that this inference rests entirely on past experience: the creature expects from the present object the same consequences it has always observed to follow from similar objects.

[84] *Second*, this inference on the animal's part cannot possibly be based on any process of argument or reasoning by which it concludes that like events must follow like objects, and that the course of nature will always be regular. For if there really are

any arguments of this kind, they are surely too abstruse for such imperfect understandings to notice, since it may well take all the care and attention of a philosophical genius to discover and grasp them. Animals, then, are not guided by reasoning in these inferences. Neither are children. Neither is the bulk of mankind, in their ordinary actions and conclusions. Neither are philosophers themselves, who in all the practical parts of life are basically the same as ordinary people and are governed by the same maxims. Nature must have provided some other principle, more readily available and more generally applicable. An operation of such immense importance to life as inferring effects from causes cannot be entrusted to the uncertain process of reasoning and argument. Even if this were doubtful in the case of human beings, it seems beyond question in the case of animals. And once the conclusion is firmly established for animals, all the rules of analogy give us a strong presumption that it should be accepted universally, without exception or reservation. It is custom alone that leads animals, from every object that strikes their senses, to infer its usual companion, and carries their imagination from the appearance of the one to conceive the other in that particular way we call *belief*. No other

explanation can be given of this operation, in all the higher as well as the lower classes of sentient beings that we observe.[1]

85 But though animals learn much of their knowledge from observation, a good deal of it they receive directly from the hand of nature. This part far exceeds the capacity they show on ordinary occasions, and they improve in it little or not at all by the longest practice and experience. We call these *instincts*, and

1 HUME'S NOTE. Since all reasoning about facts or causes comes simply from custom, it may be asked how it happens that people so far surpass animals in reasoning, and one person so far surpasses another. Doesn't the same custom have the same influence on all?

I will try here to explain briefly the great differences among human understandings. After that, the reason for the difference between humans and animals will be easy to grasp.

1. Once we have lived for a while and grown used to the uniformity of nature, we acquire a general habit by which we always carry the known over to the unknown, and conceive the latter as resembling the former. Thanks to this general habitual principle, we treat even a single experiment as a basis for reasoning, and expect a similar result with some degree of certainty, provided the experiment was done accurately and free of all extraneous circumstances. Observing the consequences of things is therefore considered very important. And since one person may far surpass another in attention, memory, and observation, this will make a great difference in how well they reason.

2. Where a combination of causes produces some effect, one mind may be much larger than another, and better able to take in the whole system of objects and infer their consequences correctly.

3. One person can follow a chain of consequences further than another.

4. Few people can think for long without getting their ideas confused and mistaking one for another, and there are various degrees of this weakness.

5. The circumstance on which an effect depends is often tangled up with other circumstances that are foreign and irrelevant. Separating it out often requires great attention, accuracy, and subtlety.

6. Forming general maxims from particular observations is a very delicate operation. Nothing is more common than to make mistakes here, out of haste or a narrowness of mind that does not look at all sides.

7. When we reason from analogies, the person with more experience, or a quicker knack for thinking of analogies, will be the better reasoner.

8. Biases from prejudice, education, passion, party, and so on weigh more heavily on some minds than on others.

9. Once we have come to trust human testimony, books and conversation widen the range of one person's experience and thought much more than another's.

It would be easy to find many other circumstances that make a difference in people's understandings.

we are inclined to marvel at them as something quite extraordinary, beyond anything the human understanding can explain. But our wonder may cease, or at least diminish, when we consider that reasoning from experience itself—which we share with the beasts, and on which the whole conduct of life depends—is nothing but a kind of instinct or mechanical power that acts in us without our knowing it. In its chief operations it is not directed by any of the relations or comparisons of ideas that are the proper objects of our intellectual faculties. The instinct is different, but it is still an instinct that teaches a man to avoid the fire, just as much as the one that teaches a bird, with such precision, the art of incubation and the whole management and order of its nursery.

Of Miracles

Section X
Hume argues that testimony can never establish a miracle as the foundation of religion.

PART I

Hume argues that a wise person weighs testimony against experience and rejects the greater miracle.

86 Dr. Tillotson's writings contain an argument against the *real presence* that is as concise, elegant, and strong as any argument could possibly be against a doctrine so little deserving of serious refutation. Everyone admits, says that learned prelate, that the authority of both scripture and tradition rests solely on the testimony of the apostles, who were eyewitnesses of the miracles by which our Savior proved his divine mission.[1] Our evidence for the truth of the *Christian* religion, then, is less than our evidence for the truth of our senses. Even for the first founders of our religion it was no greater, and it obviously must weaken as it passes from them to their disciples. Nor can anyone place as much confidence in their testimony as in what is directly before his own senses. But weaker evidence can never destroy stronger evidence. So even if the doctrine of the real presence were ever so clearly revealed in scripture, it would be directly contrary to the rules of sound reasoning to assent to it. It contradicts the senses, while scripture and tradition, on which it is supposed to rest,

1 John Tillotson (1630–1694) was Archbishop of Canterbury. The "real presence" is the Catholic doctrine that Christ's body and blood are literally present in the bread and wine of the Eucharist.

carry less evidence than the senses do—so long as they are considered merely as external evidence, and not brought home to each person's heart by the direct working of the Holy Spirit.

Nothing is so convenient as a decisive argument of this kind, which must at least *silence* the most arrogant bigotry and superstition and free us from their impertinent demands. I flatter myself that I have found an argument of a similar kind which, if sound, will serve the wise and learned as a permanent check on every kind of superstitious delusion—and so will be useful as long as the world lasts. For that long, I presume, accounts of miracles and prodigies will be found in all history, sacred and secular.

87 Though experience is our only guide in reasoning about matters of fact, it must be admitted that this guide is not wholly infallible, and in some cases can lead us into error. Someone in our climate who expected better weather in any week of June than in a week of December would be reasoning soundly and in line with experience. Yet it is certain that he may, as things turn out, find himself mistaken. Still, we may note that in such a case he would have no grounds for complaining about experience, since experience usually warns us of the uncertainty in advance, through the conflicting outcomes that careful observation reveals. Not all effects follow with equal certainty from their supposed causes. Some events have been found, in every country and every age, to be constantly conjoined. Others have proved more variable, and sometimes disappoint our expectations. So in our reasoning about matters of fact there are all conceivable degrees of assurance, from the highest certainty down to the weakest kind of probable evidence.

A wise person, therefore, proportions belief to the evidence. Where a conclusion rests on infallible experience, he expects the event with the highest degree of assurance, and treats his past experience as a full *proof* that the event will occur. In other cases he proceeds more cautiously. He weighs the conflicting experiments. He considers which side is supported by the larger number of them, and leans toward that side with doubt and hes-

itation. And when at last he settles his judgment, the evidence does not exceed what we properly call *probability*. All probability, then, presupposes a conflict of experiments and observations, in which one side outweighs the other and produces a degree of evidence proportioned to its superiority. A hundred instances or experiments on one side and fifty on the other give only an uncertain expectation of any event. But a hundred uniform experiments with only one that contradicts them reasonably produce a fairly strong degree of assurance. In every case we must weigh the opposing experiments, where they conflict, and subtract the smaller number from the larger, to find the exact strength of the superior evidence.

[88] To apply these principles to a particular case: no kind of reasoning is more common, more useful, and even more necessary to human life than the kind that comes from people's testimony and the reports of eyewitnesses and spectators. Someone might deny that this kind of reasoning is based on the relation of cause and effect. I won't quarrel over a word. It is enough to observe that our confidence in any argument of this kind comes from no other principle than our observation of the truthfulness of human testimony, and of the usual agreement between facts and the reports of witnesses. It is a general maxim that no objects have any discoverable connection with one another, and that all the inferences we can draw from one to another rest simply on our experience of their constant and regular conjunction. Clearly, then, we should not make an exception to this maxim in favor of human testimony, whose connection with any event seems in itself as little necessary as any other. If memory were not reliable to a certain degree; if people did not generally have an inclination to truth and a sense of honesty; if they were not susceptible to shame when caught in a lie—if, I say, experience had not shown these to be qualities inherent in human nature, we would never place the slightest confidence in human testimony. A man who is delirious, or known for lying and villainy, has no authority with us whatever.

And since the evidence we get from witnesses and human testimony rests on past experience, it varies with that experience. It counts either as a *proof* or as a *probability*, depending on whether the conjunction between a particular kind of report and a particular kind of object has been found constant or variable. Many circumstances must be taken into account in all judgments of this kind, and the ultimate standard by which we settle any disputes about them is always drawn from experience and observation. Where this experience is not entirely uniform in one direction, it brings an unavoidable conflict into our judgments, with the same opposition and mutual cancelling of arguments as in every other kind of evidence. We often hesitate over what others report. We weigh the opposing circumstances that cause doubt or uncertainty, and when we find one side stronger, we lean toward it—but with our confidence reduced in proportion to the strength of the other side.

[89] In the present case, this conflict of evidence may come from several different sources: from contrary testimony; from the character or number of the witnesses; from the way they give their testimony; or from all these together. We become suspicious about any matter of fact when the witnesses contradict one another; when they are few, or of doubtful character; when they have an interest in what they assert; when they testify hesitantly, or, on the contrary, with overly vehement protestations. There are many other particulars of the same kind that can weaken or destroy the force of any argument drawn from human testimony.

Suppose, for instance, that the fact the testimony is trying to establish has something extraordinary and marvelous about it. In that case the evidence from the testimony is weakened, more or less, in proportion as the fact is more or less unusual. The reason we give any credit to witnesses and historians is not that we perceive any *connection a priori* between testimony and reality, but that we are used to finding the two in agreement. But when the fact attested is one that we have seldom observed, there is a contest between two opposing experiences. Each can-

cels the other as far as its force extends, and the stronger can act on the mind only with the force that remains. The very same principle of experience that gives us a certain degree of confidence in the testimony of witnesses also gives us, in this case, another degree of confidence against the fact they are trying to establish. From this contradiction there necessarily arises a counterbalance, and a mutual cancelling of belief and authority.

I wouldn't believe such a story if Cato himself told it to me was a proverbial saying in Rome, even during the lifetime of that philosophical patriot.[2] The incredibility of a fact, it was granted, could outweigh even so great an authority.[3]

The Indian prince who refused to believe the first reports of the effects of frost reasoned correctly. It naturally took very strong testimony to win his assent to facts arising from a state of nature he was unfamiliar with, and which bore so little resemblance to the events he had constant and uniform experience of. Though they were not contrary to his experience, they did not conform to it.[4]

[90] But to increase the probability against the testimony of witnesses, let us suppose that the fact they assert, instead of being merely marvelous, is truly miraculous. And suppose also that

2 HUME'S NOTE. Plutarch, *Life of Cato*.

3 Cato the Younger (95–46 BC), a Roman statesman and Stoic famed for his integrity.

4 HUME'S NOTE. No Indian, obviously, could have had experience that water did *not* freeze in cold climates. This is placing nature in a situation quite unknown to him, and he cannot possibly tell *a priori* what will result. It is a new experiment, whose outcome is always uncertain. One can sometimes guess from analogy what will follow, but it is still only a guess. And it must be admitted that in this case of freezing, the event runs contrary to the rules of analogy, and is not what a rational Indian would expect. The action of cold on water is not gradual, in step with the degree of cold. Whenever it reaches the freezing point, the water passes in an instant from complete liquidity to perfect hardness. Such an event may therefore be called *extraordinary*, and it takes fairly strong testimony to make it credible to people in a warm climate. But it is still not *miraculous*, nor contrary to uniform experience of the course of nature in cases where all the circumstances are the same. The inhabitants of Sumatra have always seen water liquid in their own climate, and they ought to regard the freezing of their rivers as a prodigy. But they have never seen water in Muscovy in winter, and so they cannot reasonably be sure what would happen there.

the testimony, considered separately and in itself, amounts to a complete proof. In that case we have proof against proof. The stronger must prevail, but with its force reduced in proportion to that of its opponent.

A miracle is a violation of the laws of nature. And since firm and unalterable experience has established these laws, the proof against a miracle, from the very nature of the fact, is as complete as any argument from experience could possibly be. Why is it more than probable that all people must die; that lead cannot, of itself, stay suspended in the air; that fire consumes wood and is put out by water? Only because these events are found to agree with the laws of nature, and it would take a violation of those laws—in other words, a miracle—to prevent them. Nothing counts as a miracle if it ever happens in the ordinary course of nature. It is no miracle that a man in apparently good health should die suddenly, because though more unusual than any other, has often been observed to happen to happen. But it is a miracle that a dead man should come back to life, because that has never been observed in any age or country. There must therefore be uniform experience against every miraculous event; otherwise the event would not deserve the name. And since uniform experience amounts to a proof, we have here a direct and complete *proof*, from the nature of the fact, against the existence of any miracle. Nor can such a proof be destroyed,

or the miracle made credible, except by an opposing proof that is stronger.[5]

91 The plain consequence is this (and it is a general maxim worth our attention): "No testimony is sufficient to establish a miracle unless the testimony is of such a kind that its falsehood would be more miraculous than the fact it is trying to establish. And even in that case there is a mutual cancelling of arguments, and the stronger gives us only the degree of assurance that corresponds to the force left over after subtracting the weaker." When someone tells me he saw a dead man brought back to life, I immediately ask myself which is more probable: that this person is either deceiving or deceived, or that the fact he relates really happened. I weigh the one miracle against the other. According to which I find stronger, I give my verdict, and I always reject the greater miracle. If the falsehood of his testimony would be more miraculous than the event he relates, then, and not until then, can he claim to command my belief or opinion.

5 HUME'S NOTE. Sometimes an event may not seem, *in itself*, contrary to the laws of nature, and yet, if it were real, it might be called a miracle because of certain circumstances, since *in fact* it is contrary to those laws. Suppose a person claiming divine authority were to command a sick person to be well, a healthy man to fall down dead, the clouds to pour rain, the winds to blow—in short, were to order many natural events that immediately followed his command. These might rightly be considered miracles, because in this case they really are contrary to the laws of nature. For if any suspicion remains that the event and the command coincided by accident, there is no miracle and no breach of the laws of nature. If this suspicion is removed, there is clearly a miracle and a breach of those laws, because nothing could be more contrary to nature than that the voice or command of a man should have such an influence. A miracle may be accurately defined as *a transgression of a law of nature by a particular volition of God, or by the intervention of some invisible agent*. A miracle may or may not be detectable by human beings; this does not change its nature and essence. Raising a house or a ship into the air is a visible miracle. Raising a feather, when the wind falls ever so slightly short of the force needed to do it, is just as real a miracle, though not so perceptible to us.

PART II

Hume argues that no testimony for a miracle has ever been strong enough to ground a religion.

[92] In the reasoning above, we have supposed that the testimony on which a miracle rests might possibly amount to a complete proof, and that its falsehood would be a real prodigy. But it is easy to show that we have been far too generous in this concession, and that no miraculous event has ever been established on such full evidence.

For, *first*, in all of history there is no miracle attested by a sufficient number of people who were of such unquestioned good sense, education, and learning as to guarantee that they were not deluded themselves; of such undoubted integrity as to put them beyond all suspicion of intending to deceive others; of such credit and reputation in the eyes of the world as to have a great deal to lose if caught in a falsehood; and who, at the same time, attest facts performed so publicly, and in so well-known a part of the world, that detection would be unavoidable. All these circumstances are required to give us full confidence in human testimony.

[93] *Second*: we can observe a principle in human nature which, if strictly examined, will be found to reduce drastically the confidence we might have, on human testimony, in any kind of prodigy. The maxim we usually follow in our reasoning is that objects we have no experience of resemble those we do; that what we have found most usual is always most probable; and that where arguments conflict, we should prefer those based on the greatest number of past observations. But though, following this rule, we readily reject any fact that is unusual and incredible to an ordinary degree, the mind does not always keep to the same rule as it goes further. When something utterly absurd and miraculous is asserted, the mind is if anything *more* ready to accept it, on account of the very feature that ought to destroy all its authority. The passion of *surprise* and *wonder* that miracles

arouse is a pleasant emotion, and so it gives us a noticeable inclination to believe the events that produce it. This goes so far that even those who cannot enjoy this pleasure directly, and cannot believe the miraculous events they are told about, still love to share the satisfaction secondhand, or on the rebound, and take pride and delight in arousing the amazement of others.

How greedily are travelers' tales of miracles swallowed—their descriptions of sea monsters and land monsters, their stories of wonderful adventures, strange peoples, and outlandish customs! But if the religious spirit joins itself to the love of wonder, that is the end of common sense, and human testimony in these circumstances loses all claim to authority. A religious devotee may be a fanatic, and imagine he sees what has no reality. He may know his story is false and yet persist in it, with the best intentions in the world, for the sake of promoting so holy a cause. Or, even where he is not deluded, vanity, stirred by so strong a temptation, works on him more powerfully than on other people in any other circumstances—and so does self-interest. His listeners may not have—and usually do not have—enough judgment to scrutinize his evidence. Whatever judgment they have, they give up on principle when it comes to these sublime and mysterious subjects. Or, even if they were ever so willing to use it, passion and a heated imagination disturb its proper working. Their credulity increases his impudence, and his impudence overpowers their credulity.

Eloquence at its height leaves little room for reason or reflection. Addressing itself entirely to the imagination or the emotions, it captivates willing listeners and subdues their understanding. Fortunately, it seldom reaches that height. But what a Cicero or a Demosthenes could scarcely achieve with a Roman or Athenian audience, every *Capuchin* friar, every traveling or local preacher, can achieve with the bulk of mankind—and to a greater degree—by playing on such crude and common passions.[6]

6 "Tully" is the traditional English name for Cicero. The Capuchins were an order of Franciscan friars known for popular preaching.

The many instances of forged miracles, prophecies, and supernatural events, which in every age have either been exposed by contrary evidence or expose themselves by their absurdity, amply prove mankind's strong inclination toward the extraordinary and the marvelous. They ought reasonably to make us suspicious of all such accounts. This is our natural way of thinking even about the most common and credible events. For instance, no kind of rumor starts so easily or spreads so fast, especially in the country and in provincial towns, as rumors about marriages. Two young people of equal station need only see each other twice for the whole neighborhood to pair them off at once. The pleasure of telling so interesting a piece of news, of passing it on, and of being the first to report it, spreads the word. And this is so well known that no sensible person pays attention to such reports until he finds them confirmed by stronger evidence. Don't the same passions, and others stronger still, incline the bulk of mankind to believe and report all religious miracles with the greatest vehemence and assurance?

94 *Third*: it is a strong presumption against all supernatural and miraculous accounts that they are found to abound chiefly among ignorant and barbarous nations. Or, if a civilized people has ever accepted any of them, that people will be found to have received them from ignorant and barbarous ancestors, who handed them down with the inviolable sanction and authority that always attach to received opinions. When we read the earliest histories of any nation, we are apt to imagine ourselves transported into some new world, where the whole frame of nature is out of joint, and every element operates differently from the way it does now. Battles, revolutions, plague, famine, and death are never the effect of the natural causes we experience. Prodigies, omens, oracles, and divine judgments quite overshadow the few natural events mixed in among them. But as the former grow sparser on every page as we come closer to enlightened ages, we soon learn that there is nothing mysterious or supernatural in the matter. It all comes from mankind's usual inclination toward the marvelous, which, though it may at times

be checked by good sense and learning, can never be thoroughly rooted out of human nature.

It's strange, a judicious reader is apt to say after reading these wonder-working historians, *that such prodigious events never happen in our own day.* But it is not at all strange, I hope, that people should lie in every age. You must surely have seen enough instances of that weakness. You have yourself heard many such marvelous tales get started which, treated with scorn by all the wise and judicious, were finally abandoned even by ordinary people. Rest assured that those famous lies which have spread and flourished to such monstrous heights began in the same way. But being sown in more suitable soil, they finally shot up into prodigies almost equal to the ones they describe.

It was a shrewd policy on the part of that false prophet Alexander—now forgotten, but once so famous—to stage the first scene of his impostures in Paphlagonia, where, as Lucian tells us, the people were extremely ignorant and stupid, and ready to swallow even the crudest deception. People at a distance, who are foolish enough to think the matter worth looking into at all, have no chance of getting better information. The stories reach them magnified by a hundred details. Fools busily spread the imposture, while the wise and learned are generally content to mock its absurdity without informing themselves of the particular facts by which it could be clearly refuted.[7] And so the impostor I mentioned was able to move on from his ignorant Paphlagonians to enlisting devotees even among Greek philosophers and men of the highest rank and distinction in Rome. He even caught the attention of the wise emperor Marcus Aurelius, so far as to make him stake the success of a military expedition on his deceptive prophecies.

The advantages of starting an imposture among an ignorant people are so great that even if the deception is too crude to fool most of them (*which, though seldom, is sometimes the case*), it has a much better chance of succeeding in distant countries than if

7 Alexander of Abonoteichus, a second-century AD religious impostor in Paphlagonia (northern Asia Minor), exposed by the satirist Lucian of Samosata.

the first scene had been staged in a city renowned for arts and learning. The most ignorant and barbarous of these barbarians carry the report abroad. None of their countrymen has wide correspondence, or enough credit and authority, to contradict and put down the deception. People's appetite for the marvelous has full scope to show itself. And so a story that is universally discredited where it began will pass for certain a thousand miles away. But had Alexander settled in Athens, the philosophers of that renowned marketplace of learning would at once have spread their view of the matter throughout the whole Roman Empire. Backed by such great authority, and presented with all the force of reason and eloquence, it would have opened mankind's eyes completely. It is true that Lucian, passing through Paphlagonia by chance, had the opportunity to perform this good service. But, much as it is to be wished, it does not always happen that every Alexander meets a Lucian ready to expose and unmask his impostures.

[95] I may add, as a *fourth* reason that weakens the authority of prodigies, that there is no testimony for any of them—even those that have not been explicitly exposed—that is not opposed by an infinite number of witnesses. So not only does the miracle destroy the credibility of the testimony, but the testimony destroys itself. To make this clearer, consider that in matters of religion, whatever is different is contrary; and it is impossible that the religions of ancient Rome, of Turkey, of Siam, and of China should all be established on any solid foundation. Every miracle claimed to have been performed in any of these religions (and all of them abound in miracles) aims directly at establishing the particular system to which it is attributed. So it has the same force, though more indirectly, to overthrow every other system. And in destroying a rival system, it also destroys the credibility of the miracles on which that system was established. All the prodigies of different religions must therefore be regarded as contrary facts, and the evidence for these prodigies, whether weak or strong, as opposed to one another. On this way of reasoning, when we believe any miracle of Muhammad or his suc-

cessors, our warrant is the testimony of a few barbarous Arabs. And on the other side, we must regard the authority of Livy, Plutarch, Tacitus—in short, of all the authors and witnesses, Greek, Chinese, and Roman Catholic, who have reported any miracle in their own religion—we must regard their testimony, I say, in the same light as if they had mentioned that Islamic miracle and explicitly contradicted it, with the same certainty they have for the miracle they report. This argument may seem too subtle and refined. But in reality it is no different from the reasoning of a judge who assumes that the credibility of two witnesses accusing someone of a crime is destroyed by the testimony of two others who affirm that he was two hundred leagues away at the very moment the crime is said to have been committed.

[96] One of the best-attested miracles in all secular history is the one Tacitus reports of Vespasian. The emperor cured a blind man in Alexandria with his spittle, and a lame man by the mere touch of his foot, in obedience to a vision of the god Serapis, who had told the two men to go to the emperor for these miraculous cures. The story can be read in that fine historian[8], and every circumstance in it seems to add weight to the testimony. It could be laid out at length with all the force of argument and eloquence, if anyone today cared to press the evidence for that discredited and idolatrous superstition.[9] Consider the gravity, steadiness, age, and integrity of so great an emperor—a man who all his life talked easily and familiarly with his friends and courtiers, and never put on the extraordinary airs of divinity that Alexander and Demetrius assumed.[10] Consider the historian: a contemporary writer, known for candor and truthfulness, and with all that perhaps the greatest and most penetrating mind of all antiquity—so free of any tendency to credulity that

8 HUME'S NOTE. *Histories*, book 4, chapter 81. Suetonius gives nearly the same account in his *Life* of Vespasian.

9 Vespasian was Roman emperor from AD 69 to 79; Serapis was a Greco-Egyptian god worshipped at Alexandria.

10 Demetrius Poliorcetes, a Macedonian king of the late fourth century BC, accepted divine honors from the Athenians.

he actually stands accused of the opposite, of atheism and irreverence. Consider the people on whose authority he reported the miracle: men of established reputation for judgment and honesty, as we may reasonably assume; eyewitnesses of the event, who went on confirming their testimony after the Flavian family had lost the empire and could no longer pay anyone for a lie. *Utrumque, qui interfuere, nunc quoque memorant, postquam nullum mendacio pretium* [Those who were present still tell of both cures, now that there is nothing to be gained by lying]. Add to this the public nature of the events as reported, and it will be clear that hardly any stronger evidence could be imagined—for so gross and so obvious a falsehood.

There is also a memorable story told by Cardinal de Retz that well deserves our attention. When that scheming politician fled into Spain to escape the persecution of his enemies, he passed through Saragossa, the capital of Aragon. There, in the cathedral, he was shown a man who had served for seven years as a doorkeeper and was known to everyone in town who had ever worshipped at that church. For all that time he had been seen missing a leg; but he had recovered the limb by having holy oil rubbed on the stump, and the cardinal assures us that he saw him with two legs.[11] The miracle was vouched for by all the canons of the church, and everyone in town was called on to confirm it; the cardinal found them, by their zealous devotion, to be thorough believers. Here the narrator was a contemporary of the supposed wonder, a man of skeptical and freethinking character as well as great intelligence. The miracle was of so *singular* a kind that it could hardly be faked. And the witnesses were very numerous, and all of them, in a sense, spectators of the fact they testified to. What adds enormously to the force of the evidence, and may double our surprise, is that the cardinal himself, who tells the story, seems not to believe a word of it, and so cannot be suspected of any part in the holy fraud. He rightly judged that to reject a fact of this kind, one need not be able to disprove

11 Cardinal de Retz (1613–1679) was a French churchman and political intriguer whose *Memoirs* were widely read.

the testimony precisely, or to trace its falsehood through all the knavery and credulity that produced it. He knew that this was usually quite impossible at any small distance of time and place, and extremely difficult even for someone on the spot, given the bigotry, ignorance, cunning, and roguery of a large part of mankind. So he concluded, like a sound reasoner, that such evidence carried its falsehood on its very face, and that a miracle supported by any human testimony was more properly a subject for ridicule than for argument.

Surely no one person ever had more miracles ascribed to him than those recently said to have been worked in France at the tomb of the Abbé Paris, the famous Jansenist, whose sanctity the people were so long deluded by. Curing the sick, giving hearing to the deaf and sight to the blind were talked of everywhere as the usual effects of that holy grave. But what is more extraordinary, many of the miracles were proved right on the spot, before judges of unquestioned integrity, attested by witnesses of standing and distinction, in a learned age, and on the most prominent stage in the world today.[12] Nor is that all. An account of them was published and circulated everywhere. And the *Jesuits*—a learned body, backed by the civil authorities, and sworn enemies of the opinions the miracles were supposed to support

12 The Jansenists were a rigorist Catholic movement opposed by the Jesuits; François de Pâris died in 1727, and reported cures at his tomb in the Saint-Médard cemetery drew crowds until the king closed it in 1732.

—were never able to clearly refute or expose them[13]. Where will we find so many circumstances combining to confirm a single fact? And what do we have to set against such a cloud of witnesses, except the absolute impossibility, or miraculous nature, of the events they report? And that alone, surely, will be regarded by all reasonable people as a sufficient refutation.

[97] Does it follow that, because some human testimony has the greatest force and authority in some cases—when it reports the battle of Philippi or Pharsalia, for instance—therefore all kinds of testimony must have equal force and authority in all cases? Suppose that the factions of Caesar and Pompey had each claimed victory in these battles, and that the historians of each party had uniformly given the advantage to their own side. How could mankind, at this distance, have decided between them? The contradiction is just as strong between the miracles reported by Herodotus or Plutarch and those handed down by Mariana, Bede, or any monkish historian.

The wise give only a very Academic faith—a skeptic's faith—to any report that flatters the passions of the reporter—whether it glorifies his country, his family, or himself, or in any other way chimes with his natural inclinations and tendencies. But what greater temptation is there than to appear as a missionary, a prophet, an ambassador from heaven? Who would not face many dangers and hardships to attain so exalted a role? Or if, with the help of vanity and an overheated imagination, a man has first converted himself and fallen in earnest for the delusion, who ever hesitates to use pious frauds in support of so holy and worthy a cause?

Here the smallest spark may kindle the greatest flame, because the fuel is always ready. The *avidum genus auricularum*

In the case of Mademoiselle Thibaut, he sent the famous De Sylva to examine her, and his evidence is very curious. The physician declared that she could not possibly have been as ill as the witnesses proved, because she could not possibly have recovered so completely, in so short a time, as he found her. He reasoned, like a man of sense, from natural causes. But the other side told him that the whole thing was a miracle, and that his evidence was the very best proof of it.

The Molinists were in a sad dilemma. They did not dare assert that human evidence is absolutely insufficient to prove a miracle. They were forced to say that these miracles were worked by witchcraft and the devil. But they were told that this was the resort of the Jews of old.

[the tribe with greedy ears][14] the gawking populace swallow

No Jansenist was ever at a loss to explain why the miracles stopped when the churchyard was shut by the king's edict. It was touching the tomb that produced these extraordinary effects, and when no one could approach the tomb, no effects could be expected. God, of course, could have thrown down the walls in a moment; but he is master of his own graces and works, and it is not for us to account for them. He did not throw down the walls of every city, as he did those of Jericho at the sound of the rams' horns, nor break open the prison of every apostle, as he did St. Paul's.

No less a man than the Duc de Châtillon, a duke and peer of France of the highest rank and family, testifies to a miraculous cure performed on one of his servants, who had lived for several years in his house with a visible and obvious infirmity. I will end by observing that no clergy are more celebrated for strictness of life and conduct than the secular clergy of France, particularly the rectors, or parish priests, of Paris, who bear witness to these impostures. The learning, genius, and integrity of the gentlemen of Port-Royal, and the austerity of its nuns, have been celebrated all over Europe. Yet they all testify to a miracle worked on the niece of the famous Pascal, whose holiness of life and extraordinary abilities are well known. The famous Racine gives an account of this miracle in his well-known history of Port-Royal, and supports it with all the proofs that a multitude of nuns, priests, physicians, and men of the world, all of unquestioned credibility, could supply. Several men of letters, the bishop of Tournai in particular, thought this miracle so certain that they used it to refute atheists and freethinkers. The queen regent of France, who was strongly prejudiced against Port-Royal, sent her own physician to examine the miracle, and he came back a complete convert. In short, the supernatural cure was so indisputable that it saved that famous convent, for a time, from the ruin the Jesuits were threatening it with. Had it been a cheat, such shrewd and powerful opponents would certainly have exposed it, and that would have hastened the ruin of those who contrived it. Our theologians can build a formidable castle out of such contemptible materials—what a prodigious structure could they have raised from these circumstances, and many others I have not mentioned! How often would the great names of Pascal, Racine, Arnauld, and Nicole have rung in our ears? But if they are wise, they had better adopt the miracle, as worth a thousand times more than all the rest of the collection. Besides, it may serve their purpose very well. For that miracle was really performed by the touch of an authentic holy prickle of the holy thorn, which made up the holy crown, which, etc.

TRANSLATOR'S NOTE. The Parlement of Paris was a high court of law, not a legislature.

TRANSLATOR'S NOTE. "Molinists" here means the Jesuit party, after the Jesuit theologian Luis de Molina.

TRANSLATOR'S NOTE. Port-Royal was the Jansenist convent near Paris, associated with a circle of scholars that included Pascal, Arnauld, and Nicole.

TRANSLATOR'S NOTE. In 1656 Pascal's niece Marguerite Périer was reportedly cured of an eye ulcer by touching a relic said to be a thorn from Christ's crown.

greedily and without examination whatever feeds superstition and encourages wonder.

How many stories of this kind have been exposed and exploded in their infancy, in every age? How many more have been celebrated for a while and afterward sunk into neglect and oblivion? So where such reports are flying about, the explanation of the phenomenon is obvious. We judge in keeping with regular experience and observation when we account for it by the known and natural principles of credulity and delusion. And rather than turn to so natural an explanation, shall we accept a miraculous violation of the most firmly established laws of nature?

I need hardly mention how difficult it is to detect a falsehood in any private or even public history in the very place where it is said to have happened—let alone when the scene is removed even a short distance. Even a court of law, with all the authority, precision, and judgment it can bring to bear, is often at a loss to tell truth from falsehood about the most recent actions. And the matter never gets settled at all if it is left to the usual method of quarrels, debates, and flying rumors—especially when people's passions have taken sides.

When new religions are in their infancy, the wise and learned usually think the matter too trivial to deserve their attention. And when later they would gladly expose the cheat in order to undeceive the deluded multitude, the moment has passed, and the records and witnesses that might have cleared the matter up have perished beyond recovery.

No means of detection remain except those drawn from the testimony of the reporters itself. And these, though always sufficient for the judicious and well-informed, are usually too subtle for ordinary people to grasp.

[98] On the whole, then, it appears that no testimony for any kind of miracle has ever amounted to a probability, much less a proof. And even if it did amount to a proof, it would be opposed by another proof, drawn from the very nature of the fact it tried

14 HUME'S NOTE. Lucretius.

to establish. It is experience alone that gives authority to human testimony, and it is the same experience that assures us of the laws of nature. So when these two kinds of experience conflict, all we can do is subtract the one from the other and adopt an opinion on one side or the other, with the degree of assurance that the remainder supplies. But by the principle explained here, in the case of every popular religion this subtraction amounts to complete annihilation. We may therefore lay it down as a maxim that no human testimony can have enough force to prove a miracle and make it a legitimate foundation for any such system of religion.

[99] Please note the qualification I am making when I say that a miracle can never be proved so as to be the foundation of a system of religion. For I grant that otherwise there may possibly be miracles, or violations of the usual course of nature, of a kind that admits of proof from human testimony—though perhaps it will be impossible to find any such in all the records of history. Suppose, for example, that all authors, in all languages, agree that from the first of January 1600 there was total darkness over the whole earth for eight days. Suppose that the tradition of this extraordinary event is still strong and vivid among the people, and that all travelers returning from foreign countries bring us accounts of the same tradition, without the slightest variation or contradiction. Clearly our scientists today, instead of doubting the fact, ought to accept it as certain and search for the causes it might have come from. The decay, corruption, and dissolution of nature is an event made probable by so many analogies that any phenomenon that seems to tend toward that catastrophe comes within the reach of human testimony—if that testimony is very extensive and uniform.

But suppose all the historians who write about England agreed that on the first of January 1600 Queen Elizabeth died; that both before and after her death she was seen by her physicians and the whole court, as is usual with people of her rank; that her successor was acknowledged and proclaimed by Parliament; and that, after being buried for a month, she reappeared,

took back the throne, and governed England for three years. I confess I would be surprised that so many odd circumstances coincided, but I would not have the slightest inclination to believe so miraculous an event. I would not doubt her supposed death, or the other public circumstances that followed it. I would only maintain that the death was feigned, and that it neither was nor possibly could have been real. You would object in vain that it is difficult, almost impossible, to deceive the world in an affair of such importance; that the famous queen was wise and of sound judgment; that she could gain little or nothing from so poor a trick. All this might astonish me. But I would still reply that the knavery and folly of men are such common phenomena that I would sooner believe the most extraordinary events arose from their combination than accept so striking a violation of the laws of nature.

But if this miracle were attributed to some new system of religion, men in every age have been so often taken in by ridiculous stories of that kind that this very circumstance would be full proof of a cheat. It would be enough to make any sensible person not only reject the fact, but reject it without further examination. Though the Being to whom the miracle is attributed is in this case almighty, that does not make it one bit more probable. For we cannot possibly know the attributes or actions of such a Being except from our experience of his productions in the usual course of nature. This still brings us back to past observation, and forces us to compare the instances of violated truth in human testimony with the instances of violated laws of nature by miracles, in order to judge which is more likely and probable. Since violations of truth are more common in testimony about religious miracles than in testimony about any other matter of fact, this must greatly weaken the authority of such testimony, and lead us to resolve, as a general rule, never to pay it any attention, however plausible the pretext it comes dressed in.

Lord Bacon seems to have adopted the same principles of reasoning. “We ought,” he says, “to make a collection or particular history of all monsters and prodigious births or productions

—in a word, of everything new, rare, and extraordinary in nature. But this must be done with the strictest scrutiny, lest we depart from the truth. Above all, every report that depends in any degree on religion, like the prodigies of Livy, must be treated as suspect. So too must everything found in the writers on natural magic or alchemy, and authors of that kind, who all seem to have an unconquerable appetite for falsehood and fable[15]."

100 I am all the more pleased with the method of reasoning set out here because I think it may serve to confound those dangerous friends, or disguised enemies, of the *Christian Religion* who have undertaken to defend it by the principles of human reason. Our most holy religion is founded on *Faith*, not on reason; and a sure way to expose it is to put it to a test it is by no means fitted to withstand. To make this clearer, let us examine the miracles related in scripture. And so as not to lose ourselves in too wide a field, let us confine ourselves to those we find in the *Pentateuch*, which we will examine according to the principles of these would-be Christians: not as the word or testimony of God himself, but as the work of a merely human writer and historian. Here, then, we must first consider a book handed to us by a barbarous and ignorant people, written in an age when they were still more barbarous, and in all probability long after the events it relates. It is corroborated by no independent testimony, and it resembles the fabulous accounts every nation gives of its own origin. On reading this book, we find it full of prodigies and miracles. It gives an account of a state of the world and of human nature entirely different from the present one; of our fall from that state; of human lifespans extended to nearly a thousand years; of the destruction of the world by a flood; of the arbitrary choice of one people as heaven's favorites—and that people the author's own countrymen; of their deliverance from bondage by the most astonishing prodigies imaginable. I ask anyone to lay his hand on his heart and, after serious consideration, declare whether he thinks the falsehood of such a book, supported by

15 HUME'S NOTE. *Novum Organum*, book 2, aphorism 29.

such testimony, would be more extraordinary and miraculous than all the miracles it relates. Yet that is what is required for it to be accepted, by the standards of probability established above.

101 What we have said about miracles applies without any change to prophecies. Indeed, all prophecies are real miracles, and only as such can they be admitted as proofs of any revelation. If foretelling future events did not exceed the capacity of human nature, it would be absurd to use any prophecy as an argument for a divine mission or authority from heaven. So, on the whole, we may conclude that the *Christian Religion* not only was attended by miracles at first, but even today cannot be believed by any reasonable person without one. Mere reason is not enough to convince us of its truth. And whoever is moved by *Faith* to assent to it is aware of a continuing miracle in his own person, one that overturns all the principles of his understanding and gives him a determination to believe what is most contrary to custom and experience.

Of a particular Providence and of a future State

Section XI

In a dialogue, a friend speaking as Epicurus challenges the design argument for providence and an afterlife.

102 I was recently in conversation with a friend who loves skeptical paradoxes. He put forward many principles I cannot at all approve of. But since they seem curious, and bear some relation to the chain of reasoning carried on throughout this enquiry, I will copy them here from memory as accurately as I can, and submit them to the reader's judgment.

Our conversation began with my admiring the remarkable good fortune of philosophy. More than anything else, philosophy needs complete liberty, and it thrives chiefly on the free clash of opinions and arguments. Yet it was born in an age and country of freedom and toleration, and was never hampered, even in its most extravagant principles, by any creeds, confessions, or penal laws. Apart from the banishment of Protagoras and the death of Socrates—and the latter partly had other motives—there are scarcely any examples in ancient history of the bigoted jealousy with which our own age is so infested. Epicurus lived at Athens to an advanced age in peace and tranquility. Epicureans[1] were even allowed to become priests and to officiate at the altar in the most sacred rites of the established religion. And public support[2], in pensions and salaries, was granted

1 HUME'S NOTE. Lucian, *The Symposium, or The Lapiths.*
2 HUME'S NOTE. Lucian, *The Eunuch.*

equally by the wisest of all the Roman emperors[3] to the teachers of every school of philosophy. How necessary such treatment was to philosophy in her early youth is easy to see if we reflect that even now, when she may be supposed hardier and stronger, she has great difficulty bearing the inclemency of the seasons and the harsh winds of slander and persecution that blow on her.[4]

You admire as the remarkable good fortune of philosophy, my friend said, what seems to follow from the natural course of things and to be unavoidable in every age and nation. The stubborn bigotry you complain of as so fatal to philosophy is really her own offspring. Having allied himself with superstition, he cuts himself off entirely from his parent's interests and becomes her most relentless enemy and persecutor. The speculative dogmas of religion, which now occasion such furious disputes, could not possibly have been conceived or accepted in the early ages of the world. Mankind was then entirely illiterate, and formed an idea of religion better suited to its feeble understanding, making up its sacred doctrines mostly of stories that were objects of traditional belief rather than of argument or debate. So once the first alarm was over—the alarm raised by the philosophers' new paradoxes and principles—these teachers seem, throughout the rest of antiquity, to have lived in great harmony with the established superstition, and to have divided mankind fairly between them: the philosophers claiming all the learned and wise, superstition keeping all the common and illiterate.

[103] It seems, then, I said, that you leave politics entirely out of the question. You never suppose that a wise ruler might have just reason to be wary of certain philosophical doctrines, like those of Epicurus. By denying the existence of God, and therefore a providence and a future life, these seem to loosen the bonds of morality to a great extent, and may for that reason be thought harmful to the peace of civil society.

3 HUME'S NOTE. Lucian and Dio.

4 The "wisest of all the Roman emperors" is Marcus Aurelius, who endowed chairs of philosophy at Athens.

I know, he replied, that in fact these persecutions never, in any age, came from calm reason or from experience of philosophy's harmful consequences, but arose entirely from passion and prejudice. But what if I went further and claimed that if Epicurus had been accused before the people by any of the *sycophants*, or informers, of those days, he could easily have defended his cause, and shown his philosophical principles to be just as beneficial as those of his opponents, who tried so zealously to expose him to public hatred and suspicion?[5]

I wish, I said, you would try your eloquence on so extraordinary a topic and make a speech for Epicurus—one that might satisfy not the mob of Athens (if you will allow that ancient and refined city to have had a mob) but the more philosophical part of his audience, those who might be supposed capable of following his arguments.

On those conditions it would not be hard, he replied. If you like, I will imagine myself Epicurus for a moment and have you stand in for the Athenian people, and I will deliver you a speech that will fill the whole urn with white beans and leave not a single black one to gratify my enemies' malice.[6]

Very well. Please go ahead on those terms.

104 I come here, men of Athens, to defend in your assembly what I maintained in my school, and I find myself prosecuted by furious opponents instead of reasoning with calm and dispassionate inquirers. Your deliberations, which by rights should be directed to questions of the public good and the interest of the state, are diverted to discussions of speculative philosophy; and these grand but perhaps fruitless inquiries are taking the place of your more ordinary but more useful business. But as far as I can, I will prevent this abuse. We will not argue here about the origin and government of worlds. We will only ask how far such questions concern the public interest. And if I can persuade you

5 In Athens a "sycophant" was a professional informer who brought malicious prosecutions.

6 Athenian jurors voted by dropping beans or pebbles into an urn: white to acquit, black to condemn.

that they make no difference whatever to the peace of society and the security of government, I hope you will promptly send us back to our schools, to examine there at our leisure the most sublime question in all philosophy—but also the most speculative.

The religious philosophers, not content with the traditions of your forefathers and the doctrine of your priests (in which I willingly acquiesce), indulge a rash curiosity by trying to see how far they can establish religion on the principles of reason. In doing so they stir up, instead of settling, the doubts that naturally arise from careful and searching inquiry. They paint, in the most magnificent colors, the order, beauty, and wise arrangement of the universe. Then they ask whether such a glorious display of intelligence could come from a chance collision of atoms, or whether chance could produce what the greatest genius can never admire enough. I will not examine whether this argument is sound. I will grant it to be as solid as my opponents and accusers could wish. It is enough if I can prove, from this very reasoning, that the question is entirely speculative—and that when, in my philosophical discussions, I deny a providence and a future life, I am not undermining the foundations of society. I am putting forward principles that they themselves, on their own grounds, must admit to be solid and satisfactory, if they argue consistently.

[105] You, then, my accusers, have acknowledged that the chief or only argument for the existence of God (which I have never questioned) comes from the order of nature. There appear in it such marks of intelligence and design that you think it absurd to assign as its cause either chance or the blind, unguided force of matter. You grant that this is an argument from effects to causes. From the order of the work, you infer that there must have been planning and forethought in the workman. You grant that if you cannot make this out, your conclusion fails; and you do not claim to establish the conclusion any more broadly than the phenomena of nature justify. These are your concessions. I ask you to note the consequences.

When we infer a particular cause from an effect, we must proportion the one to the other. We are never entitled to ascribe to the cause any qualities beyond exactly those sufficient to produce the effect. A ten-ounce body raised on one side of a scale can prove that the counterweight on the other side exceeds ten ounces, but it can never give a reason to think it exceeds a hundred. If the cause we assign to an effect is not sufficient to produce it, we must either reject that cause or add to it such qualities as will bring it into proper proportion with the effect. But if we ascribe further qualities to it, or claim it can produce other effects, we are only indulging in the license of conjecture, arbitrarily supposing the existence of qualities and energies without reason or authority.

The same rule holds whether the cause assigned is brute, unconscious matter or a rational, intelligent being. If the cause is known only through the effect, we should never ascribe to it any qualities beyond those precisely required to produce the effect. Nor can we, by any rules of sound reasoning, turn back from the cause and infer other effects from it, beyond those through which alone we know it. No one, merely from seeing one of Zeuxis's paintings, could know that he was also a sculptor or architect, and an artist no less skilled in stone and marble than in color.[7] The talents and taste displayed in the particular work before us—these we may safely conclude the workman possesses. The cause must be proportioned to the effect. And if we proportion it exactly and precisely, we will never find in it any qualities that point further, or that allow an inference about any other design or performance. Such qualities would have to be something beyond what is merely required to produce the effect we are examining.

106 So, granting that the gods are the authors of the existence or order of the universe, it follows that they possess exactly the degree of power, intelligence, and benevolence that appears in their workmanship. Nothing further can ever be proved, unless we call on exaggeration and flattery to make up for the short-

7 Zeuxis was a celebrated Greek painter of the fifth century BC.

comings of argument and reasoning. As far as the traces of any attributes now appear, just so far may we conclude that those attributes exist. To suppose further attributes is mere hypothesis—still more to suppose that in distant regions of space or ages of time there has been, or will be, a more magnificent display of these attributes, and a scheme of government better suited to such imaginary virtues. We can never be allowed to climb from the universe, the effect, up to Jupiter, the cause, and then climb back down to infer some new effect from that cause—as if the present effects alone were not entirely worthy of the glorious attributes we ascribe to that deity. Since our knowledge of the cause comes solely from the effect, the two must be exactly matched to each other; and neither can ever point to anything further, or serve as the basis of any new inference and conclusion.

You find certain phenomena in nature. You look for a cause or author. You imagine you have found him. Afterward you become so enamored of this offspring of your brain that you think it impossible he should not produce something greater and more perfect than the present scene of things, which is so full of evil and disorder. You forget that this supreme intelligence and benevolence are entirely imaginary, or at least without any foundation in reason, and that you have no grounds for ascribing to him any qualities except those you see he has actually exercised and displayed in his works. So, philosophers, let your gods be suited to the present appearances of nature. And do not presume to alter those appearances by arbitrary suppositions, to make them fit the attributes you so fondly ascribe to your deities.

[107] When priests and poets, backed by your authority, men of Athens, talk of a golden or silver age that came before the present state of vice and misery, I listen to them with attention and reverence. But when philosophers, who claim to disregard authority and to cultivate reason, say the same thing, I confess I do not pay them the same obedient submission and pious deference. I ask: who carried them up into the heavens, who admitted

them to the councils of the gods, who opened the book of fate to them, that they so rashly declare their deities have carried out, or will carry out, any purpose beyond what has actually appeared? If they tell me they have climbed up by the steps, or the gradual ascent, of reason, by drawing inferences from effects to causes, I still insist that they have helped reason's climb along with the wings of imagination. Otherwise they could not switch their method of inference like this and argue from causes to effects—presuming that a more perfect production than the present world would better suit such perfect beings as the gods, and forgetting that they have no reason to ascribe to these heavenly beings any perfection or any attribute except what can be found in the present world.

Hence all the fruitless effort to explain away the bad appearances of nature and save the honor of the gods, while we must still admit the reality of the evil and disorder the world so abounds in. We are told that the stubborn and intractable qualities of matter, or the observance of general laws, or some such reason, is the sole cause that limited Jupiter's power and benevolence, and forced him to create mankind and every sentient creature so imperfect and so unhappy. These attributes, then, are apparently taken for granted in advance, in their fullest extent. And on that assumption, I admit, such conjectures may perhaps be accepted as plausible explanations of the evils we observe. But still I ask: why take these attributes for granted? Why ascribe to the cause any qualities except those that actually appear in the effect? Why rack your brain to justify the course of nature on suppositions that, for all you know, may be entirely imaginary, and of which no traces are to be found in the course of nature?

The religious hypothesis, therefore, must be regarded only as one particular way of accounting for the visible phenomena of the universe. But no sound reasoner will ever presume to infer a single fact from it, or to alter or add to the phenomena in a single detail. If you think the appearances of things prove such causes, you may draw an inference about the existence of those

causes. In such complicated and lofty subjects, everyone should be allowed the liberty of conjecture and argument. But there you ought to stop. If you come back down and, arguing from your inferred causes, conclude that some other fact has existed or will exist in the course of nature that would more fully display particular attributes, I must warn you that you have abandoned the method of reasoning proper to this subject. You have certainly added something to the attributes of the cause beyond what appears in the effect. Otherwise you could never, with any tolerable sense or propriety, add anything to the effect to make it more worthy of the cause.

[108] Where, then, is the offensiveness of the doctrine I teach in my school—or rather, examine in my gardens? What do you find in this whole question that touches in the least on the security of good morals, or on the peace and order of society?[8]

You say I deny a providence, a supreme governor of the world who guides the course of events, punishes the wicked with disgrace and disappointment, and rewards the virtuous with honor and success in all their undertakings. But surely I do not deny the course of events itself, which lies open to everyone's inquiry and examination. I acknowledge that in the present order of things, virtue brings more peace of mind than vice and meets with a kinder reception from the world. I am aware that, according to mankind's past experience, friendship is the chief joy of human life, and moderation the only source of tranquility and happiness. I never hesitate between a virtuous and a vicious course of life; I am aware that, to a well-disposed mind, every advantage lies with the former. And what more can you say, granting all your suppositions and reasonings? You tell me, it is true, that this arrangement of things comes from intelligence and design. But whatever it comes from, the arrangement itself —on which our happiness or misery, and so our conduct and behavior in life, depend—is still the same. I, as much as you, am still free to regulate my behavior by my experience of past

8 Epicurus taught in a garden in Athens, and his school was known as "the Garden."

events. And if you claim that, once a divine providence and a supreme distributive justice in the universe are granted, I ought to expect some more particular reward for the good and punishment for the wicked, beyond the ordinary course of events, I find here the same fallacy I have already tried to expose. You persist in imagining that if we grant the divine existence you argue for so earnestly, you may safely infer consequences from it, and add something to the experienced order of nature by arguing from the attributes you ascribe to your gods. You seem to forget that all your reasoning on this subject can only run from effects to causes, and that every argument drawn from causes to effects must necessarily be a gross sophism. For you cannot possibly know anything about the cause except what you have previously—not inferred, but found in full—in the effect.

[109] But what must a philosopher think of those empty reasoners who, instead of treating the present scene of things as the sole object of their contemplation, turn the whole course of nature upside down, making this life merely a passage to something beyond—a porch leading to a greater and vastly different building, a prologue that serves only to introduce the play and give it more grace and propriety? Where, do you think, can such philosophers get their idea of the gods? From their own fancy and imagination, surely. For if they got it from the present phenomena, it would never point to anything beyond them, but would be exactly adjusted to them. That the divinity may *possibly* have attributes we have never seen exercised, or may be governed by principles of action we cannot see being fulfilled—all this will be freely granted. But it is still mere *possibility* and hypothesis. We can never have reason to *infer* any attributes or principles of action in him except so far as we know them to have been exercised and fulfilled.

Are there any signs of a distributive justice in the world? If you answer yes, I conclude that, since justice is exercised here, it is fulfilled here. If you answer no, I conclude that you then have no reason to ascribe justice, in our sense of it, to the gods. If you take a middle position between yes and no—saying that the

justice of the gods is at present exercised in part, but not to its full extent—I answer that you have no reason to give it any particular extent beyond what you see it exercising *at present*.

110 So, men of Athens, I bring the dispute with my opponents to a quick conclusion. The course of nature lies open to my contemplation as much as to theirs. The experienced sequence of events is the great standard by which we all regulate our conduct. Nothing else can be appealed to on the battlefield or in the senate. Nothing else ought ever to be heard of in the school or the study. In vain would our limited understanding try to break through those boundaries, which are too narrow for our fond imagination. When we argue from the course of nature and infer a particular intelligent cause that first gave order to the universe and still preserves it, we embrace a principle that is both uncertain and useless. It is uncertain, because the subject lies entirely beyond the reach of human experience. It is useless, because our knowledge of this cause comes entirely from the course of nature, so we can never, by the rules of sound reasoning, return from the cause with any new inference, or add to the common, experienced course of nature and establish any new principles of conduct and behavior.

111 I notice, I said, when I saw he had finished his speech, that you don't neglect the trick of the demagogues of old. Since you chose to have me stand in for the people, you are winning my favor by embracing principles you know I have always been particularly attached to. But granting that you make experience (as I think you should) the only standard of our judgment on this and all other questions of fact, I have no doubt that from that very experience you appeal to, it may be possible to refute the reasoning you have put into Epicurus's mouth. Suppose, for instance, you saw a half-finished building, surrounded by heaps of brick, stone, and mortar, and all the tools of masonry. Couldn't you *infer* from the effect that it was a work of design and planning? And couldn't you then go back from this inferred cause and infer new additions to the effect—concluding that the building would soon be finished and would receive every fur-

ther improvement that skill could give it? If you saw the print of a single human foot on the beach, you would conclude that a man had passed that way, and that he had also left prints of his other foot, though they had been wiped out by the shifting sand or the tide. Why, then, do you refuse to allow the same kind of reasoning about the order of nature? Think of the world and this present life as merely an unfinished building, from which you can infer a superior intelligence. Then, arguing from that superior intelligence, which can leave nothing unfinished, why can't you infer a more complete scheme or plan, which will be brought to completion at some distant point in space or time? Aren't these two ways of reasoning exactly alike? And on what pretext can you accept the one while rejecting the other?

112 The infinite difference between the subjects, he replied, is reason enough for the difference in my conclusions. With works of *human* skill and design, it is legitimate to move from the effect to the cause, and then back from the cause to form new inferences about the effect, and to consider what changes it has probably undergone or may still undergo. But what is the basis of this kind of reasoning? Plainly this: man is a being we know from experience. We are familiar with his motives and designs, and his plans and inclinations hang together in a certain connection and coherence, according to the laws that nature has laid down for governing such a creature. So when we find that some work came from human skill and effort, we can draw a hundred inferences about what may be expected from its maker, because we already know the nature of the animal from other sources. And all these inferences will be grounded in experience and observation. But if we knew man only from the single work or product we were examining, we could not argue this way. In that case, our knowledge of every quality we ascribe to him would come from that product, so those qualities could not point to anything further or support any new inference. A footprint in the sand, taken by itself, can prove only that some shape fitted to it produced it. But the print of a human foot also proves, from our other experience, that there was probably another

foot, which left its print too, though it has been erased by time or some other accident. Here we climb from the effect to the cause, and then, coming back down from the cause, infer changes in the effect. But this is not a continuation of one simple chain of reasoning. In this case we bring in a hundred other experiences and observations about the *usual* shape and limbs of that species of animal. Without them, this way of arguing would have to be judged fallacious and sophistical.

113 It is not the same with our reasoning from the works of nature. God is known to us only through his works. He is a single being in the universe, not included under any species or genus whose observed attributes or qualities would let us infer, by analogy, any attribute or quality in him. Since the universe shows wisdom and goodness, we infer wisdom and goodness. Since it shows a particular degree of these perfections, we infer a particular degree of them, exactly fitted to the effect we are examining. But we can never be entitled, by any rule of sound reasoning, to infer or suppose further attributes, or further degrees of the same attributes. And without some such license to suppose, we cannot argue from the cause, or infer any change in the effect beyond what we have directly observed. Greater good produced by this Being would have to prove a greater degree of goodness. A fairer distribution of rewards and punishments would have to come from a greater regard for justice and fairness. Every supposed addition to the works of nature adds to the attributes of the Author of nature. So, having no reason or

argument to support it, it can never be accepted as anything but mere conjecture and hypothesis.[9]

The great source of our error on this subject, and of the unlimited license we allow ourselves in conjecture, is that we silently put ourselves in the place of the Supreme Being. We conclude that he will always act as we ourselves, in his position, would have thought reasonable and desirable. But the ordinary course of nature can convince us that almost everything is governed by principles and maxims very different from ours. And besides that, it plainly goes against every rule of analogy to reason from the intentions and plans of men to those of a Being so different and so far superior. In human nature there is a certain coherence of designs and inclinations, known from experience. So when some fact has revealed one of a man's intentions, it is often reasonable, on the basis of experience, to infer another, and to draw a long chain of conclusions about his past or future conduct. But this kind of reasoning can never apply to a Being so remote and incomprehensible—one who bears far less resemblance to any other being in the universe than the sun does to a wax candle, and who reveals himself only through a few faint traces or outlines, beyond which we have no right to ascribe any attribute or perfection to him. What we imagine to be a higher perfection may really be a defect. Or even if it were

9 HUME'S NOTE. In general, I think it can be laid down as a maxim that when a cause is known only through its particular effects, it must be impossible to infer any new effects from that cause. For the qualities needed to produce these new effects, along with the old ones, would have to be different from, or superior to, or wider in operation than, the qualities that produced only the original effect—and that effect is the sole source of our knowledge of the cause. So we can never have any reason to suppose that such qualities exist. Nor does it remove the difficulty to say that the new effects come simply from a continuation of the same energy already known from the first effects. For even granting that this is so (which can seldom be supposed), the very continuation and exertion of a similar energy (it cannot be absolutely the same)—this exertion of a similar energy, I say, at a different point in space and time, is a highly arbitrary supposition. There cannot possibly be any trace of it in the effects, which are the original source of all our knowledge of the cause. Let the *inferred* cause be exactly proportioned to the known effect (as it should be), and it cannot possibly have any qualities from which new or different effects could be *inferred*.

ever so much a perfection, to ascribe it to the Supreme Being where it does not appear to have been fully exercised in his works smacks more of flattery and eulogy than of sound reasoning and good philosophy. So all the philosophy in the world, and all the religion—which is nothing but a kind of philosophy—will never be able to carry us beyond the ordinary course of experience, or give us rules of conduct different from those supplied by reflecting on common life. No new fact can ever be inferred from the religious hypothesis. No event can be foreseen or foretold, and no reward or punishment expected or feared, beyond what is already known through practice and observation. So my defense of Epicurus still looks solid and satisfactory. The political interests of society have no connection with philosophical disputes about metaphysics and religion.

[114] There is still one point, I replied, that you seem to have overlooked. Even if I grant your premises, I must deny your conclusion. You conclude that religious doctrines and reasoning *can* have no influence on life because they *ought* to have none. You never consider that people do not reason the way you do. They draw many consequences from their belief in a divine being, and suppose that God will punish vice and reward virtue beyond what appears in the ordinary course of nature. Whether their reasoning is sound or not doesn't matter. Its influence on their lives and conduct will be the same either way. And those who try to free them from such prejudices may, for all I know, be good reasoners, but I cannot call them good citizens or statesmen. For they free people from one restraint on their passions, and in one respect make it easier and safer to break the laws of society.

Still, I may perhaps agree with your general conclusion in favor of liberty, though on different premises from the ones you try to base it on. I think the state ought to tolerate every philosophical principle. There is no instance of any government's political interests suffering from such tolerance. Philosophers are not given to fanaticism. Their doctrines hold little appeal for the people. And no restraint can be placed on their reasoning

without dangerous consequences for the sciences, and even for the state—since it paves the way for persecution and oppression on matters in which people generally are far more deeply interested and involved.

115 But on your main topic, I went on, a difficulty occurs to me, which I will simply put to you without pressing it, in case it leads us into reasoning that is too subtle and delicate. In short, I very much doubt whether it is possible for a cause to be known only by its effect (as you have assumed all along), or to be of so unique and singular a nature as to have no parallel and no similarity to any other cause or object that has ever come under our observation. It is only when two *species* of objects are found to be constantly conjoined that we can infer one from the other. If we were presented with an effect that was entirely unique and could not be classed under any known *species*, I do not see how we could form any conjecture or inference at all about its cause. If experience, observation, and analogy really are the only guides we can reasonably follow in inferences of this kind, then both the effect and the cause must bear a similarity and resemblance to other effects and causes that we know, and that we have found, in many instances, to be conjoined with each other. I leave it to your own reflection to follow out the consequences of this principle. I will only observe that Epicurus's opponents always take the universe—an effect entirely unique and unparalleled—as proof of a God, a cause no less unique and unparalleled. On that assumption, your reasoning seems at least to deserve our attention. There is, I admit, some difficulty in seeing how we can ever return from the cause to the effect, and, reasoning from our ideas of the cause, infer any change in the effect or any addition to it.

Of the academical or sceptical Philosophy

Section XII
Hume weighs forms of skepticism and defends a moderate, practical skepticism.

PART I

Hume examines antecedent and consequent skepticism and doubts about the senses and the external world.

[116] There is no subject on which more philosophical arguments have been deployed than those that prove the existence of God and refute the fallacies of *atheists*. And yet the most religious philosophers still argue about whether any man can be so blind as to be an atheist in theory. How are we to reconcile these contradictions? The knights-errant who wandered about ridding the world of dragons and giants never had the slightest doubt that these monsters existed.

The *skeptic* is another enemy of religion, who naturally provokes the indignation of all theologians and more serious philosophers—though it is certain that no one has ever met such an absurd creature, or talked with a man who had no opinion or principle on any subject, whether of action or of theory. This raises a very natural question: What is meant by a skeptic? And how far is it possible to push these philosophical principles of doubt and uncertainty?

There is one kind of skepticism that comes *before* all study and philosophy. Descartes and others strongly recommend it as a sovereign safeguard against error and hasty judgment. It calls for universal doubt—not only of all our previous opinions and principles, but of our very faculties. We must, they say, assure

ourselves of the reliability of these faculties by a chain of reasoning deduced from some original principle that cannot possibly be mistaken or misleading. But there is no such original principle with a privileged standing above others that are self-evident and convincing. And even if there were, we could not advance a single step beyond it except by using those very faculties we are supposed to distrust already. So the Cartesian doubt, if any human being could ever achieve it (which plainly no one can), would be entirely incurable. No reasoning could ever bring us to a state of assurance and conviction on any subject.

It must be admitted, however, that this kind of skepticism, in a more moderate form, can be understood in a very reasonable sense. It is then a necessary preparation for the study of philosophy, keeping our judgments properly impartial and weaning our minds from all the prejudices we may have absorbed from education or rash opinion. To begin with clear and self-evident principles, to advance by cautious and sure steps, to review our conclusions frequently and examine all their consequences carefully—these are the only methods by which we can ever hope to reach the truth and achieve proper stability and certainty in our conclusions, even though they will make our progress in building systems both slow and short.

[117] There is another kind of skepticism, which comes *after* science and inquiry: when people suppose they have discovered either that their mental faculties are thoroughly unreliable, or that they are unfit to reach any settled conclusion on all those curious speculative subjects they commonly occupy themselves with. A certain school of philosophers even calls our very senses into question, and subjects the maxims of common life to the same doubt as the deepest principles or conclusions of metaphysics and theology. Since these paradoxical doctrines (if they can be called doctrines) are found in some philosophers, and refutations of them in several, they naturally arouse our curiosity and lead us to ask what arguments they might rest on.

I need not dwell on the more hackneyed points that skeptics in every age have used against the evidence of the *senses*—such as those drawn from the imperfection and unreliability of our sense organs on countless occasions: an oar looking bent in water, objects looking different at different distances, the double images produced by pressing on one eye, and many other appearances of the same kind. These skeptical points, in fact, prove only that the senses alone are not to be trusted blindly. We must correct their evidence by reason, and by considerations drawn from the nature of the medium, the distance of the object, and the condition of the sense organ, in order to make them, within their proper sphere, fit *criteria* of truth and falsehood. There are other, deeper arguments against the senses that are not so easily answered.

[118] It seems evident that people are led by a natural instinct or predisposition to put their faith in their senses. Without any reasoning, or almost before we can use reason at all, we always assume an external universe that does not depend on our perception, but would exist even if we and every other perceiving creature were absent or annihilated. Even animals are governed by a similar opinion, and keep up this belief in external objects in all their thoughts, plans, and actions.

It seems equally evident that when people follow this blind and powerful instinct of nature, they always take the very images presented by the senses to be the external objects. They never suspect that the one are nothing but representations of the other. This very table, which we see as white and feel as hard, is believed to exist independently of our perception, and to be something external to the mind that perceives it. Our presence does not bring it into being; our absence does not annihilate it. It keeps its existence uniform and whole, regardless of the situation of the intelligent beings who perceive or contemplate it.

But this universal and primary opinion of all mankind is soon destroyed by the slightest philosophy. Philosophy teaches us that nothing can ever be present to the mind except an image or

perception, and that the senses are only the inlets through which these images are conveyed, without being able to put the mind in any direct contact with the object. The table we see seems to shrink as we move away from it. But the real table, which exists independently of us, undergoes no change. So what was present to the mind was nothing but its image. These are the obvious dictates of reason. No one who reflects has ever doubted that the things we have in view when we say *this house* and *that tree* are nothing but perceptions in the mind—fleeting copies or representations of other things, which remain uniform and independent.

[119] To this extent, then, reasoning forces us to contradict or depart from the primary instincts of nature, and to adopt a new system concerning the evidence of our senses. But here philosophy finds herself in great difficulty when she tries to justify this new system and fend off the quibbles and objections of the skeptics. She can no longer appeal to the infallible and irresistible instinct of nature, for that led us to a quite different system, which is admitted to be fallible and even mistaken. And to justify this supposed philosophical system by a chain of clear and convincing argument—or even by anything that looks like an argument—is beyond the power of all human ability.

By what argument can it be proved that the perceptions of the mind must be caused by external objects that are entirely different from them, though resembling them (if that is possible)? Why could they not arise from the energy of the mind itself, or from the prompting of some invisible and unknown spirit, or from some other cause still more unknown to us? It is admitted that many of these perceptions do in fact arise from nothing external, as in dreams, madness, and other diseases. And nothing could be more inexplicable than how body could act on mind so as to convey an image of itself to a substance supposed to be of so different, and even opposite, a nature.

Whether the perceptions of the senses are produced by external objects resembling them is a question of fact. How is this question to be settled? By experience, surely, like all other

questions of the same kind. But here experience is, and must be, entirely silent. The mind never has anything present to it but perceptions, and cannot possibly have any experience of their connection with objects. So the supposition of such a connection has no foundation in reasoning.

120 To appeal to the truthfulness of the Supreme Being in order to prove the truthfulness of our senses is surely a very unexpected detour. If his truthfulness were involved in this matter at all, our senses would be entirely infallible, since he cannot possibly deceive. Not to mention that once the external world is called into question, we will be at a loss to find arguments proving the existence of that Being or any of his attributes.

121 This, then, is a topic on which the deeper and more philosophical skeptics will always triumph when they try to introduce universal doubt into every subject of human knowledge and inquiry. Do you follow the instincts and propensities of nature, they may ask, in accepting the truthfulness of the senses? But these lead you to believe that the perception or perceptible image itself is the external object. Do you reject this principle in order to adopt a more rational opinion—that perceptions are only representations of something external? Then you are departing from your natural propensities and more obvious feelings, and still you cannot satisfy your reason, which can never find any convincing argument from experience to prove that perceptions are connected with any external objects.

122 There is another skeptical topic of the same sort, drawn from the most profound philosophy. It might deserve our attention, if we needed to dive so deep to find arguments and reasoning that can serve so little serious purpose. It is universally agreed by modern thinkers that all the perceptible qualities of objects—hard, soft, hot, cold, white, black, and so on—are merely secondary. They do not exist in the objects themselves, but are perceptions of the mind, with no external archetype or model that they represent. If this is granted for secondary qualities, it must also follow for the supposed primary qualities of extension and solidity; the latter have no better claim to that

title than the former. The idea of extension is acquired entirely from the senses of sight and touch. And if all the qualities perceived by the senses are in the mind and not in the object, the same conclusion must extend to the idea of extension, which depends wholly on sensory ideas—that is, on the ideas of secondary qualities. Nothing can save us from this conclusion except the claim that the ideas of those primary qualities are arrived at by *abstraction*. But if we examine that opinion carefully, we will find it unintelligible, and even absurd. An extension that is neither tangible nor visible cannot possibly be conceived. And a tangible or visible extension that is neither hard nor soft, neither black nor white, is just as far beyond the reach of human conception. Let anyone try to conceive of a triangle in general, which is neither *isosceles* nor *scalene*, and has no particular length or proportion of sides. He will soon see the absurdity of all the scholastic notions about abstraction and general ideas.[1]

123 So the first philosophical objection to the evidence of the senses, or to the belief in external existence, is this: if that belief rests on natural instinct, it is contrary to reason; if it is referred to reason, it is contrary to natural instinct, and at the same time carries no rational evidence with it to convince an impartial inquirer. The second objection goes further and represents this belief as contrary to reason—at least if it is a principle of reason that all perceptible qualities are in the mind, not in the object. Strip matter of all its intelligible qualities, both primary and sec-

1 HUME'S NOTE. This argument is taken from Dr. Berkeley. In fact, most of the writings of that very ingenious author are the best lessons in skepticism to be found among the philosophers, ancient or modern, Bayle not excepted. He claims, however, on his title page (and no doubt quite truthfully) to have written his book against the skeptics as well as against the atheists and freethinkers. But that all his arguments, though intended otherwise, are in reality merely skeptical is clear from this: *they admit of no answer and produce no conviction*. Their only effect is to cause that momentary bewilderment, irresolution, and confusion which is the result of skepticism.

TRANSLATOR'S NOTE. George Berkeley (1685–1753), Irish philosopher and bishop, argued that matter does not exist apart from perception; Pierre Bayle (1647–1706) was a French skeptic famous for his *Historical and Critical Dictionary*.

ondary, and you more or less annihilate it, leaving only a certain unknown, inexplicable *something* as the cause of our perceptions—a notion so defective that no skeptic will think it worth arguing against.

PART II

Hume considers skeptical objections to abstract reasoning and to reasoning about matters of fact.

[124] It may seem a very extravagant undertaking for the skeptics to destroy *reason* by argument and reasoning. Yet this is the grand aim of all their inquiries and disputes. They try to find objections both to our abstract reasoning and to our reasoning about matters of fact and existence.

The chief objection to all *abstract* reasoning comes from the ideas of space and time. In common life, and on a casual view, these ideas are perfectly clear and intelligible. But when they pass under the scrutiny of the deeper sciences (of which they are the chief subject), they yield principles that seem full of absurdity and contradiction. No priestly *dogmas*, invented on purpose to tame and subdue the rebellious reason of mankind, ever shocked common sense more than the doctrine of the infinite divisibility of extension, with its consequences—as all the geometers and metaphysicians pompously display them, with a kind of triumph and exultation. A real quantity, infinitely smaller than any finite quantity, containing quantities infinitely smaller than itself, and so on *in infinitum*: this is an edifice so bold and colossal that it is too heavy for any supposed demonstration to support, because it offends the clearest and most nat-

ural principles of human reason.[2] But what makes the matter more extraordinary is that these seemingly absurd opinions are supported by a chain of reasoning of the clearest and most natural kind. We cannot grant the premises without admitting the consequences. Nothing could be more convincing and satisfying than all the conclusions about the properties of circles and triangles. And yet, once these are accepted, how can we deny that the angle of contact between a circle and its tangent is infinitely smaller than any angle formed by straight lines? Or that as you increase the diameter of the circle to infinity, this angle of contact becomes smaller still, to infinity? Or that the angle of contact between other curves and their tangents may be infinitely smaller than that between any circle and its tangent, and so on, to infinity?[3] The demonstration of these principles seems as flawless as the one proving that the three angles of a triangle equal two right angles—though the latter conclusion is natural and easy, and the former is full of contradiction and absurdity. Here reason seems thrown into a kind of bewilderment and suspense, which, without any prompting from a skeptic, makes her distrust herself and the ground she stands on. She sees a bright light illuminating certain places, but that light borders on the deepest darkness. Caught between the two, she is so dazzled and confused that she can scarcely pronounce with certainty and assurance on any single object.

125 The absurdity of these bold conclusions of the abstract sciences seems to become, if anything, even more obvious in the

2 HUME'S NOTE. Whatever disputes there may be about mathematical points, we must allow that there are physical points—that is, parts of extension that cannot be divided or made smaller, either by the eye or by the imagination. These images, then, which are present to the imagination or the senses, are absolutely indivisible. Mathematicians must therefore allow them to be infinitely smaller than any real part of extension. And yet nothing seems more certain to reason than that an infinite number of them make up an infinite extension. How much more, then, an infinite number of those infinitely small parts of extension, which are still supposed to be infinitely divisible.

3 The "angle of contact" (or horn angle) between a curve and its tangent was a classic puzzle: it seems to be an angle, yet it is smaller than any angle between straight lines.

case of time than of extension. An infinite number of real parts of time, passing in succession and used up one after another, seems so evident a contradiction that no one, you would think, could ever accept it—unless his judgment had been corrupted by the sciences instead of improved.

Yet reason must still remain restless and uneasy, even about the skepticism these apparent absurdities and contradictions drive her to. How any clear, distinct idea can contain features that contradict itself, or some other clear, distinct idea, is absolutely incomprehensible—perhaps as absurd as any proposition that can be formed. So nothing could be more skeptical, or more full of doubt and hesitation, than this very skepticism that arises from some of the paradoxical conclusions of geometry, the science of quantity.[4]

126 The skeptical objections to *probable* evidence—that is, to reasoning about matters of fact—are either *popular* or *philosophical*. The popular objections are drawn from the natural weakness of human understanding; the conflicting opinions held in different ages and nations; the changes in our judgment in sickness and health, youth and old age, prosperity and adversity; the constant contradictions within each person's own opinions and feelings; and many other points of that kind. There is no need to dwell on these further. These objections are weak. For in

4 HUME'S NOTE. It seems to me not impossible to avoid these absurdities and contradictions if we admit that there is, strictly speaking, no such thing as an abstract or general idea. All general ideas are really particular ones attached to a general term, which calls up, when needed, other particular ideas that resemble, in certain respects, the idea present to the mind. Thus when the word "horse" is spoken, we immediately picture a black or white animal of a particular size or shape. But since the word is also commonly applied to animals of other colors, shapes, and sizes, these other ideas, though not actually present to the imagination, are easily called up. And our reasoning and conclusions proceed just as if they were actually present. If this is admitted (as seems reasonable), it follows that all the ideas of quantity that mathematicians reason about are merely particular—the kind suggested by the senses and imagination—and consequently cannot be infinitely divisible. It is enough to have dropped this hint for now, without pursuing it further. It certainly matters to all lovers of science that their conclusions not expose them to the ridicule and contempt of the ignorant, and this seems the readiest solution to these difficulties.

common life we reason every moment about fact and existence, and could not possibly survive without constantly using this kind of argument. So any popular objections drawn from these sources must be insufficient to destroy that evidence. The great destroyer of *Pyrrhonism*—the excessive principles of skepticism—is action, work, and the business of everyday life. These principles may flourish and triumph in the lecture halls, where it is indeed difficult, if not impossible, to refute them. But as soon as they leave the shade of the schools, and are set, by the presence of the real objects that stir our passions and feelings, against the more powerful principles of our nature, they vanish like smoke. They leave the most determined skeptic in the same condition as other mortals.

[127] So the skeptic had better stay within his proper sphere and display those *philosophical* objections that arise from deeper research. Here he seems to have plenty of grounds for triumph. He rightly insists that all our evidence for any matter of fact beyond the testimony of the senses or memory comes entirely from the relation of cause and effect. He insists that we have no other idea of this relation than that of two objects that have frequently been *conjoined*; that we have no argument to convince us that objects frequently conjoined in our experience will be conjoined in the same way in other instances; and that nothing leads us to this inference but custom, or a certain instinct of our nature—an instinct that is indeed hard to resist, but which, like other instincts, may be misleading and deceptive. While the skeptic presses these points, he shows his strength—or rather, in fact, his own weakness and ours—and seems, for the moment at least, to destroy all assurance and conviction. These arguments could be set out at greater length, if any lasting good or benefit to society could ever be expected from them.

[128] For here is the chief and most crushing objection to *excessive* skepticism: no lasting good can ever come of it while it remains in full force and vigor. We need only ask such a skeptic: *What does he mean? And what does he hope to achieve by all these curious researches?* He is immediately at a loss and doesn't know

what to answer. A Copernican or a Ptolemaic, each defending his own system of astronomy, may hope to produce a conviction in his audience that will remain steady and lasting. A Stoic or an Epicurean sets out principles that may not be lasting, but that do affect conduct and behavior. But a Pyrrhonian cannot expect his philosophy to have any steady influence on the mind—or, if it did, that its influence would benefit society. On the contrary, he must admit, if he will admit anything, that all human life would perish if his principles were universally and steadily to prevail. All conversation and all action would cease at once, and people would remain in total lethargy until the unmet needs of nature put an end to their miserable existence. True, so fatal an outcome is hardly to be feared. Nature is always too strong for principle. And though a Pyrrhonian may throw himself or others into momentary bewilderment and confusion with his profound reasoning, the first and most trivial event in life will put all his doubts and scruples to flight. It will leave him, in every point of action and speculation, just like the philosophers of every other school, or like those who never troubled themselves with philosophical research at all. When he wakes from his dream, he will be the first to join in the laughter against himself, and to admit that all his objections are mere amusement. They can do nothing but show the whimsical condition of mankind: we must act and reason and believe, though we cannot, by our most diligent inquiry, satisfy ourselves about the foundation of these operations, or remove the objections that can be raised against them.

PART III

Hume recommends a moderate skepticism that limits inquiry to common life, mathematics and experience.

[129] There is, indeed, a more *moderate* skepticism, or *Academic* philosophy, which may be both lasting and useful. It may partly be the result of this Pyrrhonism, or *excessive* skepticism, when its indiscriminate doubts are to some extent corrected by common sense and reflection. Most people are naturally inclined to

be assertive and dogmatic in their opinions. Seeing things from only one side, and having no idea of any counterbalancing argument, they throw themselves headlong into the principles they lean toward, and have no patience with those who hold opposing views. To hesitate or weigh alternatives confuses their understanding, checks their passion, and holds up their action. So they are impatient until they escape from a state they find so uncomfortable, and they think they can never get far enough away from it through the violence of their assertions and the stubbornness of their beliefs. But if such dogmatic reasoners could become aware of the strange weaknesses of human understanding, even at its best, and even when it is most careful and cautious in its conclusions, the reflection would naturally make them more modest and reserved. It would lessen their fond opinion of themselves and their prejudice against their opponents. The uneducated might reflect on the attitude of the learned, who, with all the advantages of study and reflection, are usually still hesitant in their conclusions. And if any of the learned are inclined by temperament to arrogance and obstinacy, a small dose of Pyrrhonism might humble their pride. It would show them that the few advantages they may have gained over their fellows are trivial compared with the universal perplexity and confusion inherent in human nature. In general, there is a degree of doubt, caution, and modesty that ought always to accompany a sound reasoner in every kind of inquiry and decision.

[130] Another kind of *moderate* skepticism that may benefit mankind, and may be the natural result of Pyrrhonian doubts and scruples, is limiting our inquiries to the subjects best suited to the narrow capacity of human understanding. The human *imagination* is naturally lofty. It delights in whatever is remote and extraordinary, and runs off unchecked into the most distant reaches of space and time, to escape the objects that custom has made too familiar. Sound *judgment* follows the opposite method. Avoiding all remote and lofty inquiries, it confines itself to common life and to the subjects that fall within daily practice and

experience, leaving the more sublime topics to be embellished by poets and orators, or to the arts of priests and politicians. Nothing can do more to bring us to so healthy a resolution than being once thoroughly convinced of the force of Pyrrhonian doubt, and of the impossibility of anything but the strong power of natural instinct freeing us from it. Those with a taste for philosophy will still continue their research. They reflect that, besides the immediate pleasure that comes with such an occupation, philosophical conclusions are nothing but the reflections of common life, made methodical and corrected. But they will never be tempted to go beyond common life, so long as they bear in mind the imperfection of the faculties they use, their narrow reach, and their imprecise operation. When we cannot give a satisfactory reason why, after a thousand experiments, we believe that a stone will fall or fire will burn, can we ever be satisfied with any conclusion we reach about the origin of worlds, or the state of nature from and to eternity?

This narrow limitation of our inquiries is, in fact, so reasonable in every respect that the slightest examination of the natural powers of the human mind, compared with their objects, is enough to recommend it to us. We will then find what the proper subjects of science and inquiry are.

131 It seems to me that the only objects of abstract science, or demonstration, are quantity and number, and that all attempts to extend this more perfect kind of knowledge beyond these bounds are mere sophistry and illusion. Because the component parts of quantity and number are entirely alike, their relations become intricate and complex. Nothing could be more interesting, or more useful, than to trace by various intermediate steps their equality or inequality through their different forms. But all other ideas are clearly distinct and different from one another, so our utmost scrutiny can never take us further than noticing this difference and, by obvious reflection, declaring that one thing is not another. Or if there is any difficulty in these judgments, it comes entirely from the vague meaning of words, which is corrected by more precise definitions. That *the square of*

the hypotenuse is equal to the squares of the other two sides cannot be known, however exactly the terms are defined, without a train of reasoning and inquiry. But to convince us of the proposition *that where there is no property, there can be no injustice*, we need only define the terms and explain that injustice is a violation of property. This proposition is really nothing but a less perfect definition. The same holds for all the would-be syllogistic reasoning found in every other branch of learning except the sciences of quantity and number. These, I think, can safely be declared the only proper objects of knowledge and demonstration.

[132] All other human inquiries concern only matters of fact and existence, and these are plainly incapable of demonstration. Whatever *is* may *not be*. No denial of a fact can involve a contradiction. The non-existence of any being whatever is as clear and distinct an idea as its existence. The proposition that affirms it not to exist, however false, is no less conceivable and intelligible than the one that affirms it to exist. It is different with the sciences properly so called. There, every proposition that is not true is confused and unintelligible. That the cube root of 64 equals half of 10 is a false proposition, and can never be distinctly conceived. But that Caesar, or the angel Gabriel, or any being, never existed may be a false proposition, yet it is still perfectly conceivable and implies no contradiction.

So the existence of any being can be proved only by arguments from its cause or its effect, and these arguments are founded entirely on experience. If we reason *a priori*, anything may appear able to produce anything. For all we know, the falling of a pebble might put out the sun, or a man's wish might steer the planets in their orbits. Only experience teaches us the nature and limits of cause and effect, and enables us to infer the existence of one object from that of another.[5] Such is the foundation

5 HUME'S NOTE. That impious maxim of ancient philosophy, *Ex nihilo, nihil fit* [Nothing comes from nothing], which ruled out the creation of matter, ceases to be a maxim according to this philosophy. Not only may the will of the Supreme Being create matter; for all we know *a priori*, the will of any other being might create it, or any other cause that the most whimsical imagination can come up with.

of probable reasoning—reasoning about matters of fact—which makes up the greater part of human knowledge and is the source of all human action and behavior.

Probable reasoning concerns either particular facts or general ones. All the practical deliberations of life concern the former, as do all inquiries in history, chronology, geography, and astronomy.

The sciences that deal with general facts are politics, natural science, medicine, chemistry, and so on, where the qualities, causes, and effects of a whole species of objects are investigated.

Divinity, or theology, insofar as it proves the existence of God and the immortality of the soul, consists partly of reasoning about particular facts and partly of reasoning about general facts. It has a foundation in *reason* to the extent that it is supported by experience. But its best and most solid foundation is *faith* and divine revelation.

Ethics and criticism are not so much objects of the understanding as of taste and feeling. Beauty, whether moral or natural, is felt rather than perceived. Or if we reason about it and try to fix its standard, we are dealing with a new fact—namely, the general taste of mankind, or some such fact—that can be an object of reasoning and inquiry.

When we run through libraries, convinced of these principles, what havoc we must make! If we take any volume in hand—of theology or scholastic metaphysics, for instance—let us ask: *Does it contain any abstract reasoning about quantity or number?* No. *Does it contain any reasoning based on experience about matters of fact and existence?* No. Then commit it to the flames, for it can contain nothing but sophistry and illusion.