

# Enquiry Concerning Human Understanding<sup>1</sup>

## By David Hume

### Section 4: Sceptical doubts about the operations of the understanding Part 1

All the objects of human reason or enquiry fall naturally into two kinds, namely *relations of ideas* and *matters of fact*. The first kind include geometry, algebra, and arithmetic, and indeed every statement that is either intuitively or demonstratively certain. *That the square of the hypotenuse is equal to the squares of the other two sides* expresses a relation between those figures. *That three times five equals half of thirty* expresses a relation between those numbers. Propositions of this kind can be discovered purely by thinking, with no need to attend to anything that actually exists anywhere in the universe. The truths that Euclid demonstrated would still be certain and self-evident even if there never were a circle or triangle in nature.

Matters of fact, which are the second objects of human reason, are not established in the same way; and we cannot have such strong grounds for thinking them true. The contrary of every matter of fact is still *possible*, because it doesn't imply a contradiction and is conceived by the mind as easily and clearly as if it conformed perfectly to reality. *That the sun will not rise tomorrow* is just as intelligible as - and no more contradictory than - the proposition *that the sun will rise tomorrow*. It would therefore be a waste of time to try to *demonstrate* [= 'prove absolutely rigorously'] its falsehood. If it were demonstratively false, it would imply a contradiction and so could never be clearly conceived by the mind.

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<sup>1</sup> This document has been excerpted by Kevan Edwards, with permission, from a manuscript translated and edited by Jonathan Bennett. Bennett's translations of this and other early modern texts can be found online at: <http://www.earlymoderntexts.com>. Bennett uses square [brackets] to enclose editorial explanations and small ·dots· to indicate material that has been added to the original text, but can be read as though it were part of the original text. The present editor has also used square brackets to indicate omissions of material from Bennett's text ([...]). Bennett indents some passages that are not quotations in order to facilitate comprehension of the text. The present editor has added a paragraph break and has put several important terms and passages in bold font.

So it may be worth our time and trouble to try to answer this: What sorts of grounds do we have for being sure of matters of fact - propositions about what exists and what is the case - that are not attested by our present senses or the records of our memory? [...]

All reasonings about matters of fact seem to be based on the relation of *cause and effect*, which is the only relation that can take us beyond the evidence of our memory and senses. If you ask someone why he believes some matter of fact which is not now present to him - for instance that his friend is now in France - he will give you a reason; and this reason will be some other fact, such as that he has received a letter from his friend or that his friend had planned to go to France. Someone who finds a watch or other machine on a desert island will conclude that there have been men on that island. All our reasonings concerning fact are like this. When we reason in this way, we suppose that the present fact is *connected* with the one that we infer from it. If there were nothing to bind the two facts together, the inference of one from the other would be utterly shaky. [...]

So if we want to understand the basis of our confidence about matters of fact, we must find out how we come to know about cause and effect.

I venture to assert, as true without exception, that knowledge about causes is never acquired through *a priori* reasoning, and always comes from our experience of finding that particular objects are constantly associated with one other. [When Hume is discussing cause and effect, his word 'object' often covers *events* as well as *things*.] Present an object to a man whose skill and intelligence are as great as you like; if the object is of a kind that is entirely new to him, no amount of studying of its perceptible qualities will enable him to discover any of its causes or effects. Adam, even if his reasoning abilities were perfect from the start, could not have inferred from the fluidity and transparency of water that it could drown him, or from the light and warmth of fire that it could burn him. The qualities of an object that appear to the senses never reveal the causes that produced the object or the effects that it will have; nor can our reason, unaided by experience, ever draw any conclusion about real existence and matters of fact.

The proposition *that causes and effects are discoverable not by reason but by experience* will be freely granted (1) with regard to objects that we remember having once been altogether unknown to us; for in those cases we remember the time when we were quite unable to tell what would arise from those objects. Present two smooth pieces of marble to a man who has no knowledge

of physics - he will not be able to work out that they will stick together in such a way that it takes great force to separate them by pulling them directly away from one another, while it will be easy to slide them apart. (2) Events that are not much like the common course of nature are also readily agreed to be known only by experience; and nobody thinks that the explosion of gunpowder, or the attraction of a magnet, could ever be discovered by arguments *a priori* - that is, by simply thinking about the matter, without bringing in anything known from experience. (3) Similarly, when an effect is thought to depend on an intricate machinery or secret structure of parts we don't hesitate to attribute all our knowledge of it to experience. No-one would assert that he can give the ultimate reason why milk or bread is nourishing for a man but not for a lion or a tiger.

[...]

If you are not yet convinced that absolutely all the laws of nature and operations of bodies can be known only by experience, consider the following. If we are asked to say what the effects will be of some object, without consulting past experience of it, how can the mind go about doing this? It must invent or imagine some event as being the object's effect; and clearly this invention must be entirely arbitrary. The mind can't possibly find the effect *in* the supposed cause, however carefully we examine it, for the effect is totally different from the cause and therefore can never be discovered in it. Motion in the second billiard ball is a distinct event from motion in the first, and nothing in the first ball's motion even hints at motion in the second. A stone raised into the air and left without any support immediately falls; but if we consider this situation *a priori* we shall find nothing that generates the idea of a downward rather than an upward or some other motion in the stone.

[...]

In short, every effect is a distinct event from its cause. So it can't be discovered in the cause, and the first invention or conception of it *a priori* must be wholly arbitrary. Furthermore, even after it has been suggested, the linking of it with the cause must still appear as arbitrary, because plenty of other possible effects must seem just as consistent and natural from reason's point of view. So there isn't the slightest hope of reaching any conclusions about causes and effects without the help of experience.

[...]

## Part 2 (of Section 4)

But we haven't yet found an acceptable answer to the question that I initially asked. Each solution raises new questions that are as hard to answer as the first one was, and that lead us on to further enquiries. To the question, *What is the nature of all our reasonings concerning matter of fact?* the proper answer seems to be that they are based on the relation of cause and effect. When it is further asked, *What is the foundation of all our reasonings about cause and effect?* we can answer in one word, *experience*. But if we persist with questions, and ask, *What are inferences from experience based on?* this raises a new question that may be harder still. [...]

In this section I shall settle for something easy, offering only a negative answer to the question I have raised about what inferences from experience are based on. It is this: even after we have experience of the operations of cause and effect, *the conclusions we draw from that experience are not based on reasoning or on any process of the understanding*. I shall try to explain and defend this answer.

[...] All that past experience can tell us, directly and for sure, concerns the behaviour of the particular objects we observed, at the particular time when we observed them. My experience directly and certainly informs me that *that* fire consumed coal *then*; but it is silent about the behaviour of the same fire a few minutes later, and about other fires at any time. Why should this experience be extended to future times and to other objects, which for all we know may only *seem* similar? - that is what I want to know. The bread that I formerly ate nourished me; that is, a body with such and such sensible qualities did at that time have such and such secret powers. [By 'sensible qualities' Hume means properties that can be directly experienced with the senses.] But does it follow that other bread must also nourish me at other times, and that the same perceptible qualities must always be accompanied by the same secret powers? It does not seem to follow necessarily. Anyway, it must be admitted that in such a case as this the mind draws a conclusion; it takes a certain step, goes through a process of thought or inference, which needs to be explained. These two propositions are far from being the same:

I have found that such and such an object has always had such and such an effect.

I foresee that other objects which appear similar will have similar effects.

The second proposition is always inferred from the first; and if you wish I shall grant that it is rightly inferred. But if you insist that the inference is made by a chain of reasoning, I challenge you to produce the reasoning. The connection between these propositions is not intuitive [that is, the second does not self-evidently and *immediately* follow from the first]. If the inference is to be conducted through reason alone, it must be with help from some intermediate step. But when I try to think what that intermediate step might be, I am defeated. Those who assert that it really exists and is the origin of all our conclusions about matters of fact owe us an account of what it is.

·They haven't given any account of this, which I take to be evidence that none can be given. If many penetrating and able philosophers try and fail to discover a connecting proposition or intermediate step through which the understanding can perform this inference from past effects to future ones, my negative line of thought about this will eventually be found entirely convincing. But as the question is still new, the reader may not trust his own abilities enough to conclude that because he can't find a certain argument it doesn't exist. In that case I need to tackle a harder task than I have so far undertaken - namely, going through all the branches of human knowledge one by one, trying to show that none can give us such an argument.

All reasonings fall into two kinds: (1) demonstrative reasoning, or that concerning relations of ideas, and (2) factual reasoning, or that concerning matters of fact and existence. That no demonstrative arguments are involved in (2) seems evident; since there is no outright contradiction in supposing that the course of nature will change so that an object that seems like ones we have experienced will have different or contrary effects from theirs. Can't I clearly and distinctly conceive that snowy stuff falling from the clouds might taste salty or feel hot? Is there anything unintelligible about supposing that all the trees will flourish in December and lose their leaves in June? Now, if something is intelligible and can be distinctly conceived, it implies no contradiction and can never be proved false by any demonstrative argument or abstract a priori reasoning.

So if there are arguments to justify us in trusting past experience and making it the standard of our future judgment, these arguments must concern matters of fact and real existence, to put it in terms of the classification I have given. But reasoning about matters of fact, if I have described it accurately, can't provide us with the argument we are looking for. **According to my account, all arguments about existence are based on the relation of cause and**

effect; our knowledge of that relation is derived entirely from experience; and in drawing conclusions from experience we assume that the future will be like the past. So if we try to prove *this* assumption by [reasoning based on matters of fact], i.e. arguments regarding existence, we shall obviously be going in a circle, taking for granted the very point that is in question.<sup>2</sup>

[...]

[...] All inferences from experience are based on the assumption that the future will resemble the past, and that similar powers will be combined with similar sensible qualities. As soon as the suspicion is planted that the course of nature may change, so that the past stops being a guide to the future, all experience becomes useless and can't support any inference or conclusion. So no arguments from experience can *support* this resemblance of the past to the future, because all such arguments are *based on* the assumption of that resemblance. However regular the course of things has been, that fact on its own doesn't prove that the future will also be regular.

It's no use your claiming to have learned the nature of bodies from your past experience. Their secret nature, and consequently all their effects and influence, may change without any change in their sensible qualities. This happens sometimes with regard to some objects: Why couldn't it happen always with regard to all? What logic, what process of argument, secures you against this? You may say that I don't *behave* as though I had doubts about this; but that would reflect a misunderstanding of why I am raising these questions. When I am considering how to act, I am quite satisfied that the future will be like the past; but as a philosopher with an *enquiring* - I won't say *sceptical* - turn of mind, I want to know what this confidence is based on. Nothing I have read, no research I have done, has yet been able to remove my difficulty. Can I do better than to put the difficulty before the public, even though I may not have much hope of being given a solution? In this way we shall at least be aware of our ignorance, even if we don't increase our knowledge.

It would be inexcusably arrogant to conclude that because I haven't discovered a certain argument it doesn't really exist. Even if learned men down the

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<sup>2</sup> The present editor has made several minor omissions/modifications in this paragraph that are not indicated with parentheses.

centuries have searched for something without finding it, perhaps it would still be rash to conclude with confidence that the subject must surpass human understanding. Even though we examine all the sources of our knowledge and conclude that they are unfit for a given subject, we may still suspect that the list of sources is not complete or our examination of them not accurate. With regard to our present subject, however, there are reasons to think that my conclusion is certainly right and that I am not arrogant in thinking so.

[...]

## **Section 5: Sceptical solution of these doubts**

### **Part 1**

Suppose that a highly intelligent and thoughtful person were suddenly brought into this world; he would immediately observe one event following another, but that is all he could discover. He would not be able by any reasoning to reach the idea of cause and effect, because (firstly) the particular powers by which all natural operations are performed are never perceived through the senses, and (secondly) there is no *reason* to conclude that one event causes another merely because it precedes it. Their occurring together may be arbitrary and casual, with no causal connection between them. In short, until such a person had more experience he could never reason about any matter of fact, or be sure of anything beyond what was immediately present to his memory and senses.

Now suppose that our person gains more experience, and lives long enough in the world to observe similar objects or events occurring together constantly; now what conclusion does he draw from this experience? He immediately infers the existence of one object from the appearance of the other! Yet all his experience has not given him any idea or knowledge of the secret power by which one object produces another; nor can any process of reasoning have led him to draw this inference. But he finds that *he can't help* drawing it: and he will not be swayed from this even if he becomes convinced that there is no intellectual support for the inference. Something else is at work, compelling him to go through with it.

It is *custom* or *habit*. When we are inclined to behave or think in some way, not because it can be justified by reasoning or some process of the understanding but just because we have behaved or thought like that so often in the past, we always say that this inclination is the effect of 'custom'. In using

that word we don't claim to give the basic reason for the inclination. All we are doing is to point out a fundamental feature of human nature which everyone agrees is there, and which is well known by its effects. Perhaps that is as far as we can go. Perhaps, that is, we can't discover the cause of this cause, and must rest content with it as the deepest we can go in explaining our conclusions from experience. Our ability to go that far should satisfy us; we oughtn't to complain about the narrowness of our faculties because they won't take us any further. We do at least have here a very intelligible proposition and perhaps a true one: *After the constant conjunction of two objects - heat and flame, for instance, or weight and solidity - sheer habit makes us expect the one when we experience the other.* Indeed, this hypothesis seems to be the only one that could explain why we draw from a thousand instances an inference which we can't draw from a single one that is exactly like each of the thousand. Reason isn't like that. The conclusions it draws from considering one circle are the same as it would form after surveying all the circles in the universe. But no man, having seen only one body move after being pushed by another, could infer that every other body will move after a similar collision. All inferences from experience, therefore, are effects of custom and not of reasoning.

[...]

What are we to conclude from all this? Something that is far removed from the common theories of philosophy, yet is very simple:

All beliefs about matters of fact or real existence are derived merely from *something that is present to the memory or senses, and a customary association of that with some other thing.*

Or in other words: having found in many cases that two kinds of objects - flame and heat, snow and cold - have always gone together, and being presented with a new instance of flame or snow, the mind's habits lead it to expect heat or cold and to believe that heat or cold exists now and will be experienced if one comes closer. This belief is the inevitable result of placing the mind in such circumstances. That our minds should react in that way in those circumstances is as unavoidable as that we should feel love when we receive benefits, or hatred when we are deliberately harmed. These operations of the soul are a kind of *natural instinct*, which no reasoning or process of the thought and understanding can either produce or prevent.