34
Hume *Enquiry* V.i, IX
Naturalism

In *Enquiry* IV Hume established that whatever I know of matters of fact or real existence beyond what I have discovered from my own perception or memory must be based on reasoning from effect to cause or cause to effect. But he also established that there is no rational basis for our beliefs in causal connections between things. These claims lead to the sceptical conclusion that we cannot reasonably believe anything beyond the narrow bounds of our own current experience and our memories of our own past experience.

However, Hume thought that causal inference is both irresistible and necessary for survival. Once we have witnessed one type of object being regularly followed by another, we infer the unperceived existence of the one from an experience of the other, however unfounded this inference may be. If, whenever I open the front door to my house, the bell in the church tower rings, then I will expect to hear the sound of the bell whenever I go to open the door. The fact that I can discover no observable connection between the two events (no wires connecting the opening door to a bell ringing mechanism; no observation deck in the church tower from which a bell ringer could see me leave the house, etc.) will do nothing to change this instinctive impulse. Upon going to open the door, the memory of all the past occasions when this act was followed by a ringing of the bell will rush in upon me and I will be irresistibly compelled to anticipate the ringing of the bell on this occasion as well, in defiance of any background beliefs I may have about the plausibility of this occurrence given the absence of electrical wires, spies, or other known principles. We cannot stop associating constantly conjoined objects as cause and effect, even if we might want to.

But even if we could do this, it would be suicidal to try. As Hume pointed out in another work, it is not possible to get up and leave the room without relying on inferences from past experiences of constant conjunctions. If I get up and leave through the door, rather than make a run at passing directly through the brick wall or attempt to fly from the third story window, it is because I am drawing inferences concerning what the likely effect of launching myself in the direction of a solid object or out over a precipice is likely to be. Were I not to make such inferences I would not live for long.

This is a classic sceptical result. The sceptics never denied that we can and must form beliefs. They simply questioned our ability to obtain them by sense experience or by reasoning from the evidence. In place of reasoning from the evidence the ancient sceptics recommended a rule of life that involved giving undogmatic assent to appearances, indulging natural inclinations, accepting the traditions of one's city, and following the instruction of the arts. More modern sceptics, like Bayle, had instead observed that where reason fails to be capable of inducing belief, the elect will be compelled to believe by divine grace, and the rest of us will believe out of the force of education, out of ignorance of the reasons not to believe, and out of natural inclination.

Note that natural inclination is the one element that is common to the ancient and the modern sceptical rules of life. It is also the element Hume picked upon when, in *Enquiry* V, he turned of offer a "sceptical solution" to the doubts that the operations of the understanding are incapable of resolving.

QUESTIONS ON THE READING

1. What is the one passion that is not frustrated by the sceptical philosophy?

2. Why do we not need to be afraid that sceptical doubts will render us incapable of making decisions about how to act in common life?
3. Why would a rational being, brought suddenly into this world, not at first be able to reach the idea of cause and effect?
4. What is the consequence of this being's observing events of a certain type to always be followed by events of another type?
5. What is the principle that induces us to infer the existence of one object from the appearance of another?
6. What can we say about what ultimately causes us to develop habits?
7. What makes the hypothesis that we are determined by custom to infer causes from effects superior to the hypothesis that we are determined by reason to do so?
8. What two things are necessary if we are to believe in the existence of an object that we do not now perceive?
9. What is it that ensures that these two things will necessarily and unavoidably produce the belief?
10. How did Hume propose to confirm his theory concerning the foundation of our inferences from experience in *Enquiry* IX?
11. What convinced Hume that animals get their knowledge of the nature of fire, water, earth, stones, heights, depths, etc. from experience rather than from innate instincts?
12. What convinced Hume that animals do not get their knowledge of unperceived objects by reasoning that like effects will always follow like causes, or that the course of nature will not change?
13. Why would "nature" (i.e. a wise designer) have preferred to make causal inference depend on custom rather than reasoning?
14. If custom is the cause of causal inference, how is it that we can sometimes draw inferences from just one experiment?
15. How did Hume distinguish what animals believe by instinct from what they learn from experience?
16. Why should we think that there is nothing unique or special about animal instincts?

NOTES ON THE READING

Hume opened *Enquiry* V by noting that we get beliefs in the existence of unperceived objects as a consequence of having previously experienced objects of one sort to have been always preceded or followed by objects of another sort. Given this history, a present experience of just one of those objects is enough to lead us to form an irresistible belief in the unperceived existence of the other. But neither reasoning nor experience are able to lead us from the past experience of the regular conjunction of two objects and the current experience of just one of them to a belief in the unperceived existence of the other. So what does? Hume's "sceptical" answer to this question is the same one the ancient sceptics and Bayle gave: though reason and experience are inadequate to lead us to infer the existence of objects we are not now perceiving, our animal instinct — a quirk of our psychological make-up — steps in to repair the deficiency.

We are creatures of habit. Whenever we repeat a certain action a number of times, we develop a tendency to automatically repeat that act in the future. This is the idea behind the sort of training we do to develop a manual skill, such as the skill of dancing or playing a musical instrument. We think that if we make a deliberate effort to repeat an action over and over again it will become

automatic and we will be able to do it without thinking. Even when it is not done deliberately, the repetition of actions over and over again in the same way can train habits into us. This is why those who always take the same route home from work need to make a special effort of attention to break that habit. They might want on one occasion to make a detour to run an errand, but they lose their concentration, the habit takes over and they miss their turn and continue home in the same way as usual.

Note that this does not just happen with physical activities, but with thoughts. We have habits of mind as well as of body. We memorize a poem by deliberately forcing ourselves to read the words over and over again. After a few repetitions we develop a habit of thought that enables us to recite the whole poem without having to read the words.

In the case of memorizing a poem, we deliberately train ourselves. But Hume's insight was that sensory experience can do the same thing to us without our agreement or intention. If we customarily observe one type of object to be followed by another type of object, we will get a habit of thought trained into us, so that whenever anything leads us to think of the one, we will habitually form the thought of its usual partner.

At this point, Hume added a further rider to his story. If we do not just happen to *think* of or imagine one of the two objects, but actually have an experience (or, to a lesser extent, a memory) of one or the other of the two objects, then not only will we be led to think of the usual partner, we will also form a belief in its existence.

To sum up: Hume's answer to the question of what leads us to connect objects as causes and effects consists in claiming (i) that we are naturally so constituted that a customary conjunction between two types of object in past experience trains a habit of mind into us to conceive the one whenever we happen to think of the other, and (ii) that this habit, together with an actual experience (or a memory) of one of the previously conjoined objects, will lead us to not merely imagine the other but to believe in its unperceived existence.

The second of these consequences is surprising. We can readily understand how, being creatures of habit, we might be led to conceive of or imagine an object upon witnessing or remembering some other object that it has been customarily conjoined with it in the past. But why should we go on to form a belief in its existence?

In response to this question Hume seemed ready to say that it is enough to simply observe that this is in fact what happens. We cannot explain everything, and it is enough that we have been able to carry our investigations this far.

But why should we accept that Hume was right? Granting that we do form beliefs in the unperceived existence of objects, why should we accept that these beliefs arise in the way Hume proposed, as a result of the habit to conceive of objects that have been regularly conjoined with a given or remembered object in the past? Hume had two different answers to give to this question.

Towards the close of *Enquiry* V.i, he observed that it is remarkable that it often happens that we will only believe that objects are causally related after seeing them occur in succession on a number of occasions. That we should do this means that our belief could not be based on reasoning. When we reason, we infer a conclusion from premises. If those premises are inadequate to yield the conclusion, we do not think that repeating them over and over again will help matters. If the premises are inadequate to support a conclusion, they will be as inadequate after a thousand repetitions as they were on the first occasion. But, Hume proceeded to observe, if our beliefs are based on a habit of thought trained into us by past experience, then obviously the more often the instances are repeated, the stronger the habit, and hence the belief, will become. This does not

prove that Hume's hypothesis must be the correct one, but it indicates that it may be the best explanation for the phenomenon. This seems to be the only account than can explain why we base a belief on a thousand instances that we would not base on just one.

Hume's second answer is offered in Enquiry IX. He there observed that not all animals get all their beliefs by experience. Some (he frequently mentioned dogs) appear to be able to learn from past experience (for example, they learn to fear the raising of a stick that was in the past used to beat them, or to anticipate how a hare will try to elude their chase). But it is not likely that they would employ reason to arrive at these conclusions. Their beliefs are more likely based on habit. But if we accept that the causal beliefs of animals are based on habit, then this establishes a likelihood that those of human beings may be so as well, since we are not that different from animals.

However, Hume did not let the matter rest here. Though he noted he could stop by simply claiming that it is a brute fact, verified by experience, that habit not merely produces an idea but a belief as well, he thought it is possible to probe somewhat more deeply into its origin. This is the job of *Enquiry* V.ii, supported by the results of *Enquiry* II and III, which will be discussed in the next chapter.

General Rules. *Enquiry* IX, on the reason of animals, concludes with a long footnote explaining why we are more knowledgeable and intelligent than animals, and why one human being is more knowledgeable and intelligent than another. This is initially puzzling. After all, if Hume is right, all our knowledge about what exists depends on present experience, past experience, and the tendency to associate objects with one another on the basis of custom and habit, which is an instinct we share in common with animals. If this is the case, then the only difference between one human being and another, or between one animal and another, ought to be due to the extent of their past experience, which will have enabled different people or different animals to notice more correlations. But people and animals with the same experiences ought to be identical in the inferences they are able to draw from those experiences. Obviously this is not the case. How, then, does it come about that we are so much more intelligent and knowledgeable than animals, that one animal is more intelligent and knowledgeable than another, and, indeed, that one human being is more intelligent and knowable than another?

Hume's answer to this question turns on the observation that habits can be formed at various levels of generality. At the most specific level we develop a habit to associate particular objects with particular objects. For example, we associate stones with hardness and with falling to the ground when unsupported, fire with heat and burning, and water with fluidity and suffocating. All of these associations are really associations of types of objects with one another. "Stone" is really a name for a type of object, since there are many different things that fall under this description (e.g., knuckle sized chunks of granite, slate, marble, etc.), and many things that might be thought to be more or less appropriately included under it (grains of sand, boulders, pieces of concrete, diamond, bone, metal). When drawing causal inferences, both animals and humans probably look for a strong degree of resemblance both between the present case and those they have experienced in the past, and among the past cases themselves. The stronger the analogy to a number of analogous past cases, the more confident they are in their conclusions. So if this particular granite stone has always fallen when unsupported, I will be very confident that it will continue to do so, but somewhat less confident that other pieces of granite or other stones of similar size will do so, and somewhat less confident yet that bone or metal will do so, and so on. If I see other stones of other

kinds and sizes fall, and other materials like bone and metal fall, then my confidence will go up. But we human beings do something that most other animals likely do not do: we do not just think that stones fall, metal falls, bones fall, and so on. We formulate a general rule that incorporates all of these different cases, perhaps the rule that any body with a mass per unit of volume that exceeds a certain quantity and located at sea level will be observed to fall when unsupported.

The ability to form general rules requires mental capacities that not all animals can be presumed to have, and that not all human beings can be supposed to have to equal degrees. These include the capacity to recall past experiences, to attend to details, and to note similarities.

But why should the capacity to formulate general rules make such a difference to our cognitive abilities? An answer to this question can be gleaned by considering some of the most general of the general rules that we are able to form. These are rules that are likely beyond the capacities of many animals, and some of them are rules that not even all human beings fully appreciate.

One very important general rule that we learn from a broad experience of nature, instituting what Hume called a "general habit" is the rule that same objects, placed in same circumstances, will have same effects. This is the principle that nature is uniform in all of its operations. It is not something that Hume considered us to be born believing. But it is something we learn from experience. After we have learned that all subsequently experienced pieces of granite behave just like the first piece; that all subsequently experienced glasses of water behave just like the first glass, that all subsequently observed wood fires act just like the first fire, and so on, we generalize to the rule that this uniformity will hold in general and that each new particular of a certain kind that we come upon will behave like all the others of its kind that we have witnessed. It is by means of this rule that we develop the ability to draw a causal inference after just one experiment. (Contrary to those who would suppose that the burned hand teaches best, Hume supposed that we are not innately able to draw inferences from just one experiment and that infants could only come to associate objects on the basis of a repeated past experience of their conjunction.)

This rule also leads us into errors. It is the source of what critical reasoners call the "post hoc ergo propter hoc" fallacy (the fallacy of supposing that because two things have been correlated on one occasion, that they must be related as cause and effect).

However, the errors that the principle of uniformity sometimes induces us to make are to some degree corrected by the development of other principles. Those of us who are patient, attentive, curious, and careful enough will have noticed that any particular cause is typically an object that has a vast number of properties, only some of which are actually relevant to the occurrence of the effect. Water is transparent and fluid. But it is not because it is transparent or fluid that it puts out fire, as anyone who has tossed a can of ethanol or benzine on a fire can attest. What it is in water that gives it the ability to put out fire is actually quite difficult to determine. This holds generally. Causes typically have some one property that is the truly causal element and a whole collection of other properties. When this element is present, the effect occurs. When it is absent, the effect never occurs, even though all the other properties may be present and may make the object look to all appearances like the cause.

Many people do not think this. They think instead that causes can sometimes simply fail to bring about their effects. But Hume claimed that a few, scientifically minded people will have arrived at a different general rule. They will have discovered that, whenever a supposed cause fails to produce its usual effect, if we look hard enough we will be able to identify some hidden or previously unnoticed property in the supposed cause that is the truly efficacious element (that is, that is the true cause), so that even though the object may look the same, when this element is

absent the effect will not occur. These people will have so regularly discovered this hidden element upon a more exact examination of the cause that their experience will have led them to formulate the general rule that examination of an apparent cause that even once fails to produce its effect will reveal some previously unnoticed or hidden circumstance that is the true cause and that must be present for the effect to occur.

Once this rule has been discovered, it leads to a further rule: the rule that causes necessitate their effects, and that there are no causal relations that are irreducibly stochastic or probabilistic in nature. (At any rate, this is what Hume believed. Recent quantum mechanics may show that he was wrong.)

Hume supposed that a general experience will also show us that wherever similar effects are produced, there must be some circumstance in the causes of those effects that is similar, however superficially different those causes may at first seem. This correlation leads us to think that nature will never employ multiple, different causes to produce the same effect.

The effect of these rules is to enjoin a method of investigation into causes that is likely to lead to the discovery of the most fundamental principles operative in nature.

ESSAY QUESTIONS AND RESEARCH PROJECTS

1. In Section X of the *Enquiry* Hume seems to have wanted to condemn those who believe in miracles on the basis of the testimony of others. Yet in Section V.i of the *Enquiry* he claimed that belief we form in anything we have not ourselves observed is "the necessary result of placing the mind in [particular] circumstances" (e.g., the circumstances of hearing testimony to the occurrence of miracles), and that it is "an operation of the soul, when we are so situated, as unavoidable as to feel the passion of love, when we receive benefits; or hatred, when we meet with injuries," and that it is "a species of natural instincts, which no reasoning or process of the thought and understanding is able, either to produce, or to prevent." But it is a maxim that no one ought to be blamed for doing something they were necessitated to do, and that no one ought to be criticized for forming beliefs which they could not have altered by any reasoning or process of the thought and understanding. Was Hume therefore being inconsistent when he condemned those who believe in miracles? Does his account of belief in unperceived existence imply that no one has any right to criticize anyone else for any belief that they might form in matters of fact neither of them has observed?