Hume section 4: squashed

The stone caused the window to break; the baby dropped its dinner and caused the stain on the carpet; someone running in the corridor bumped into the red box on the wall and caused the fire alarm to sound. What is it that connects these three situations? What exactly is this thing called causation? How do we find out about cause and effect? It is this last question that Hume attempts to answer in Section IV.

In the opening paragraphs we discover why an investigation into cause and effect is important. Hume then makes a claim about the basis for our belief in cause and effect and spends the rest of Section IV part I trying to establish the truth of that claim. Hume says:

I shall venture to affirm, as a general proposition, which admits of no exception, that the knowledge of this relation is not, in any instance, attained by reasonings a priori; but arises entirely from experience, when we find that any particular objects are constantly conjoined with each other.

The following is a summary¹ of what Hume says in Section IV part 1

SECTION IV

SCEPTICAL DOUBTS CONCERNING the OPERATIONS of the UNDERSTANDING

All the objects of human reason may be divided into two kinds: Relations of Ideas, and Matters of Fact.

Of the first kind are the sciences of Geometry, Algebra and Arithmetic - for propositions like to three times five equals half of thirty express a relation between numbers discoverable by mere thought alone. The second kind, Matters of Fact, are not ascertained in the same manner nor is our evidence for their truth, however great, of a like nature. The proposition the sun will not rise tomorrow is still an intelligible proposition.

Therefore, let us enquire what is the evidence which assures us of any real existence or of matters of fact. This part of philosophy has been little cultivated, so our doubts and errors may perhaps be excused.

I shall venture to affirm, as a general proposition which admits of no exception, that knowledge of matters of fact seem to be founded on the relation of Cause and Effect, that the knowledge arises entirely from experience when we find that particular objects are constantly conjoined with each other.

Let an object be presented to a man of ever so strong natural reason; if that object be entirely new to him, he will not be able, by the most accurate examination of its sensible qualities to discover any of its causes or effects. Adam could not have inferred from the fluidity of water that it would suffocate him, nor from the warmth of fire that it would consume him.

We fancy that from our first appearance in the world we could have inferred, without experience, that one billiard ball would communicate motion to another or that a stone raised in the air without support would fall. If we could pronounce concerning such effects, without consulting past observation, after what manner, I beseech you, must the mind carry out this operation? Is there anything a priori which might prevent the stone from moving upwards or the or the billiard ball from remaining at rest? In all our reasonings the mind can never find the effect in the supposed cause.

The utmost effort of human reason is to reduce the many effects of natural phenomena to a few general causes. Thus, the law of motion, assisted by geometry, allows us to devise the parts of a machine. We have deduced laws of motion, gravity and elasticity. Yet the law that governs these, established by nature, remains totally shut up from human curiosity. The observation of human blindness and weakness is thus the result of all philosophy, and meets us at every turn.

¹ Squashed Philosophers - Glyn Hughes (http://sqapo.com/hume.htm)

In Part II Hume tries to dig a little deeper. Hume believes he has established that our understanding of cause and effect is based entirely on experience. However, we go on to draw some conclusions from that experience. Because the stone broke the window yesterday I conclude that if it hits a similar window with similar force it will also break that window. I press the switch on the wall to make the lights come on because my previous experience has been that when the switch is pressed that is what happens. What is it that justifies these conclusions? Hume says:

I shall content myself, in this section, with an easy task, and shall pretend only to give a negative answer to the question here proposed. I say then, that, even after we have experience of the operations of cause and effect, our conclusions from that experience are not founded on reasoning, or any process of the understanding. This answer we must endeavour both to explain and to defend.

Part II

What is the nature of our reasoning concerning matter of fact? the proper answer seems to be that they are founded on the relation of cause and effect. When we ask What is the foundation of our understanding of cause and effect? it may be replied, Experience. But if we sift further and ask What is the foundation of experience this implies a new question which may be of more difficult solution.

Nature has kept us at a great distance from all her secrets, and has afforded us only the knowledge of a few superficial qualities of objects. Our senses inform us of the colour, weight and consistence of bread, but neither sense nor reason can ever inform us of those qualities which fit it for the nourishment of humans. Sight or feeling conveys an idea of the motion of bodies, but as to the wonderful force which carries a moving body forever in a continued change of place and which bodies never loose but by communicating it to others, we cannot form even the most distant conception.

The bread which I eat nourishes me, but does it follow that other bread must also nourish me at another time? The consequence seems nowise necessary. It is a consequence drawn by the mind, a process of thought, which wants to be explained.

When I have found that such an object has always been attended with such an effect then I foresee that similar objects will be attended with similar effect. What may be the medium which enables the mind to draw such an inference I confess passes my comprehension.

In reality, all arguments from experience are founded on the similarity we discover among natural objects. Though none but a fool or a madman will ever pretend to dispute the authority of experience, it is surely for the philosopher to examine the principles which give this mighty authority to experience.

You must confess that the inference is not intuitive; neither is it demonstrative: while to say that it is experimental is begging the question. While it is certain that the most ignorant peasants - nay infants, even brute beasts learn the qualities of natural objects by observing the effects which result from them, yet no reading or enquiry has yet been able to give me satisfaction in a matter of such importance.

In Section V Hume will go on to provide a more positive answer. Hume has shown that the conclusions we draw from experience are based on the assumption that the future will resemble the past but this assumption cannot be defended using either reason or experience. The question remains, why do we assume that the stone that broke the window yesterday will break the same window tomorrow. Hume's answer is that it is custom and habit. Experience induces in us the expectation that when we see a similar cause it will result in a similar effect.

This hypothesis seems even the only one which explains the difficulty, why we draw, from a thousand instances, an inference which we are not able to draw from one instance, that is, in no respect, different from them. Reason is incapable of any such variation. The conclusions which it draws from considering one circle are the same which it would form upon surveying all the circles in the universe. But no man, having seen only one body move after being impelled by another, could infer that every other body will move after a like impulse. All inferences from experience, therefore, are effects of custom, not of reasoning.