

some other mind, and the objects of sense are nothing but sensations combined, blended together in a concrete nexus. None of these entities – time, space, sense, qualities, etc. – can be supposed to exist unperceived. We cannot frame an idea of pure time exclusive of the sequence of ideas, nor of pure space exclusive of all external sensations. Pure space means the ability of the limbs of my body to move in all directions without the least resistance.

The skeptics triumph in natural philosophy. They say we do not know the real essence, the internal qualities and constitution of things. There is something in every drop of water, in every grain of sand, which it is beyond the power of human understanding to fathom or comprehend. This complaint is groundless. There is no inward essence of things whence their discernible qualities flow and whereon they depend. It is also a vain labor to endeavor to explain appearances or qualities, the production of color and sound, for example, by the figure, motion, weight, and like qualities of insensible particles. There is no other agent or efficient cause than *spirit*; motion, like all other ideas, is perfectly inert.

The great principle in vogue in Berkeley's time was that of attraction. The word, says Berkeley, does not mean anything but the effect itself; it does not tell us anything as to the manner of the actions whereby it is produced, or the cause, which produces it. Many pronounce gravitation universal: to attract and to be attracted by every other body is said to be an essential quality inherent in all bodies. There is nothing necessary or essential in gravitational attraction – it depends entirely upon the will of the Governing Spirit, who causes certain bodies to cleave together or tend towards each other, according to various laws. Hence, it is vain to seek for a natural efficient cause distinct from mind or spirit. The whole creation is the workmanship of a wise and good Agent, and philosophers should concern themselves solely with the final causes of things: they should try to discover the various ends to which things are adapted, and for which they were originally contrived. There is no reason why observations and experiments should not be made. "That they are of use to mankind and enable us to draw general conclusions, is not the result of any immutable habitudes or relations between things themselves, but only of God's goodness and kindness to men in the administration of the world. By a diligent observation of phenomena within our view, we may discover the general laws of nature, and from them deduce the other phenomena; I do not say *demonstrate*, for all deductions of that kind depend on the supposition that the Author of Nature always operates uniformly and in a constant observance of those rules we take for principles: which we cannot evidently know."⁹ The rules of morality, however, which have a necessary tendency to promote the well-being of mankind, Berkeley thinks can be demonstrated, and possess the same immutable, eternal truth as the propositions of geometry.

Arthur A. Collier (1680-1732), a contemporary of Berkeley, in his *Clavis Universalis* (1713), making Malebranche's system his starting point, attempts from the standpoint of rationalism to prove the non-existence of an external world. *Clavis Universalis*, ed. by E. Bowman, 1909; G. Boas, *The Major Traditions of European Philosophy*, contains a good account of Collier.

52. David Hume

David Hume, born in Edinburgh in 1711, studied law, served as secretary to General St. Clair and later to Lord Hertford (1763-1766), became librarian to the Faculty of Law in Edinburgh (1752-1757), and Under-Secretary of State (1767-1769). He wrote his chief work, *treatise on Human Nature*, in three books, during his first residence in France (1734-1737), but the work made no impression upon the public; it "fell-deadborn from the press," as Hume says. He afterwards worked it over, in more popular form, and published three essays corresponding to the three parts of the original *Treatise*; but his fame during his lifetime rested upon his achievements as a historian rather than on his philosophical works. During his second sojourn at Paris, as a member of the English Embassy, he met Rousseau, Diderot, Holbach, Turgot, and d'Alembert, and induced Rousseau to visit England. He died in 1776.

9. *A Treatise Concerning the Principles of Human Knowledge*, sec. 107.

Among his works are : *Treatise on Human Nature* (1739-1740); five volumes of *Essays* : 1. *Essays, Moral, Political and Literary*, 1741-1742; 2. *Inquiry Concerning Human Understanding*, 1748 (an essay dealing with the topic of Book I of the *Treatise*); 3. *Inquiry Concerning the Principles of Morals*, 1751 (corresponding to Book III of the *Treatise*); 4. *Political Discourses*, 1752; 5. *Four Dissertations*, 1757, including *A Dissertation on the Passions* (on the same topic as Book II of the *Treatise*) and *Natural History of Religion*. Posthumous works : *My Own Life* (published by Adam Smith), 1777; *Dialogues Concerning Natural Religion*, 1779; *Suicide and Immortality of the Soul*, 1783. His *History of England* appeared 1754-1762.

Works, ed. by Green and Grose, 4 vols., 1874, new ed. 1909; *Essays and Principles of Morals*, ed. by Selby-Bigge, 1894; *Dialogues Concerning Natural Religion*, ed. by N. Kemp Smith, 1935; *Treatise*, Book I, together with Berkeley's *Principles*, ed. by P. Wheelwright, 1935.

T. Huxley, *David Hume*, 1879; T.H. Green, "Introduction" to *Hume's Works* (contains criticisms of Hume), 1882; W.B. Elkin, *Hume : the Relation of the Treatise and the Inquiry*, 1904; C.W. Hendel, ed., *Hume : Selections*, 1927; M.S. Kuypers, *Studies in the Eighteenth Century Background of Hume's Empiricism*, 1930; N. K. Smith, *The Philosophy of David Hume*, 1941; C.W. Hendel, *Studies in the Philosophy of David Hume*, 1925; J. Laird, *Hume's Philosophy of Human Nature*, 1931; B.M. Laing, *David Hume*, 1932; H.H. Price, *Hume's Theory of the External World*, 1940; J. Grieg, *David Hume*, 1932; R.W. Church, *Hume's Theory of Understanding*, 1935; C. Maund, *Hume's Theory of Knowledge*, 1937; R.M. Kydd, *Reason and Conduct in Hume's Treatise*, 1946; C.R. Morris, *Locke, Berkeley and Hume*, 1946.

Hume's Problem – Locke had taught that we have certain knowledge of our ideas, demonstrative knowledge of God and of mortality, and practically certain knowledge of the external world of bodies. Berkeley denied the existence of a material world and limited our knowledge to ideas, relations, and spiritual beings. David Hume accepts the empirical theory of the origin of knowledge and the Berkeleyan view that *esse percipi*, and draws what seem to him the logical conclusions. If all we can know are our own impressions, we have no right to assert the reality either of material or of spiritual substances. We find no impressions that justify the assumption of any kind of substance. And we discover nothing in our experience that justifies our notion of necessary connection or causation; cause and effect can mean nothing more than a regular succession of ideas. Metaphysics, theology, and natural science cannot yield universal and necessary knowledge; the sciences of God, the universe, and the soul are impossible, as rational sciences. We can know only what we experience, and we can reach only probability in this field. Hume agrees with Descartes, Hobbes, and Locke in requiring that genuine knowledge must be self-evident; but he finds no such knowledge anywhere except in mathematics, which merely analyzes its own concepts.

Hume's view is empirical : our knowledge has its source in experience; it is positivistic : our knowledge is limited to the world of phenomena; it is agnostic : we know nothing of ultimates, substances, causes, soul, ego, external world, universe; it is humanistic : the human mental world is the only legitimate sphere of science and enquiry.

Science of Human Nature – All sciences, says Hume, have a relation to human nature. The sole end of *logic* is to explain the principles and operations of our reasoning faculty and the nature of our ideas; *morals* and *criticism* relate to our tastes and sentiments; and *politics* studies men as united in society and dependent on each other. Even mathematics, natural philosophy, and natural religion are products of the powers and faculties of men. Hence, we ought to study human nature itself, in order to find the principles, which regulate our understanding, excite our sentiments, and make us praise or blame any particular object, action, or behavior. What, we ask, is the source of our distinctions between truth and falsehood, vice and virtue, beauty and deformity? The science of man, or moral philosophy, as Hume calls it, is the only solid foundation we can give to the other sciences, and must be based on experience and observation; the "experimental method of reasoning" must be introduced into philosophy. Hume attempts this task in his *Treatise on Human Nature*, of which Book I treats of the understanding, Book II of the passions, and

Book III of morals. The same subjects are discussed in the *Inquiry concerning Human Understanding*, *Dissertation on the Passions*, and *Inquiry concerning the Principles of Morals*.

The most important task is to inquire into the nature of the human understanding, to analyze its powers and capacities, to show that it is not fitted for the abstruse and remote subjects which traditional philosophy has set before it; in other words, we must cultivate true metaphysics – the science of the understanding – in order to destroy the false and adulterate kind which attempts to penetrate into realms inaccessible to the intellect. Even if we could do no more than offer a "mental geography," a delineation of the distinct parts and powers of the mind, there ought to be, to say the least, as much satisfaction in that as in studying the system of the planets. But why may we not hope to discover the secret springs and principles by which the mind is actuated in its operations? May not a Newton of the mental sciences arise who will discover a universal and general principle of the mind comparable to the law of gravitation in physics?

Origin of Knowledge – The chief problems that occupy Hume are those of the origin and nature of knowledge. What is the source of our knowledge; what degree of certainty does it possess; what are its extent and limitations? What are the meaning and value of the categories of knowledge, such as substance and causality? Of all these questions the basic one for Hume is the question of the origin of knowledge. All the materials of our thinking are derived from outward and inward impressions. By impressions we mean our more lively perceptions, when we hear or see or feel or love or hate or desire or will: that is, all our sensations, passions, and emotions as they make their first appearance in the soul. All our thoughts or ideas are copies of such impressions: they are the less lively perceptions, the faint or feeble perceptions of which we are conscious when we recall or reflect on any of the sensations or any other impressions just mentioned. Outward impressions, or sensations, arise in the soul from unknown causes, while the inward impressions are frequently occasioned by our ideas. For example, we have an impression of heat or cold, pleasure or pain, of which a copy, or idea, remains. This idea of pleasure or pain produces new impressions: desire and aversion, hope and fear, which are impressions of reflection. These, again, are copied by the memory and imagination. From such impressions, all our knowledge is derived. Knowledge results from compounding, transposing, augmenting, or diminishing the materials furnished us by the senses and experience. The mixture and composition of the impressions alone belongs to the mind and will. Analysis shows that every idea which we examine is copied from similar impressions. Moreover, where there are no impressions, there can be no ideas; a blind man can have no notion of color, nor a deaf man of sound. Hence, we should always ask ourselves in examining the meaning of philosophical terms: From what impression is the supposed idea derived?

Our thoughts or ideas, however, are not entirely loose and unconnected, or joined by chance; they introduce one another with a certain degree of method and regularity; there is a bond of union between them, one calls up another. A picture naturally leads our thoughts to the original (resemblance), the mention of one room is an apartment suggests an adjoining one (contiguity), the thought of a wound calls up the idea of pain (cause and effect). This is the phenomenon called *association of ideas*. The principles or laws of association are resemblance, contiguity in time and place, and cause and effect. Thoughts, in other words, tend to call up thoughts of like things, of things contiguous in time and place, and of things related as cause and effect.

Relation of Cause and Effect – All our reasonings concerning matters of fact are based on the relation of *cause and effect*; that is, we always seek a connection between a present fact and another. A man finds a watch in a desert island: he concludes from the product to the cause, and infers that men have once been there. On our search for causes and effects depend our speculations and practice. It is, therefore, of cardinal importance that we

study this relation. How do we arrive at the knowledge of cause and effect, and what is the validity of this knowledge, what the nature of its evidence?

We do not reach a knowledge of this relation by a priori reasonings. Adam could not have inferred a priori to experience, from the light and warmth of fire, that it would consume him. The mind cannot deduce the effect from the supposed cause; no amount of reasoning will enable us to discover a priori the explosiveness of gunpowder or the magnetic attraction of the loadstone. For the effect is totally different from the cause and can never be discovered in it. We cannot demonstrate that a certain cause must have a certain effect or that it must always have the same effect; we cannot prove by reason that bread nourishes and fire warms, as we can a mathematical proposition. There is no necessary connection between bread and nourishment, such that the conception of the one necessarily implies that of the other; if there were, we could, without experience, infer the effects from the first appearance of these qualities, just as we can conclude from the concept of a triangle that the sum of its angles is equal to two right angles. There is nothing logically contradictory in assuming that fire will not warm nor bread nourish nor gunpowder explode.

Our knowledge of the relation of cause and effect is based on observation and experience. We observe that objects succeed one another, that similar objects are constantly conjoined, that heat follows flame, cold snow, that the motion of one billiard ball is attained by the movement of the other. Having found, in many instances, that any two kinds of objects have always been conjoined, we infer that the objects are causally related, that one is the cause of the other. That is, we are led to expect upon the appearance of the one, the appearance of the other; the mind is led by habit or custom to believe that the two objects in question are connected, that they will always go together. After the constant conjunction of two objects, such as heat and flame, weight and solidity, we are determined by custom to expect the one from the appearance of the other. Our experience of the constant conjunction of objects, in other words, produces a belief in their connection. This belief is an operation of the mind, a species of natural instinct, as unavoidable as feeling the passion of love when we receive benefits. We cannot define belief except as a feeling of which everyone knows the meaning, because every man is conscious of it. In the *Treatise* Hume is still uncertain as to psychology of belief: he connects it with the imagination, but the matter remains obscure and unsatisfactory to him. Nature, apparently, has not entrusted to the fallible deductions of reasoning the operation of the mind by which we infer like effects from like causes and vice versa, but has secured it by an instinctive or mechanical tendency.

A cause may, accordingly, be defined as an object followed by another, and whose appearance conveys the thought of that other. This definition, however, does not satisfy some metaphysicians. For them a cause is something productive of another thing; there is something in the cause by which it is enabled to produce the effect, a secret power, force, or energy. There is a tie that binds the cause to the effect, a necessary connection between cause and effect, such that if we knew the power, we could foresee the effect even without experience, and might, on the very first occasion, pronounce with certainty concerning it, merely by dint of thought and reasoning. If this were true, we could deduce the effect from the cause; a knowledge of the cause would necessarily carry with it a knowledge of the effect and we should know at once, without any experience, how an object would act.

But what do the terms power, force, energy, necessary connection mean, and what right have we to employ them? To answer this question, we must analyze our idea of power or necessary connection. We cannot think of any thing which we have not antecedently felt either by our external or internal senses. Now what is the impression on which this idea of power depends, how do we get it? When we look at external objects and consider the operation of causes, we never discover any power or necessary connection,

could
would
ant of
or the
e and
ave a
n that
nece-
e one
infer
n the
s no-
n nor

and
cons-
all is
two
rela-
ce of
t the
cons-
eter-
ce of
tion.

le as
as a
t. In
the
ren-
l by
an

ose
isfy
e is
ce,
en
th-
rn-
the
w-
ect

hat
of
ce-
ch
nd
on,

any quality which binds the effect to the cause and renders the one an infallible consequence of the other. We only find that the one does actually follow the other. The impulse of one billiard ball is attended with motion in the second: this is all that appears to the *outward* senses. From the first appearance of an object we can never conjecture what its effect will be. The force in the universe which actuates the whole machine is entirely concealed from us. We know that heat is a constant attendant upon flame, but what the connection is between them we cannot imagine. Nor do we get the idea of power from reflection on the operation of our own minds; it is not copied from any *internal* impression or experience. But, it may be asked, are we not every moment conscious of internal power, do we not feel that by a simple command of our will we can move the organs of the body or direct the faculties of the mind? An act of volition produces motion in our limbs or generates a new idea in our imagination. Are we not acquainted with the influence of the will in our inner consciousness? Thus we acquire the idea of power or energy; and we are certain that we ourselves and all other intelligent beings are possessed of power.

Let us examine this view, says Hume. It is true, we do influence the organs of the body by volition. But we are not conscious of the means by which this is effected; we never are, and never can be, directly conscious of the energy by which the will does this. The power is utterly concealed from us here, as in the case of natural events. The motion of the body follows upon the command of the will, that is all experience tells us; how it is done is a mystery. Experience does not tell us the secret connection which binds together the will and its act and renders them inseparable. Indeed, the entire relation between mind and body is mysterious; we do not discern any inner connection between the mind as cause and the body as effect which renders the one an infallible consequence of the other. It is equally impossible to know how our will controls our thinking, the power by which the mind produces ideas. We do not discover any such power; all we know is that the will commanded an idea and the event followed.

To sum up: We can never discover any power at all, all we see is one event following another. We cannot observe or conceive the tie that binds together volition and bodily movements; we do not experience the energy by which the mind produces its effect. The same is true of natural events. One event follows another; we can never observe a tie between separate events. They are *conjoined* but never *connected*. We receive no impression of such a tie, or power, or connection, hence we can have no *idea* of it. Employed in this way, these words are devoid of meaning. But they have a meaning when used in their proper sense: when we say one object is connected with another, we mean that they have acquired a connection in our thought. As has been said before, the mind is led by *habit*, on the appearance of one event, to expect its usual attendant and to believe that it will exist. This connection, therefore, which we feel in the mind, this customary transition of the imagination from one object to its usual attendant, is the sentiment or impression from which we form the idea of power or necessary connection.

According to Hume, then, objects are not necessarily connected, but the ideas are connected in our minds by association. The association is the result of repetition, of custom or habit. Two ideas have gone together so often that when one appears, it suggests the other. We have here not logical but psychological necessity, and this psychological necessity depends on experience. The process is the same in animals, in children, and among the majority of men and philosophers.

Another basic concept or category of human thought is that of *substance*. We cannot forbear looking at colors, sounds, tastes, figures, and other properties of bodies, as existences which cannot subsist by themselves, but which require a subject of inhesion to sustain and support them. The imagination feigns something unknown and invisible which it supposes to continue the same despite all variation of quality. This unknown something is the substance; its qualities are called accidents. Many philosophers also posit occult

qualities and substantial forms. But all these are fictions, they are like specters in the dark. We have no idea of anything but a perception; a substance is entirely different from a perception; therefore we have no idea of a substance. Every quality, being a distinct thing from every other quality, may be conceived to exist apart, and may indeed exist apart, not only from every other quality, but from that unintelligible chimera - substance.

Validity of Knowledge - All our ideas or thoughts, then, are copies of impressions, all knowledge is derived from experience. Now let us ask: What is the validity of such knowledge, what is the nature of its evidence? All the objects of human knowledge may be divided into two kinds: relations of ideas and matters of facts. Of the first kind are the truths of geometry, algebra, and arithmetic, and, in short, every affirmation which is neither intuitively or demonstratively certain. That the square on the hypotenuse is equal to the sum of the squares on the other two sides is a proposition which expresses 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 are discoverable by the mere operation of thought, without dependence on what is existent anywhere in the universe. Even if there had never been a circle or a triangle in nature, the truths demonstrated by Euclid would forever retain their certainty and self-evidence.

All evidence of matters of fact which lies beyond the testimony of sense or memory is derived from the relation of cause and effect. Our knowledge of cause and effect is derived as we saw, from experience; custom leads us to infer that objects which our experience tells us are frequently conjoined, will always be so; but custom is an instinct and instinct may mislead us. Our evidence of the truth of matters of facts is not comparable to the evidence we have in mathematics. The contrary of every matter of fact is still possible, for its occurrence would involve no contradiction. That the sun will not rise tomorrow is no less intelligible a proposition, and implies no more contradiction than that it will rise. Here we are dealing not with certain, self-evident knowledge, but with probability.

Of substances we have no idea whatever, and they have no place in knowledge. But, it may be asked, why trust imagination in the case of causes and not in the case of substance? Hume's answer is that we must distinguish between principles which are permanent, irresistible, and universal, such as is the customary transition from causes to effects, and the principles which are changeable, weak, and irregular, such as substance, substantial forms, accidents, occult qualities. The former are the foundation of all our thought and action, so that, in their absence, human nature would inevitably perish and go to ruin. The latter are neither unavoidable for mankind nor necessary and useful in the conduct of life.

Thus we have no absolute, self-evident or certain knowledge of matters of facts; our knowledge never reaches absolute certainty. We base our conclusions on experience, we believe the future will be like the past, but we have no absolute assurance that things will not change. Life, however, would be impossible unless we acted on the belief that nature is regular and uniform; no practical good can come of our skepticism; practice is the best cure for all skeptical reflections.

Knowledge of the External World - The testimony of the senses alone is not to be trusted implicitly; we must correct their evidence by reason. We trust our senses by a natural instinct and accept an external universe without reasoning, almost before the use of reason. We assume it to exist even if every sensible creature were annihilated. The slightest philosophical reflection, however, suffices to destroy the instinctive opinion of all men. Nothing can be present to the mind but an image or perception. We cannot prove that perceptions are caused by external objects entirely different from them, though perhaps resembling them in some way. Experience is silent here, for we have before the mind only perceptions. We observe a relation of cause and effect between two perceptions, but we can never observe it between perceptions and objects; hence we cannot proceed by causal inference from perception to objects. If we deprive matter of primary as