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THE PHILOSOPHY OF HUME

AS CONTAINED IN EXTRACTS FROM THE FIRST BOOK AND THE FIRST AND SECOND SECTIONS OF THE THIRD PART OF THE SECOND BOOK

OF THE

TREATISE OF HUMAN NATURE

SELECTED, WITH AN INTRODUCTION,

BY

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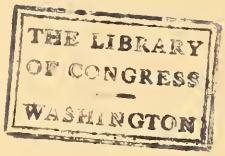

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PREFACE.

It is unfortunate that most students of philosophy, both in Germany and in Great Britain and America, should gain their knowledge of Hume's philosophy from the Enquiry Concerning Human Understanding; for in this work Hume sacrificed the thoroughgoing philosophical scepticism of the Treatise of Human Nature in order to carry out a system of religious scepticism which finds its culmination and best expression in the sections on "Miracles" and a "Particular Providence and a Future State." When these sections are quietly omitted the Enquiry represents neither Hume's philosophy nor his theology; and yet the length and difficulty of the Treatise have made it necessary for college and university instructors to put editions of the Enquiry thus mutilated into the hands of their students. To remedy this difficulty I have taken the following selections from the first book of the Treatise, in the hope that the main doctrines of this great work will be no less intelligible when much confusing detail is omitted.

Selections from the sections of Book II. on Liberty and Necessity have been incorporated with the extracts from Book I. because Hume's doctrine of the will is merely a special application of his doctrine of causation and cannot be understood apart from it.

H. A. A.

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and of the Philosophical Works. It can also be had separately.

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The Philosophical Works of David Hume. Four volumes, octavo. Edinburgh and London, 1826. "The philosophical writings of Mr. Hume are here for the first time collected in a uniform edition." Other editions, Edinburgh, 1836; Edinburgh and Boston, 1854; London, 1856.

The editions of 1826 and 1854, now out of print, contain Hume's portrait, his autobiography, his will, his account of his controversy with Rousseau, and a list of the editions.

The best edition of Hume's Philosophical works now in print is that in four octavo volumes edited by T. H. Green and T. H. Grose, Longmans, 1874 and 1886. Two volumes, which can be had separately, contain the 'Treatise of Human Nature,' the 'Dialogues concerning Natural Religion,' and two critical 'Introductions' to the 'Treatise' by Professor Green, which cover in all 370 pp., and which are generally admitted to be by far the best criticisms of Hume in English. The two volumes of 'Essays, Moral, Political, and Literary,' contain all the rest of Hume's philosophical works. The first of these volumes also contains Hume's Autobiography as well as an elaborate 'History of the Editions' and a 'List of Editions' by Mr. Grose. A cheaper edition of the 'Treatise' is that published in one volume at the Clarendon Press in

1888, with a carefully-prepared index of nearly seventy pages by Mr. L. A. Selby-Bigge. The edition of Hume's 'Essays' published by Ward, Lock & Co. is not complete, but is cheap and good enough for most purposes. In this edition the sections of the 'Enquiry' on 'Miracles' and a 'Particular Providence and a Future State' are placed at the back of the volume.

ON THE LIFE AND PHILOSOPHY OF HUME.

The literature is very abundant. For English readers the following are perhaps the best and most accessible.

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It is impossible to give a complete list of what has been written about Hume; for all the histories of philosophy, the philosophical journals, and the great writers, from Reid, Kant, and Jacobi to Lotze and Spencer, have something to say about him. The following bibliography, however, may be useful.

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BIOGRAPHICAL SKETCH.

In his Autobiography, dated April 18, 1776, Hume says :

"I was born the twenty-sixth of April 1711, old style, at Edinburgh. I was of a good family, both by father and mother. My family, however, was not rich ; and being myself a younger brother, my patrimony, according to the mode of my country, was of course very slender. My father, who passed for a man of parts, died when I was an infant. I passed through the ordinary course of education with success, and was seized very early with a passion for literature, which had been the ruling passion of my life, and the great source of my enjoyments. My studious disposition, my sobriety, and my industry, gave my family a notion that the law was a proper profession for me ; but I found an unsurmountable aversion to everything but the pursuits of philosophy and general learning.

"In 1734 I went to Bristol, with some recommendations to eminent merchants ; but in a few months found that scene totally unsuitable to me. I went over to France with a view of prosecuting my studies in a country retreat. During my retreat in France, first at Rheims, but chiefly at La Flèche, in Anjou, I composed my 'Treatise of Human Nature.' In the end of 1738 I published my treatise. Never literary

attempt was more unfortunate than my Treatise of Human Nature. It fell dead-born from the press, without reaching such distinction as even to excite a murmur among the zealots. But, being naturally of a cheerful and sanguine temper, I very soon recovered the blow, and prosecuted with great ardor my studies in the country. In 1742 I printed at Edinburgh the first part of my Essays ; the work was favorably received, and soon made me entirely forget my former disappointment."

After an extremely unpleasant year spent as tutor and guardian of the weak-minded young Marquis of Annandale, Hume accepted in 1746 the invitation of General St. Clair to act as secretary to the expedition which afterwards attacked the French coast, and the following year he attended him in the same station in his military embassy to the courts of Vienna and Turin. "These two years were almost the only interruptions which my studies have received during the course of my life."

"I had always entertained a notion that my want of success in publishing the Treatise of Human Nature had proceeded more from the manner than the matter, and that I had been guilty of a very usual indiscretion, in going to the press too early. I therefore cast the first part of that work anew in the 'Enquiry concerning Human Understanding,' which was published while I was at Turin. But this piece was at first little more successful than the Treatise of Human Nature.

"Such is the force of natural temper, that these disappointments made little or no impression on me. I went down in 1749, and lived two years with my

brother at his country house, for my mother was now dead. I there composed the second part of my essay, which I called 'Political Discourses,' and also my 'Enquiry concerning the Principles of Morals,' which is another part of my treatise that I cast anew.

"In 1751 I removed from the country to the town. In 1752 the Faculty of Advocates chose me their librarian; an office from which I received little or no emolument, but which gave me the command of a large library. I then formed the plan of writing the 'History of England.' I was, I own, sanguine in my expectations of the success of this work. I thought that I was the only historian that had at once neglected present power, interest, and authority, and the cry of popular prejudices; and, as the subject was suited to every capacity, I expected proportional applause. But miserable was my disappointment: I was assailed by one cry of reproach, disapprobation, and even detestation: English, Scotch, and Irish, whig and tory, churchman and sectary, freethinker and religionist, patriot and courtier, united in their rage against the man who had presumed to shed a generous tear for the fate of Charles I. and the Earl of Strafford; and, after the first ebullitions of their fury were over, what was still more mortifying, the book seemed to sink into oblivion."

Yet some time later "the copy-money given me by the booksellers much exceeded anything formerly known in England."

In 1763 Hume accepted the Earl of Hertford's invitation to join the British embassy at Paris, and was shortly afterwards appointed secretary to the embassy.

He was much pleased with his reception in the French capital; but left in 1766 for Edinburgh, with the purpose "of burying himself in a philosophical retreat." After two years in London as under-secretary to General Conway, Hume returned to Edinburgh in 1769 "very opulent (for I possessed a revenue of one thousand pounds a year), healthy, and, though somewhat stricken in years, with the prospect of enjoying long my ease, and of seeing the increase of my reputation.

"In spring 1775 I was struck with a disorder in my bowels, which at first gave me no alarm, but has since, as I apprehend it, become mortal and incurable. I now reckon upon a speedy dissolution.

"To conclude historically with my own character. I am, or rather was (for that is the style I must now use in speaking of myself, which emboldens me the more to speak my sentiments); I was, I say, a man of mild disposition, of command of temper, of an open, social, and cheerful humor, capable of attachment, but little susceptible of enmity, and of great moderation in all my passions. Even my love of literary fame, my ruling passion, never soured my temper, notwithstanding my frequent disappointments. My company was not unacceptable to the young and careless, as well as to the studious and literary; and, as I took a particular pleasure in the company of modest women, I had no reason to be displeased with the reception I met with from them. In a word, though most men, anywise eminent, have found reason to complain of calumny, I never was touched, or even attacked, by her baleful tooth; and, though I wantonly exposed myself to the rage of both civil and religious factions,

they seemed to be disarmed in my behalf of their wonted fury. My friends never had occasion to vindicate any one circumstance of my character and conduct ; not but that the zealots, we may well suppose, would have been glad to invent and propagate any story to my disadvantage, but they could never find any which they thought would wear the face of probability. I cannot say there is no vanity in making this funeral oration of myself ; but I hope it is not a misplaced one ; and this is a matter of fact which is easily cleared and ascertained."

Hume's conviction that he had not long to live turned out to be correct ; for on Sunday, Aug. 25, 1776, " he died in such a happy composure of mind that nothing could exceed it." On Nov. 9 of the same year Adam Smith wrote to Wm. Strahan " some account of the behavior of our late excellent friend, Mr. Hume, during his last illness," and in concluding he said : " Upon the whole, I have always considered him, both in his lifetime and since his death, as approaching as nearly to the idea of a perfectly wise and virtuous man as perhaps the nature of human frailty will permit."

That a professed sceptic should be described as wise and virtuous, and that he could die peacefully and cheerfully, seemed to most Christians of Hume's time scandalous and incredible. No sooner, therefore, had Dr. Smith's account of Hume's happy end been published in 1777 than it became the subject of horrified comment and violent controversy. Boswell 'mentioned to Dr. Johnson that David Hume's persisting in his infidelity when he was dying shocked

him much,' and Dr. Johnson replied that "he had a vanity in being thought easy;" Bishop Horne wrote his anonymous "Letter to A. Smith on the Life, Death, and Philosophy of his friend D. Hume," and Pratt replied to it; while John Wesley, in a sermon preached some time after Hume's death, alluded to his last days as described by Smith, and called upon the dead man to say whether he had not learned that 'it is a fearful thing to fall into the hands of the living God.' Nevertheless, Adam Smith's estimate of Hume's personal character is confirmed by the fact that Campbell and Blair, both clergymen, and both skilful opponents of his anti-theological arguments, were among his personal friends, and by the testimony of Francis Hardy, who says in his "Life of the Earl of Charlemont": "Of all the philosophers of his sect, none, I believe, ever joined more real benevolence than my friend Hume. His love to mankind was universal and vehement; and there was no service he would not cheerfully have done to his fellow-creatures, excepting only that of suffering them to save their souls in their own way."

Neither the Autobiography nor Adam Smith's letter contains any reference to the celebrated 'quarrel' with Rousseau; for Hume wished it forgotten, though it did him no discredit. The story can be briefly told. When the erratic and morbid author of the 'Emile' was in trouble on the Continent, Hume invited him to England, found him a pleasant home, and got him the offer of a pension. But one day Rousseau received a letter inviting him to the court of King Frederick of Prussia and promising that if he would go there he

would be given no opportunity to pose as a martyr. Rousseau became much excited, remembered that he had once heard Hume say in his sleep "I have Jean Jacques Rousseau," and publicly accused him, not only of writing the letter, but of bringing him to England to betray him to his enemies. Hume was persuaded to answer his accusations; and thus the controversy began. As a matter of fact the offending letter was written by Horace Walpole, who despised Rousseau. Of Hume himself Walpole wrote: "I am no admirer of Hume. In conversation he was very *thick;* and I do believe hardly understood a subject till he had written upon it."

Hume is buried on the outskirts of Edinburgh, and his tombstone bears this inscription:

DAVID HUME
Born 1711 Died 1776
Leaving it to Posterity to add the Rest.

SOURCES OF HUME'S SCEPTICAL PHILOSOPHY.

The 'Treatise of Human Nature,' Hume's first and greatest work, is connected in the closest possible way with the systems of Locke and Berkeley.

(1) Locke, in trying to show that all knowledge depends upon experience, had thought it necessary to prove that all ideas, the elements of knowledge, are derived from experience. He succeeded in doing this to his own satisfaction, but only because he failed to distinguish between pure sensations and their revived images in memory and imagination on the one hand, and these sense-images together with the closely associated intellectual factors which enter into the simplest act of knowledge on the other. For example, he said that the idea of impenetrability is derived from the sense of touch, and that if any one desires to ascertain the content of this idea he may "put a flint or a football between his hands and then endeavor to join them, and he will know." Here Locke did not distinguish from the mere muscular and tactual sensations involved, the additional complex thought that in spite of the effort made it is impossible to bring the hands together, because there

is something between them that resists extinction. Yet it is clear that this thought is not a part of the sensations involved, and that without it we could have no idea of impenetrability.

(2) Berkeley accepted Locke's conclusion that all the elements of knowledge are derived from sense-experience, but he saw as Locke did not that sensations and their fainter reproductions consist simply of images presented to some sense or other—of visual, auditory, or tactual pictures, as it were. Berkeley therefore supposed that all thought consists of nothing but a series of simple or complex images.

(3) But every image is an image, not of a so-called general idea, but of some particular thing, more or less definitely conceived. We cannot, for example, picture a triangle which is not either equilateral, isosceles, or scalene, nor imagine a taste which is neither sweet, sour, saline, or the like. There are, therefore, no *abstract ideas*, or ideas of things or qualities in general.

(4) One idea especially, of which Locke spoke, Berkeley could not picture: that, namely, of an inert, senseless something called *substance*, which has all the qualities perceived by the senses but is not any of them. So he concluded that the only possible idea of substance is the complex of ideas of the individual qualities of a particular object as they present themselves to the human mind through the organs of sense; and that, as the mind knows only these ideas, it is illogical, unnecessary, and even absurd to assert the existence of an absolutely unknown something called substance, or matter, to account for these sensations.

These four conclusions reached by Locke and Berkeley—that all ideas are derived from experience, that experience is only of individual mental images, and that therefore there can be no abstract ideas, and no idea of a substance which underlies the perceptible qualities of things—these are the whole basis on which Hume's system rests.

BRIEF EXPOSITION OF HUME'S PHILOSOPHY.

THE SYSTEM IN OUTLINE.

The First Part of the Treatise is concerned largely with the four principles just enunciated. The omission of all reference to external reality from the definition of Impressions and Ideas is in accordance with Berkeley's rejection of a material world ; and Sections VI. and VII. are devoted to a reaffirmation of Berkeley's doctrines that there can be no idea of an underlying substance, and no abstract idea of anything.

In Part II. the principle that every idea is a definite mental image is applied to the conceptions of space, time, and existence. It is absurd to say that space is *infinitely divisible ;* for we can picture neither an infinitesimal portion of space nor an infinite process of division. The ideas of *empty space* and *empty time* are equally impossible ; for experience always presents space as a relation between the parts of visual or tactual images, and time as a relation between successive impressions and ideas; and it is impossible to form an idea of the relation apart from that which is related. In like manner, since there is no impression of existence or of external existence apart from that of the

object or qualities existing, the idea of the one cannot be abstracted from that of the other. Indeed, if by external existence is meant something specifically different from impressions and ideas themselves, no real conception of it can be formed at all; for all thought is confined to impressions and ideas, that is, to more or less vivid mental images.

In Part III. two topics are treated together: *inference* and the idea of *causation*. By separating them we can perhaps make Hume's conception of each a little clearer than is otherwise possible.

First of all, *inference*.—Of Hume's seven Philosophical Relations or categories, of *resemblance*, *proportions in quantity and number*, *degrees of any quality*, *contrariety*, *identity*, *situation in time or place*, *and causation*, the first four—corresponding to Kant's mathematical relations—are concerned with mental images as mere images, and are always the same for the same images. They are therefore the objects of intuitive and demonstrative knowledge. The three others, however, correspond to Kant's dynamical relations and are concerned with facts and events considered as really existing or happening, not merely with the inner relations of any set of mental pictures. And as we cannot predict the order of nature by merely analyzing our conceptions, these relations are not the objects of either intuitive or demonstrative knowledge, i.e., of knowledge proper. Nevertheless, through one of them, namely, through the relation of causation, something can be inferred about events that are not directly perceived through any sense. And the question is: How is this possible?

To infer is to pass in thought from some object or fact perceived or remembered to some other object or fact not experienced, and on the basis of the former to believe in the existence of the latter.

It has been shown already that there is no idea of existence apart from the idea or image of the object existing. A little introspection will show just as clearly that the *belief* in an object's existence adds no new image to that of the object already formed. And certainly belief does not change the outline or color of that image; for then the image would represent, not the same, but some other object. The only possible difference, therefore, between the mental image of something believed and the image of the same thing not believed must be a difference of vivacity or intensity. And beyond the image with its outline, color, and vivacity, thought there is none. Belief therefore consists merely in the vivacity of a mental image.

There are three Natural Relations, or principles of association, between objects, which tend to convey the thought from the impression or idea of the one to the idea of the other. And, moreover, when the thought is conveyed by any of these principles from an impression of sense or a vivid image in the memory to an idea, the preceding vivid image of sense or memory imparts some of its vivacity to the suggested idea; so that this idea is much more vividly pictured than if it had been called up by some idea of the imagination only.

These natural relations are Resemblance, Contiguity, and Causation. But Causation is much more effective

than either of the others, and imparts a much greater degree of vivacity to the associated idea.

This is because objects which we recognize as causes and effects are not only always successive and contiguous to each other in space and time, but they have been constantly conjoined in our experience, so that the association between them is very fixed and unerring.

Indeed the association is so strong that all the vivacity of belief is conveyed to the suggested image. And thus it is that through causation an inference is drawn to something beyond present experience.

Conclusions regarded as merely *probable* are reached either when one's experience of the cause and its effect has been too limited to produce a well-established association between them, or when the same cause has been connected in one's experience with various effects. In the latter case the impression of the cause tends to suggest the ideas of all the effects; but only one of the images can be present at a time; there is therefore a conflict between them; and when finally the strongest has crowded out the others, it has lost much of its vivacity; so the belief attached to it is but faint, and the conclusion is said to be only probable.

Another kind of probability is attained by *analogy*. In this case the present impression is not a perfect reproduction of the cause which has always been experienced in connection with a certain effect, though it resembles it more or less; and the lack of a perfect resemblance diminishes the vivacity of the suggested image, as did the lack of a perfect experience in the other kind of merely probable inferences.

As the strength of an association can vary indefinitely, and as there can also be any degree of resemblance between the present impression and a cause given in past experience, it is evident that an inference from a present impression to its anticipated effect may involve any degree of belief, from the merest probability to the fullest conviction. But in every case the inference is a matter of imagination, and not of reasoning. For, did the inference from past to future depend upon reasoning, the uniformity of nature would have to be the major premise. And what reasoning could ever prove this premise? It cannot be demonstrated, for there is no contradiction in supposing the course of nature to change; and in every attempt to prove it by induction it is merely assumed.

Since the causal relation is so important for inference as to matters of fact, its nature should be determined a little more accurately. Causes and effects are not only successive and contiguous and constantly conjoined in our experience, but we suppose a certain *necessary connection* to exist between them; and the idea of this necessary connection is much more obscure than that of succession, of contiguity, or of constant conjunction. To clear it up it is necessary to find the impression from which it is derived; for, since there are no innate ideas, there must be such an impression, and impressions are intenser than their ideas, and their outlines are therefore clearer.

Though contiguity and succession between external objects can be perceived, none of the senses present any image of their connection. The impression is therefore not gained from a contemplation of nature,

as Locke said in his chapter on Power. Much less can it be derived from the 'substantial forms' or other unintelligible properties of matter, or even from the Divine activity; for none of these are objects of perception, and none of them therefore can afford an impression.

Nor can it be gained from the known influence of volition upon the organs of the body; for we are nowhere directly conscious of this influence, as is proved by the fact that it is generally supposed to be direct, while in reality it is exerted only through the nerves and muscles. Nor, again, is the idea of necessary connection obtained by observing the control of the will over the course of one's own ideas; for the greatest voluntary effort is often accompanied with the least control.

Finally, it is of no avail to say that the idea is abstract; for abstract ideas are but particular aspects of ordinary ideas, and must therefore have been preceded by impressions like the rest.

The impression is obtained, however, from the mutual relations of associated ideas when one suggests another; for, like the relations of resemblance, proportion, degree, and contrariety, the connection between ideas becomes present to consciousness with the ideas themselves, and can be obtained by a simple inspection or 'comparison' of them.

The impression of necessary connection or power is therefore the impression of a certain relation between ideas, namely, of connected ideas suggesting each other. And the idea of necessary connection also must be the idea of such a relation between ideas; for

the idea is a copy of the impression, and it is impossible to abstract the idea of the relation from that of the ideas related. In other words, the idea of necessary connection is a pair of associated mental images considered in reference to their connection with each other.

This being so, it is absurd to speak of a connection between external objects; and causation therefore consists of contiguity, succession, and constant conjunction in nature, together with a pair of connected ideas (and therefore the idea of connection) in the mind of the observer. So the causal relation is a mixed one, partly independent of mind and partly dependent upon it.

The common belief that there is a necessity in things themselves is the result of the mind's anthropomorphic tendency to 'spread itself' over inanimate objects and attribute to them its own ideas and emotions. It is the same kind of confusion that leads us to attribute to and at the same time deny of changeless things the changes that really take place in our own thought, and so to say that these things endure.

This doctrine of Causation can be applied as well to our fellow-men as to nature. The sequence and constant conjunction of motive and act is in them ; the idea of their connection, in us.

It has thus been explained " why we conclude that such particular causes must necessarily have such particular effects, and why we form an inference from one to the other." As for the other question (Sections III. and IV.), " For what reason we pronounce it necessary that everything whose existence has a be-

ginning should also have a cause?"—no such necessity exists, and every attempt to prove it has failed; for necessity is to be found only when objects have been experienced in close conjunction and succession and their ideas have been associated. But we pronounce it necessary because we draw a hasty induction from those cases in which a necessity really is involved.

In Part III. Hume tried to show that inference concerning matters of fact not yet observed was a matter of imagination, not of reasoning. In Part IV. he attempts to do the same thing for demonstration concerning the relations of ideas.

In all the demonstrative sciences occasional mistakes are made. In even a simple arithmetical addition our faculties sometimes play us false. Knowing this, we ought to add to any reasoning of this sort a second judgment pronouncing upon the probable correctness of the first. But this judgment itself may be erroneous; so it also should be corrected by a third; and so on *ad infinitum*, when none of the original assurance will be left. This is the result that Reason would reach were it to determine our belief. It is avoided only because the Imagination is too sluggish to call up the appropriate images when the train of ideas gets more than a very few steps from the impression that started it. So, by keeping the thought closely confined to present impressions and the ideas most immediately associated with them, imagination gives an assurance which reason, if allowed its way, would utterly destroy.

Thus all belief is a matter of sense and imagination and not of reasoning.

The next topic is *Real Being*, and it can be considered under two heads: I. Things external or bodies, and II. Things internal or souls.

I. *Body.*—To ask whether external things exist or not is useless; for believe in them we must; and the only question is, *why?*

As it is impossible to form a mental image of anything specifically different from impressions and ideas, the conception of external things can be nothing more than that of certain perceptions possessed of a continuous existence independent of any perceiving mind. To account for the belief in such things it is necessary to consider the continuity and the independence separately.

A. The *continued existence* which the imagination attributes to certain perceptions is due to their peculiar (1) coherence and (2) constancy.

(1) *The Coherence of Impressions.*—When there is an established relation of contiguity and succession between dissimilar impressions, the presence of the one leads to the idea and expectation of the other, and we get into the way of looking for this uniform sequence even when we have no impression of it. But in order to find it we have sometimes to suppose that a perception exists when not present to consciousness. Thus when we perceive wood in the fireplace before leaving a room and return to find only ashes, the force of habit compels us to imagine the burning fire as intervening. This necessity never

arises, however, in the case of the passions; for their effects never appear unless they themselves have been present to consciousness.

(2) The *Constancy* of certain impressions leads to the same result. For when similar impressions constantly recur the shock of surprise finally disappears, and the passage from one such impression to another is felt scarcely more than the passage from one moment of a continuous perception to the next. Both kinds of experience therefore give rise to the same easy feeling; and on this account they become confused, and we tend to regard the recurring impressions as really continuous and identical.

B. This leads to the belief in an existence of perceptions *independent* of the mind. For, in spite of this tendency of the imagination to regard recurring impressions as continuous and identical, Reason still insists that they are interrupted and different. To reconcile the contradiction we therefore suppose two sets of perceptions, the one interrupted and dependent upon the mind that perceives them, the other continuous and independent. The latter we now distinguish by the name Objects, reserving the term Perceptions for the former.

Thus the idea of an external world of objects and the belief in it rest upon unjustifiable yet unavoidable confusions and contradictions of imagination.

II. *Souls.*—To speak of perceptions apart from a preceiving mind is not self-contradictory. For as an external object is nothing more than an aggregate of qualities, so a mind is nothing more than an aggregate of perceptions; and a perception can be said to be

present in a mind only in the sense that it is at the moment associated with the special group of perceptions of which that particular mind is made up. This is why all discussions about the materiality or immateriality of the soul are so meaningless. They are attempts to describe the nature of an assumed substance underlying all perceptions. But of such a substance we can have neither impression nor idea. It is therefore nonsense to attempt to describe it or even to affirm its existence.

Though some specially favored metaphysicians may be continually conscious of a perfectly identical and simple *Self*, the rest of mankind, when they enter most intimately into what they call themselves, can find only a collection of rapidly-varying perceptions, which, however, are bound together so firmly by association that they are often supposed to be a unity, simple and identical.

As to the relation between matter and mind, it is through experience alone that any knowledge or idea of the causal relation is gained ; and so it cannot be maintained *a priori*, as the followers of Descartes maintain, that motion cannot cause perceptions, nor perceptions motion.

The investigation of Human Nature was undertaken in the hope that through a knowledge of its principles a foundation for all the sciences could be laid. But these principles have been found to lead to such absurdities and contradictions that no conclusions reached by their aid can be relied upon ; and yet without them there can be no knowledge at all.

Total scepticism is therefore the only resort—and that is impossible.

CAUSATION.

Hume's doctrine of causation is the most important and at the same time the most difficult part of his whole philosophy. It has been often said that Hume denied that any idea of necessary connection is possible, and that he reduced causation to mere uniform sequence. But Hume himself in the chapter devoted to the subject expressly stated, and emphasized the statement, that the idea of necessary connection does enter into the conception of causation, and that it must be accounted for. All that he denied was that the idea can be accounted for in the way in which he believed various authors had attempted to account for it, and that it can be applied as these writers would apply it. "Necessity is nothing but an internal impression of the mind or a determination to pass from one object to its usual attendant," * and a necessary connection between anything but thoughts cannot be conceived: this is the whole burden of the most difficult section in the Treatise.

But here a difficulty presents itself: how can Hume treat the mind's necessity to pass from one idea to another as identical with the impression or observation of that necessity? Certainly the two are not identical; but unless they be regarded as such the one can no more explain the other than the connec-

* Pp. 126, l. 1; 125, l. 23. See also 112, l. 28.

tion between an act of will and its result can explain the knowledge of the connection.

A similar difficulty is found in Hume's account of the cause of the association from which this idea of necessity is derived. Does the association of ideas result from the mere fact that similar combinations of objects frequently recur, or from the observation of the fact? There are at least half a dozen passages in which he says, "the *observation* of this resemblance" * between several instances causes the association; while in others he speaks only of the resemblance itself. It is true that in ordinary experience it is the observation of a constant conjunction between phenomena which leads to the supposition of a causal connection between them. But for Hume's 'inference' this observation is not necessary; for a repeated experience of conjoined phenomena is sufficient to establish an association between them whether the fact of the repeated conjunction has been observed or not.

Another question which arises in this connection is whether Hume regarded the internal necessity to which repeated experience gives rise as a "determination of the mind" by an impression or idea, or simply as a determination of one idea by another.

To explain these difficulties it is necessary to consider Hume's doctrines in their historical connection. The plain people regard not only things, but the relations between them, as perceived immediately, and from this natural realism of common-sense thought passes but slowly. It may be discovered, for example,

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* Pp. 125-127.

that no causal connection can be observed between things, while it is still taken for granted that the things themselves and their other relations are immediately known. Or it may be discovered that thought is not a copy of things, while it is still assumed that it is caused by them ; and then the conception of a *Ding an sich* or an *unknowable* arises. And even when such ways of thinking are declared to be erroneous there is a continual tendency to revert to them. In the age in which Hume lived this influence of avowedly abandoned modes of thought was exemplified in the conception of ideas. That things cannot be immediately known was recognized, because it had been found that there is no direct causal relation between extra-bodily objects and the mind. The problem was to restore this immediate relation between the mind and the object known ; and since the mind did not go out to things, it was assumed that things came in to the mind,—not themselves, however, but through their representatives, called ideas, which were supposed to be conveyed in some way or other by the senses to the mind. Thus, something was got into the immediate presence of the mind ; and perception was explained.

How these ideas could be perceived when brought 'into' or 'before' the mind no one asked ; but it was taken for granted that the mind could perceive ideas and their relations just as easily and just as completely as the most *naïve* realist supposed he could perceive things. Except that ideas had been substituted for things, the standpoint of the philosophers was essentially that of the plain people. The only problem was

to account for the presence of the ideas; and this came to be regarded as a very grave problem indeed, for the philosophers were still influenced a good deal by the common forms of speech, and were only too apt to regard both ideas and the physical motion that causes them as shadowy entities which could 'inhere' in mind or in matter, and be 'imparted,' 'communicated,' or 'conveyed' from one thing capable of 'possessing' them to another. Now when the Cartesians discovered that the essence of the mind is thought and the essence of matter extension, and that ideas cannot exist in things, nor motion in minds; how is it possible, they asked, for any communication to take place between matter and mind, unless in passing from the one to the other motion becomes thought, and *vice versa*? And this seemed to them equally impossible, for "matter and motion are still matter and motion, and 'tis absurd to imagine that the shocking of two globular particles should become a sensation of pain and that the meeting of two triangular ones should afford a pleasure." *

When they had avoided this difficulty and accounted for the presence of ideas in the mind by the Occasionalistic hypothesis, the Cartesians supposed they had explained perception, just as Berkeley thought he had explained it by his similar supposition that ideas are given by God. Hume, with his conception of causation, was able to avoid the Cartesian puzzle about the interaction of mind and matter; and yet, like his predecessors, he failed to see the real difficulty con-

* Treatise, Part IV., Sec. V.

nected with the ordinary conception of perception, and took it for granted that he had accounted for ideas of color and extension when he had supposed that there were colored and extended ideas before the mind, and that when he had shown how ideas are related he had explained the idea of their relation.

With this point of view, it was as natural that Hume should fail to distinguish between the connection of ideas and the impression of their connection, and between their repetition and the observation of the repetition, as it was that Locke should overlook the distinction between the fact that observed qualities and substances receive their existence from the application and operation of some other observed being, and the knowledge of that fact.* And to make this part of his doctrine consistent it must be supposed that the 'determination' Hume spoke of was a determination of ideas, and that he used the word 'mind' only loosely and provisionally.

Thus it was that Hume reduced necessary connection, the most objective of all dynamical relations, to a mere relation of ideas, perceived immediately with the ideas themselves. But, notwithstanding the fact that he had accepted the philosophical explanation of perception through ideas, throughout his whole account of causation he took it for granted that things with their contiguity, succession, and constant conjunction can be perceived directly; and from this strange combination of half-critical and wholly non-critical thought there resulted the mixture of phenom-

* Essay, Book II., Chap. XXVI., Sec. I.

enalism and *naïve* realism which is found in his second defininition of a cause.

Though Hume professed to have no idea of causation but that of two objects frequently perceived in close succession and the idea of one of them suggesting that of the other, to account for this suggestion of one idea by another it was necessary for him to assume causal relations independent of it. Such was the relation between things contiguous and successive and the perceptions they produce; such was that between repeated perceptions and the 'habit' of mind which accounts for individual suggestions; such was the 'natural' relation of causation, if Hume meant to distinguish it from contiguity as a cause of association; and such must be the relation between any 'hidden cause' and its effect. It is this kind of causation which he quietly assumed, rather than that which he defined, that corresponds to the ordinary conception of a cause. But Hume had said that the ordinary conception is really impossible. What he accomplished, therefore, was this: by repeatedly assuming a causation of which he said it was impossible to conceive, he accounted for a conception of a cause that no one ever really held.

The nature of the connection involved is not the only respect in which the causes Hume assumed to exist are different from those he defined. His whole account of the idea of causation depended upon the 'observation' that causes and effects are always closely conjoined in time; and yet when he said that every idea is caused by a previous perception resembling it, he assumed that causes and effects are sim-

ilar, rather than that they are always to be found together. Certainly it is impossible that 'ideas of the imagination' can be constantly conjoined with their corresponding impressions, when they occur, as Hume says, in an entirely different order.*

How far Hume's rules by which to judge of causes and effects are consistent with the doctrine that "anything may produce anything"; how many of them are the logical consequences of his conception of a cause; and how many of them would actually result from the principles of the imagination that Hume supposed to explain the idea of a cause, cannot be discussed here.

Hume's theory of causation is no more satisfactory when applied to the will than when applied to things; for the real problem is, not whether the spectator feels any inner necessity to pass from one idea to another, but whether the agent is under any necessity to pass from his idea to his act.

THE CONCEPTION OF REALITY.

Hume's account of the idea of causation would have been less plausible if his conception of reality had been less pliable.

At the beginning of the Treatise he assumed that impressions 'arise in the soul originally from unknown and perfectly inexplicable causes.' † As he advanced towards his chapter on the idea of necessary connection he substituted for this unknowable thing in itself

* Part I., Secs. I., II., and III.

† Part I., Sec. II., and Part III., Sec. V.

'objects' which could be observed to be frequently conjoined in time and place, but which could not be observed or even thought to be connected. And before the chapter was ended he found it necessary to join the plain people and assume the knowledge of a 'nature' full of connections.

Having accounted for the idea of necessary connection by means of this assumption and arrived at his semi-realistic and semi-idealistic conception of a cause, as "an object precedent and contiguous to another, and so united with it that the idea of the one determines the mind to form the idea of the other," etc., Hume remembered that causation was a relation, and that according to his definition relations exist between ideas, not things, and so he identified his objects with ideas by adding that a cause may be considered "either as a comparison of two ideas or as an association betwixt them." This overturned his account of the idea of connection; but it enabled him to return to the idealism which he formally recognized, and it prepared the way for his forthcoming account of the idea of real external things.

Real things can act and be acted upon; while mental images are mere transient states of a perceiving subject and can do or suffer nothing. Such images are the perceptions with which the Treatise opened. But when Hume remembered that his 'objects' were perceptions he still regarded them as possessed of all the properties of real things; though, of course, they were immediately present to consciousness, since they were perceptions. This made it seem easy to account

for the idea of a set of permanent perceptions, called things.

But it is not, as Hume said, the perceptions themselves that the vulgar believe to have a continued existence, but rather the efficient things of which Hume's perceptions were after all but lifeless models. And the philosophers believe, not in a second set of perceptions, but in the same things as the vulgar. But the philosophers realize that they know these things only through their own mental images, and so they suppose there are three facts · the thing, the image of it, and the mind knowing the thing by perceiving the image ; while the vulgar are so busily concerned with the things themselves that it never occurs to them that any image intervenes between the things and their knowledge of them. For them, therefore, there are but two facts: the thing and the mind knowing it. For Hume also there were two facts; and this is why he identified his 'objects' with those of the vulgar. But Hume's facts were the image and the mind knowing it; and an image is not a thing.

Both Hume and Kant started with the assumption that perceptions are caused by a thing in itself, possessed of all the extra-mental reality that the plain people believe things to have; and when they came to account for the conception of reality, what they both explained was not the idea of the transcendental things which they and the plain people had alike assumed to exist ; but it was the idea of some phenomenal 'permanent in perception,' the conception of which had been developed in the course of their philosophy.

Though at this stage of his philosophy Hume supposed his conceptions to be those of the plain people, there could be no doubt about the next; for having made all the use that was necessary of the popular assumption of a mind capable of forming habits and perceiving what is presented to it, Hume proceeded to show that this assumption is just as impossible as is the idea of an external substance, and that the perceptions themselves are the only reality. These self-existent perceptions he supposed, presumably, not only to know themselves, but to have a share in the knowledge of any other images with which they might become associated. How the group of perceptions which he made to constitute a mind is to be distinguished from the group which constitutes a thing, or whether there is any distinction between them, Hume did not say.

THE BELIEF IN REALITY.

When Hume tried to show how the belief in the independent existence of 'objects' resulted from the belief in the permanence of perceptions he reversed the natural order. For people are realists before they are idealists; and the earliest perceptions that we know anything about already carry with them a reference to something which they claim to represent. When we make use of the conception of a coherent order of nature, it is not to prove that most perceptions really do represent reality, but to show that some of them do not; for any particular perception can be shown to be an illusion only if a great many others with which

it does not cohere are already believed to represent reality.

In his section on Scepticism with regard to the Senses Hume proved that from mere subjective images there can be no logical inference to any reality beyond them. This is true. But, since the given mental facts, though subjective, are more than mere images, belief in extra-mental things does not involve all the absurdities that Hume supposed. That this belief cannot be proved to be correct is no reason that we should accept it unwillingly ; for all reasoning must be based on premises which are accepted, not proved. Whether these premises rest upon the imagination, as Hume supposed, or whether they have a much deeper root in the whole mind and life, is a matter of indifference so long as they are necessary. Hume especially had no right to profess uneasiness at the thought that belief rested ultimately upon the imagination ; for he had resolved all thinking into imagining. And he had no right to ask whether he should accept the suggestions of the more or of the less general principles of the imagination, or to hesitate because these suggestions were contradictory ; for to him all conviction was a matter of necessity, and choice he had none.

CONFIDENCE IN REASON.

Hume's proof that logically reason should not be trusted rests upon an obvious fallacy. Granting that every judgment should be tested by another, and that each one would weaken the confidence reposed in that

preceding it, it does not follow that all the original conviction would be finally destroyed; for, in weakening the conviction attached to the second judgment, the third strengthens that belonging to the first: $1 - (\frac{1}{2} - \frac{1}{4}) = \frac{3}{4}$, not $\frac{1}{4}$, as Hume's argument supposes; and the sum of the series is two thirds, not zero. The truth is that every judgment carries conviction with it; and if to make an error proves reason's weakness, to detect it proves its strength.

Though Hume failed to prove the untrustworthiness of reasoning, and though he was wrong in making belief nothing more than the vivacity of impressions, he was right in maintaining, in an age where mathematical demonstration was regarded as the highest type of thought, that much demonstrative reasoning carries with it less assurance than may often be attained in other ways. It is intense sensations, strong feelings, and vigorous action that produce the deepest convictions.

INFERENCE.

When Hume accepted the view that all thought could be resolved into imagination, it naturally followed that the only test of truth which he could accept was conceivability; and the only inference, the passing of thought from one image to another. But though it is necessary that a conclusion be suggested in order that it be thought of at all, the mere passing in thought from one image to another is not sufficient to constitute inference. For, while fundamental beliefs are merely caused, and not

proved, inferences are conclusions thought to be warranted by the evidence. And causation is important for inference, because conclusions based upon the law of causation are thought to be warranted by what is known of the objectively fixed order of events which causation implies.

Even if the association of ideas could account, as Hume supposed, for the inference from causes to effects, it could not account for the inference from effects to causes; for when the order of ideas is to be reversed mere contiguity and succession form but a poor bond between them, and do not convey much 'vivacity' from one to another, as we learn when we try to say the alphabet backwards. Moreover, when inference and causation are both resolved into the association of ideas, the one cannot be said to be either warranted or caused by the other, for they have become indistinguishable. And, finally, were there no reality beyond themselves to which perceptions refer, there could be no distinction between true and false perceptions; and none between valid and invalid, warranted and unwarranted, inferences.

In his account of inference, therefore, as in his account of the ideas of causation and reality, Hume made no attempt to explain what is most important. But he did one great thing: he proved that the belief in the uniformity of nature, without which neither science nor work would be possible, rests upon causes and not upon proofs. And thus he emphasized the great part played by faith in every sphere of life.

THE TREATISE AND THE ENQUIRY.

The foregoing introductory paragraphs have had reference to the Treatise of Human Nature rather than to the Enquiry concerning Human Understanding, and the extracts to follow have been taken from the same work. There is, however, considerable difference between the two books.

The Treatise was written when Hume's enthusiasm for philosophy had received no check, and it is characterized by the keenest observation of psychological facts and by a relentless logic, however paradoxical the conclusions to which that logic leads. The very confusion which often makes it so difficult to follow the argument is due to Hume's desire to overlook no difficulty and to leave the origin of no idea unexplained, however absurd that idea may be.

The Enquiry, on the other hand, was written after the bitterly disappointing reception given the Treatise had quenched much of Hume's zeal for philosophy and driven him to work in other fields of literature. Having learned there to gauge the popular taste, Hume recast parts of the Treatise in essay form, and published them in the various Enquiries. But now not only was he addressing a popular audience, but he had lost enthusiasm for his subject, and the Enquiry concerning Human Understanding suggests more than a suspicion that Hume's interest in it was more anti-theological than psychological. The introduction speaks, not of the foundation to be laid for all the sciences by the study of human nature, but of popu-

lar superstitions to be driven from their shelter among the brambles of metaphysics; sections taken from the Treatise are modified so as to state, not only that certain philosophers are unable to explain the origin of certain ideas, but that they 'diminish instead of magnifying the grandeur of those attributes of the Creator which they affect so much to celebrate,' and to speak of "dogmas invented on purpose to tame and subdue the rebellious reason of mankind"; and in the Enquiry entirely new sections on Miracles and a Particular Providence and a Future State are introduced. All the difficult parts of the Treatise in which Hume had attempted to account for the apparent existence of ideas which he regarded as impossible are omitted from the Enquiry; so that its work is purely destructive. And instead of honestly following even such reasoning as was allowed to remain to its logical conclusion, and exposing himself, as he had said in the Treatise, "to the enmity of all metaphysicians, logicians, mathematicians, and even theologians," by discrediting all knowledge and all science, Hume distinguished in the Enquiry between the excessive scepticism to which his principles logically lead and a more mitigated scepticism; and by adopting the latter, he rescued books of 'abstract reasoning concerning quantity and number and of experimental reasoning concerning matter of fact and existence' from the flames to which all the other volumes in one's library were to be condemned as containing nothing but sophistry and illusion. And this in spite of the fact that in the very same section not only had he made use of the 'paradoxical conclusions

of geometry or the science of quantity, big with contradiction and absurdity,' as an argument against "all abstract reasonings"; but had made the sceptic to insist justly "that all our evidence for any matter of fact which lies beyond the testimony of sense or memory" rests ultimately upon nothing more than "custom or a certain instinct of our nature, which is indeed difficult to resist, but which, like other instincts, may be fallacious and deceitful."

In short, though in style the Enquiry "exhibits a great improvement on the Treatise", Professor Huxley is right in saying that the substance "is certainly not improved." What is new is out of place in a psychological study, and the changes made in what is old indicate pretty plainly that the earnest critical thinker of the Treatise had acquired many characteristics of the mere sophist.

Parts of the 'Treatise' not Represented in the 'Enquiry.'

PART I.

Sec. 2. Distinction between Impressions of Sensation and of Reflection.

" 3. Distinction between Memory and Imagination.

" 5. Distinction between Natural and Philosophical Relations. Enumeration of the Philosophical Relations or Categories.

" 6. The Ideas of Mode and Substance.

" 7. 'Of Abstract Ideas.' (Represented by only ten lines and a note in Sec. XII. of the Enquiry.)

Part II.

Secs. 1–5. Space and Time. (Represented by only a page and a half in Sec. XII. of the Enquiry, where mathematical paradoxes are used to show the weakness of reason.)

Sec. 6. 'Of the Ideas of Existence and of External Existence.'

Part III.

Sec. 1. 'Of Knowledge.' (Represented in the Enquiry only by the distinction between matters of fact and relations of ideas.)

" 3. 'Why a Cause is always Necessary.'

" 10. 'Of the Influence of Belief.'

Secs. 11, 12, 13. Probability. (Represented by only two pages of the Enquiry.)

Sec. 15. 'Rules by which to judge of Causes and Effects.'

Part IV.

Sec. 2. Why we believe in external things.

" 3. 'Of the Ancient Philosophy.' The ideas of Substances, Accidents, and Occult Qualities.

" 5. 'Of the Immateriality of the Soul.'

" 6. 'Of Personal Identity.'

Parts of the 'Enquiry' not Represented in the 'Treatise.'

Sec. 1. The distinction between the Rhetorical and the Critical Philosophy.

" 10. 'Of Miracles.'

" 11. 'Of a Particular Providence and of a Future State.'

" 12. The distinction between Pyrrhonism or excessive scepticism and the Academical Philosophy or a more mitigated scepticism.

HUME'S INFLUENCE UPON SUBSEQUENT PHILOSOPHIC THOUGHT.

HUME'S reasoning, which finds its logical conclusion in total and helpless scepticism, showed how hopeless was the attempt to account for knowledge on Locke's theory that all ideas are derived from sense, and how impossible it was to justify knowledge on Descartes' principle that ideas which cannot be proved to represent reality should be treated as false. It therefore led on the one side to Kant's search for the innate forms of knowledge overlooked by Locke, and on the other to Reid's philosophy of Common Sense which rejected the whole 'ideal system' and held to an immediate knowledge of reality.

Again, by eliminating all necessity from nature and by making all reasoning depend ultimately upon the imagination, Hume threw doubts upon the fundamental assumptions of Spinoza and the other rationalistic Ontologists who had been carried away by the mathematical sciences and had tried to make the universe 'a system of abstract truths related to each other as the propositions of Euclid are related to his axioms and substantialized by their reference to God or pure Being.' When he had done this, the Materialists proposed to "escape to the world of tangible, visible, sense-giving realities."* Thus Hume

* Stephen: English Thought in the Eighteenth Century, I., 65.

gave a new impulse to the French Illumination with its wide-spread influences.

Hume has also exerted an immense direct influence over the course of English thought. His religious essays with their clear style, coming as they did at the close of the Deistic Controversy, attracted more immediate attention than his philosophical writings ; and they are still the arsenal from which most anti-theological weapons are borrowed. The Treatise was too obscure to be read by the general public, even after attention had been called to it through the various Enquiries ; so that as late as 1808 an unfriendly critic felt at liberty to write : " His strictly philosophical works seem likely to fall into utter neglect; but his History, we need not say, is the basis of his permanent reputation. " * Yet in the English Associational School the influence of Hume's psychology has been deeply felt.

At the present time his importance is fully recognized ; and Professor Huxley on the one hand describes him " as the parent of Kant and as the protagonist of that more modern way of thinking which has been called ' agnosticism ' ", and says that " that to which succeeding generations have made, are making, and will make continual additions is Hume's fame as a philosopher " ; † while on the other hand the late Professor Green called him the " last great English philosopher ", but made use of him to show how hollow this " more modern way of thinking " is.‡

* John Foster, in the *Eclectic Review*.

† ' Hume '—English Men of Letters Series—pp. 58, 43.

‡ Introduction to his edition of the Treatise.

THE PHILOSOPHY OF HUME AS CONTAINED IN EXTRACTS FROM THE FIRST BOOK AND THE FIRST AND SECOND SECTIONS OF THE THIRD PART OF THE SECOND BOOK OF THE TREATISE OF HUMAN NATURE.

THE PHILOSOPHY OF HUME.

INTRODUCTION.

It is evident that all the sciences have a relation, greater or less, to human nature; and that however wide any of them may seem to run from it, they still return back by one passage or another. Even *Mathematics, Natural Philosophy, and Natural Religion* are in some measure dependent on the science of Man; since they lie under the cognizance of men, and are judged of by their powers and faculties. It is impossible to tell what changes and improvements we might make in these sciences were we thoroughly acquainted with the extent and force of human understanding, and could explain the nature of the ideas we employ, and of the operations we perform in our reasonings.

There is no question of importance whose decision is not comprised in the science of man; and there is none which can be decided with any certainty before we become acquainted with that science. In pretending therefore to explain the principles of human nature, we in effect propose a complete system of the sciences, built on a foundation almost entirely new, and the only one upon which they can stand with any security. And, as the science of man is the only solid

foundation for the other sciences, so the only solid foundation we can give to this science itself must be laid on experience and observation.

For to me it seems evident that, the essence of the mind being equally unknown to us with that of external bodies, it must be equally impossible to form any notion of its powers and qualities otherwise than from careful and exact experiments and the observation of those particular effects which result from its different circumstances and situations.

We must therefore glean up our experiments in this science from a cautious observation of human life, and take them as they appear in the common course of the world, by men's behavior in company, in affairs, and in their pleasures. Where experiments of this kind are judiciously collected and compared, we may hope to establish on them a science which will not be inferior in certainty, and will be much superior in utility, to any other of human comprehension.

PART I.

OF IDEAS, THEIR ORIGIN, COMPOSITION, CONNECTION, ABSTRACTION, ETC.

SECTION I.

Of the origin of our ideas.

All the perceptions of the human mind resolve themselves into two distinct kinds, which I shall call Impressions and Ideas. The difference betwixt these consists in the degrees of force and liveliness with which they strike upon the mind and make their way into our thought or consciousness. Those perceptions which enter with most force and violence we may name *impressions;* and under this name I comprehend all our sensations, passions, and emotions, as they make their first appearance in the soul. By *ideas* I mean the faint images of these in thinking and reasoning; such as, for instance, are all the perceptions excited by the present discourse, excepting only those which arise from the sight and touch, and excepting the immediate pleasure or uneasiness it may occasion. I believe it will not be very necessary to employ many words in explaining this distinction.

Every one of himself will readily perceive the difference betwixt feeling and thinking. The common degrees of these are easily distinguished; though it is not impossible but in particular instances they may very nearly approach to each other. Thus in sleep, in a fever, in madness, or in any very violent emotions of soul, our ideas may approach to our impressions: as on the other hand it sometimes happens that our impressions are so faint and low that we cannot distinguish them from our ideas. But notwithstanding this near resemblance in a few instances, they are in general so very different that no one can make a scruple to rank them under distinct heads, and assign to each a peculiar name to mark the difference.

There is another division of our perceptions which it will be convenient to observe, and which extends itself both to our impressions and ideas. This division is into SIMPLE and COMPLEX. Simple perceptions or impressions and ideas are such as admit of no distinction nor separation. The complex are the contrary to these, and may be distinguished into parts. Though a particular color, taste, and smell are qualities all united together in this apple, it is easy to perceive they are not the same, but are at least distinguishable from each other.

Though there is in general a great resemblance betwixt our *complex* impressions and ideas, yet the rule is not universally true that they are exact copies of each other; for I can imagine to myself such a city as the *New Jerusalem*, whose pavement is gold and walls are rubies, though I never saw any such. We may next consider how the case stands with our

simple perceptions. After the most accurate examination of which I am capable, I venture to affirm that the rule here holds without any exception, and that every simple idea has a simple impression, which resembles it ; and every simple impression a correspondent idea. That idea of red which we form in the dark, and that impression which strikes our eyes in sunshine, differ only in degree, not in nature.

We shall here content ourselves with establishing one general proposition, *That all our simple ideas in their first appearance are derived from simple impressions, which are correspondent to them, and which they exactly represent.* We find that any impression either of the mind or body is constantly followed by an idea which resembles it and is only different in the degrees of force and liveliness. The constant conjunction of our resembling perceptions is a convincing proof that the one are the causes of the other ; and this priority of the impressions is an equal proof that our impressions are the causes of our ideas, not our ideas of our impressions.

As our ideas are images of our impressions, so we can form secondary ideas, which are images of the primary; but, as the first ideas are supposed to be derived from impressions, it still remains true that all our simple ideas proceed either mediately or immediately from their correspondent impressions.

This then is the first principle I establish in the science of human nature.

SECTIONS II., III.

Division of the subject, and of the ideas of memory and imagination.

IMPRESSIONS may be divided into two kinds, those of SENSATION and those of REFLECTION. The first kind arises in the soul originally, from unknown causes. The second is derived in a great measure from our ideas, and that in the following order. An impression first strikes upon the senses, and makes us perceive heat or cold, thirst or hunger, pleasure or pain of some kind or other. Of this impression there is a copy taken by the mind, which remains after the impression ceases; and this we call an idea. This idea of pleasure or pain, when it returns upon the soul, produces the new impressions of desire and aversion, hope and fear, which may properly be called impressions of reflection, because derived from it. These again are copied by the memory and imagination, and become ideas; which perhaps in their turn give rise to other impressions and ideas. So that the impressions of reflection are only antecedent to their correspondent ideas; but posterior to those of sensation, and derived from them.

We find by experience that when any impression has been present with the mind it again makes its appearance there as an idea; and this it may do after two different ways: either when in its new appearance it retains a considerable degree of its first vivacity, and is somewhat intermediate betwixt an impression

and an idea; or when it entirely loses that vivacity, and is a perfect idea. The faculty by which we repeat our impressions in the first manner is called the MEMORY, and the other the IMAGINATION. It is evident at first sight that the ideas of the memory are much more lively and strong than those of the imagination, and that the former faculty paints its objects in more distinct colors than any which are employed by the latter. When we remember any past event, the idea of it flows in upon the mind in a forcible manner; whereas in the imagination the perception is faint and languid, and cannot without difficulty be preserved by the mind steady and uniform for any considerable time. Here then is a sensible difference betwixt one species of ideas and another. But of this more fully hereafter.

There is another difference betwixt these two kinds of ideas which is no less evident, namely, that though neither the ideas of the memory nor imagination, neither the lively nor faint ideas, can make their appearance in the mind unless their correspondent impressions have gone before to prepare the way for them, yet the imagination is not restrained to the same order and form with the original impressions; while the memory is in a manner tied down in that respect, without any power of variation.

SECTION IV.

Of the connection or association of ideas.

As all simple ideas may be separated by the imagination, and may be united again in what form it

pleases, nothing would be more unaccountable than the operations of that faculty, were it not guided by some universal principles, which render it in some measure uniform with itself in all times and places. Were ideas entirely loose and unconnected, chance alone would join them; and it is impossible the same simple ideas should fall regularly into complex ones (as they commonly do) without some bond of union among them, some associating quality, by which one idea naturally introduces another. The qualities from which this association arises, and by which the mind is after this manner conveyed from one idea to another, are three, *viz.*, RESEMBLANCE, CONTIGUITY in time or place, and CAUSE and EFFECT.

It is plain that in the course of our thinking, and in the constant revolution of our ideas, our imagination runs easily from one idea to any other that *resembles* it, and that this quality alone is to the fancy a sufficient bond and association. It is likewise evident that as the senses, in changing their objects, are necessitated to change them regularly, and take them as they lie *contiguous* to each other, the imagination must by long custom acquire the same method of thinking, and run along the parts of space and time in conceiving its objects. As to the connection that is made by the relation of *cause and effect*, we shall have occasion afterwards to examine it to the bottom, and therefore shall not at present insist upon it. It is sufficient to observe that there is no relation which produces a stronger connection in the fancy, and makes one idea more readily recall another, than the relation of cause and effect betwixt their objects.

That we may understand the full extent of these relations we must consider that two objects are connected together in the imagination, not only when the one is immediately resembling, contiguous to, or the cause of the other, but also when there is interposed betwixt them a third object which bears to both of them any of these relations. This may be carried on to a great length; though at the same time we may observe that each remove considerably weakens the relation.

Amongst the effects of this union or association of ideas, there are none more remarkable than those complex ideas which are the common subjects of our thoughts and reasoning and generally arise from some principle of union among our simple ideas. These complex ideas may be divided into *Relations*, *Modes*, and *Substances*. We shall briefly examine each of these in order, and shall subjoin some considerations concerning our *general* and *particular* ideas, before we leave the present subject, which may be considered as the elements of this philosophy.

SECTION V.

Of relations.

THE word RELATION is commonly used in two senses considerably different from each other. Either for that quality by which two ideas are connected together in the imagination and the one naturally introduces the other, after the manner above explained; or for that particular circumstance in which, even upon the arbitrary union of two ideas in the fancy, we may

think proper to compare them. In common language the former is always the sense in which we use the word relation; and it is only in philosophy that we extend it to mean any particular subject of comparison, without a connecting principle. Thus distance will be allowed by philosophers to be a true relation, because we acquire an idea of it by the comparing of objects; but in a common way we say *that nothing can be more distant than such or such things from each other*, *nothing can have less relation*, as if distance and relation were incompatible.

It may perhaps be esteemed an endless task to enumerate all those qualities which make objects admit of comparison, and by which the ideas of *philosophical* relation are produced. But if we diligently consider them we shall find that without difficulty they may be comprised under seven general heads, which may be considered as the sources of all *philosophical* relation.

1. The first is *resemblance:* and this is a relation without which no philosophical relation can exist; since no objects will admit of comparison but what have some degree of resemblance. But, though resemblance be necessary to all philosophical relation, it does not follow that it always produces a connection or association of ideas. When a quality becomes very general and is common to a great many individuals, it leads not the mind directly to any one of them; but, by presenting at once too great a choice, does thereby prevent the imagination from fixing on any single object.

2. *Identity* may be esteemed a second species of relation. This relation I here consider as applied in

its strictest sense to constant and unchangeable objects; without examining the nature and foundation of personal identity, which shall find its place afterwards. Of all relations the most universal is that of identity, being common to every being whose existence has any duration.

3. After identity the most universal and comprehensive relations are those of *Space* and *Time*, which are the sources of an infinite number of comparisons, such as *distant*, *contiguous*, *above*, *below*, *before*, *after*, &c.

4. All those objects which admit of *quantity* or *number* may be compared in that particular; which is another very fertile source of relation.

5. When any two objects possess the same *quality* in common, the *degrees* in which they possess it form a fifth species of relation. Thus, of two objects which are both heavy, the one may be either of greater or less weight than the other. Two colors that are of the same kind may yet be of different shades, and in that respect admit of comparison.

6. The relation of *contrariety* may at first sight be regarded as an exception to the rule *that no relation of any kind can subsist without some degree of resemblance.* But let us consider that no two ideas are in themselves contrary except those of existence and non-existence, which are plainly resembling, as implying both of them an idea of the object; though the latter excludes the object from all times and places in which it is supposed not to exist.

7. All other objects, such as fire and water, heat and cold, are only found to be contrary from experience, and from the contrariety of their *causes* or *effects*;

which relation of cause and effect is a seventh philosophical relation, as well as a natural one. The resemblance implied in this relation shall be explained afterwards.

It might naturally be expected that I should join *difference* to the other relations. But that I consider rather as a negation of relation than as anything real or positive. Difference is of two kinds as opposed either to identity or resemblance. The first is called a difference of *number*; the other of *kind.*

SECTION VI.

Of modes and substances.

I WOULD fain ask those philosophers who found so much of their reasonings on the distinction of substance and accident, and imagine we have clear ideas of each, whether the idea of *substance* be derived from the impressions of sensation or of reflection? If it be conveyed to us by our senses, I ask, which of them; and after what manner? If it be perceived by the eyes, it must be a color; if by the ears, a sound; if by the palate, a taste; and so of the other senses. But I believe none will assert that substance is either a color, or sound, or a taste. The idea of substance must therefore be derived from an impression of reflection, if it really exist. But the impressions of reflection resolve themselves into our passions and emotions; none of which can possibly represent a substance. We have therefore no idea of substance, distinct from that of a collection of particular qualities,

nor have we any other meaning when we either talk or reason concerning it.

The idea of a substance, as well as that of a mode, is nothing but a collection of simple ideas that are united by the imagination and have a particular name assigned them, by which we are able to recall, either to ourselves or others, that collection. But the difference betwixt these ideas consists in this, that the particular qualities which form a substance are commonly referred to an unknown *something* in which they are supposed to inhere; or, granting this fiction should not take place, are at least supposed to be closely and inseparably connected by the relations of contiguity and causation. The effect of this is that whatever new simple quality we discover to have the same connection with the rest, we immediately comprehend it among them, even though it did not enter into the first conception of the substance. Thus our idea of gold may at first be a yellow color, weight, malleableness, fusibility; but upon the discovery of its dissolubility in *aqua regia*, we join that to the qualities, and suppose it to belong to the substance as much as if its idea had from the beginning made a part of the compound one. The principle of union being regarded as the chief part of the complex idea gives entrance to whatever quality afterwards occurs, and is equally comprehended by it as are the others, which first presented themselves.

That this cannot take place in modes is evident from considering their nature. The simple ideas of which modes are formed either represent qualities which are not united by contiguity and causation,

but are dispersed in different subjects ; or if they be all united together, the uniting principle is not regarded as the foundation of the complex idea. The idea of a dance is an instance of the first kind of modes ; that of beauty of the second. The reason is obvious why such complex ideas cannot receive any new idea without changing the name which distintinguishes the mode.

SECTION VII.

Of abstract ideas.

A VERY material question has been started concerning *abstract* or *general* ideas, *whether they be general or particular in the mind's conception of them.* A * great philosopher has disputed the received opinion in this particular, and has asserted that all general ideas are nothing but particular ones annexed to a certain term which gives them a more extensive signification and makes them recall upon occasion other individuals which are similar to them. As I look upon this to be one of the greatest and most valuable discoveries that has been made of late years in the republic of letters, I shall here endeavor to confirm it by some arguments which I hope will put it beyond all doubt and controversy.

It is evident that in forming most of our general ideas, if not all of them, we abstract from every particular degree of quantity and quality, and that an object ceases not to be of any particular species on account of every small alteration in its extension,

* Dr. Berkeley.

duration, and other properties. It may therefore be thought that here is a plain dilemma that decides concerning the nature of those abstract ideas which have afforded so much speculation to philosophers. The abstract idea of a man represents men of all sizes and all qualities ; which it is concluded it cannot do, but either by representing at once all possible sizes and all possible qualities, or by representing no particular one at all. Now, it having been esteemed absurd to defend the former proposition, as implying an infinite capacity in the mind, it has been commonly inferred in favor of the latter ; and our abstract ideas have been supposed to represent no particular degree either of quantity or quality. But that this inference is erroneous I shall endeavor to make appear, *first*, by proving that it is utterly impossible to conceive any quantity or quality without forming a precise notion of its degrees ; and, *secondly*, by showing that, though the capacity of the mind be not infinite, yet we can at once form a notion of all possible degrees of quantity and quality, in such a manner, at least, as, however imperfect, may serve all the purposes of reflection and conversation.

To begin with the first proposition, *that the mind cannot form any notion of quantity or quality without forming a precise notion of degrees of each ;* we may prove this by the three following arguments. First, we have observed that whatever objects are different are distinguishable, and that whatever objects are distinguishable are separable by the thought and imagination. And we may here add that these propositions are equally true in the *inverse*, and that whatever

objects are separable are also distinguishable, and that whatever objects are distinguishable are also different. For how is it possible we can separate what is not distinguishable, or distinguish what is not different? In order therefore to know whether abstraction implies a separation, we need only consider it in this view, and examine whether all the circumstances which we abstract from in our general ideas be such as are distinguishable and different from those which we retain as essential parts of them. But it is evident at first sight that the precise length of a line is not different nor distinguishable from the line itself; nor the precise degree of any quality from the quality. These ideas, therefore, admit no more of separation than they do of distinction and difference. They are consequently conjoined with each other in the conception; and the general idea of a line, notwithstanding all our abstractions and refinements, has in its appearance in the mind a precise degree of quantity and quality; however it may be made to represent others which have different degrees of both.

Secondly, it is confessed that no object can appear to the senses, or, in other words, that no impression can become present to the mind, without being determined in its degrees of both quantity and quality.

Now, since all ideas are derived from impressions, and are nothing but copies and representations of them, whatever is true of the one must be acknowledged concerning the other. Impressions and ideas differ only in their strength and vivacity.

Thirdly, it is a principle generally received in philosophy, that everything in nature is individual, and

that it is utterly absurd to suppose a triangle really existent which has no precise proportion of sides and angles. If this therefore be absurd in *fact and reality*, it must also be absurd *in idea*; since nothing of which we can form a clear and distinct idea is absurd and impossible. Abstract ideas are therefore in themselves individual, however they may become general in their representation. The image in the mind is only that of a particular object, though the application of it in our reasoning be the same as if it were universal.

This application of ideas beyond their nature proceeds from our collecting all their possible degrees of quantity and quality in such an imperfect manner as may serve the purposes of life, which is the second proposition I proposed to explain. When we have found a resemblance among several objects that often occur to us, we apply the same name to all of them, whatever differences we may observe in the degrees of their quantity and quality, and whatever other differences may appear among them. After we have acquired a custom of this kind, the hearing of that name revives the idea of one of these objects, and makes the imagination conceive it with all its particular circumstances and proportions.

After the mind has produced an individual idea, upon which we reason, the attendant custom revived by the general or abstract term readily suggests any other individual, if by chance we form any reasoning that agrees not with it. Thus should we mention the word, triangle, and form the idea of a particular equilateral one to correspond to it, and should we after-

wards assert *that the three angles of a triangle are equal to each other*, the other individuals of a scalenum and isosceles, which we overlooked at first, immediately crowd in upon us, and make us perceive the falsehood of this proposition, though it be true with relation to that idea which we had formed. If the mind suggests not always these ideas upon occasion, it proceeds from some imperfection in its faculties ; and such a one as is often the source of false reasoning and sophistry. But this is principally the case with those ideas which are abstruse and compounded. On other occasions the custom is more entire, and it is seldom we run into such errors.

Before I leave this subject I shall employ the same principles to explain that *distinction of reason* which is so much talked of, and is so little understood, in the schools. Of this kind is the distinction betwixt figure and the body figured, motion and the body moved. The difficulty of explaining this distinction arises from the principle above explained, *that all ideas which are different are separable.* For it follows from thence that, if the figure be different from the body, their ideas must be separable as well as distinguishable ; if they be not different, their ideas can neither be separable nor distinguishable. What then is meant by a distinction of reason, since it implies neither a difference nor separation ?

To remove this difficulty we must have recourse to the foregoing explication of abstract ideas. It is certain that the mind would never have dreamed of distinguishing a figure from the body figured, as being in reality neither distinguishable, nor different, nor

separable, did it not observe that even in this simplicity there might be contained many different resemblances and relations. Thus, when a globe of white marble is presented, we receive only the impression of a white color disposed in a certain form, nor are we able to separate and distinguish the color from the form. But, observing afterwards a globe of black marble and a cube of white, and comparing them with our former object, we find two separate resemblances in what formerly seemed, and really is, perfectly inseparable. After a little more practice of this kind we begin to distinguish the figure from the color by a *distinction of reason;* that is, we consider the figure and color together, since they are in effect the same and undistinguishable ; but still view them in different aspects, according to the resemblances of which they are susceptible. When we would consider only the figure of the globe of white marble, we form in reality an idea both of the figure and color, but tacitly carry our eye to its resemblance with the globe of black marble : and in the same manner, when we would consider its color only, we turn our view to its resemblance with the cube of white marble. By this means we accompany our ideas with a kind of reflection, of which custom renders us in a great measure insensible. A person who desires us to consider the figure of a globe of white marble without thinking on its color desires an impossibility ; but his meaning is that we should consider the color and figure together, but still keep in our eye the resemblance to the globe of black marble, or that to any other globe of whatever color or substance.

PART II.

OF THE IDEAS OF SPACE AND TIME.

SECTIONS I., II.

Of the infinite divisibility of space and time.

It is universally allowed that the capacity of the mind is limited and can never attain a full and adequate conception of infinity. It is also obvious that whatever is capable of being divided *in infinitum* must consist of an infinite number of parts, and that it is impossible to set any bounds to the number of parts without setting bounds at the same time to the division. It requires scarce any induction to conclude from hence that the *idea* which we form of any finite quality is not infinitely divisible, but that by proper distinctions and separations we may run up this idea to inferior ones which will be perfectly simple and indivisible. In rejecting the infinite capacity of the mind we suppose it may arrive at an end in the division of its ideas; nor are there any possible means of evading the evidence of this conclusion.

It is therefore certain that the imagination reaches

a *minimum*, and may raise up to itself an idea of which it cannot conceive any sub-division, and which cannot be diminished without a total annihilation. When you tell me of the thousandth and ten thousandth part of a grain of sand, I have a distinct idea of these numbers and of their different proportions; but the images which I form in my mind to represent the things themselves are nothing different from each other, nor inferior to that image by which I represent the grain of sand itself which is supposed so vastly to exceed them.

It is an established maxim in metaphysics *That whatever the mind clearly conceives includes the idea of possible existence*, or, in other words, *that nothing we imagine is absolutely impossible.* We can form the idea of a golden mountain, and from thence conclude that such a mountain may actually exist. We can form no idea of a mountain without a valley, and therefore regard it as impossible.

Now it is certain we have an idea of extension; for otherwise why do we talk and reason concerning it? It is likewise certain that this idea as conceived by the imagination, though divisible into parts or inferior ideas, is not infinitely divisible, nor consists of an infinite number of parts: for that exceeds the comprehension of our limited capacities. Here then is an idea of extension which consists of parts or inferior ideas that are perfectly indivisible: consequently this idea implies no contradiction: consequently it is possible for extension really to exist conformable to it: and consequently all the arguments employed against the possibility of mathematical

points are mere scholastic quibbles and unworthy of our attention.

These consequences we may carry one step farther and conclude that all the pretended demonstrations for the infinite divisibility of extension are equally sophistical; since it is certain these demonstrations cannot be just without proving the impossibility of mathematical points; which it is an evident absurdity to pretend to.

All this reasoning takes place with regard to time.

SECTIONS III., IV.

Of the other qualities of our ideas of space and time.

No discovery could have been made more happily for deciding all controversies concerning ideas than that above mentioned, that impressions always take the precedency of them and that every idea with which the imagination is furnished first makes its appearance in a correspondent impression. These latter perceptions are all so clear and evident that they admit of no controversy; though many of our ideas are so obscure that it is almost impossible even for the mind which forms them to tell exactly their nature and composition. Let us apply this principle in order to discover farther the nature of our ideas of space and time.

The idea of space is conveyed to the mind by two senses, the sight and touch; nor does anything ever appear extended that is not either visible or tangible. That compound impression which represents exten-

sion consists of several lesser impressions, that are indivisible to the eye or feeling and may be called impressions of atoms or corpuscles, endowed with color and solidity. But this is not all. It is not only requisite that these atoms should be colored or tangible in order to discover themselves to our senses; it is also necessary we should preserve the idea of their color or tangibility in order to comprehend them by our imagination. There is nothing but the idea of their color or tangibility which can render them conceivable by the mind. Upon the removal of the ideas of these sensible qualities they are utterly annihilated to the thought or imagination.

As it is from the disposition of visible and tangible objects we receive the idea of space, so from the succession of ideas and impressions we form the idea of time; nor is it possible for time alone ever to make its appearance or be taken notice of by the mind. A man in a sound sleep, or strongly occupied with one thought, is insensible of time; and according as his perceptions succeed each other with greater or less rapidity the same duration appears longer or shorter to his imagination. Wherever we have no successive perceptions we have no notion of time, even though there be a real succession in the objects. From these phenomena, as well as from many others, we may conclude that time cannot make its appearance to the mind either alone or attended with a steady, unchangeable object, but is always discovered by some *perceivable* succession of changeable objects.

In order to know whether any objects which are joined in impression be separable in idea, we need

only consider if they be different from each other ; in which case it is plain they may be conceived apart. The idea of time is not derived from a particular impression mixed up with others and plainly distinguishable from them, but arises altogether from the manner in which impressions appear to the mind, without making one of the number. Five notes played on a flute give us the impression and idea of time, though time be not a sixth impression which presents itself to the hearing or any other of the senses. Nor is it a sixth impression which the mind by reflection finds in itself.

The ideas of space and time are therefore no separate or distinct ideas, but merely those of the manner or order in which objects exist. Or, in other words, it is impossible to conceive either a vacuum, and extension without matter, or a time when there was no succession or change in any real existence.

I know there are some who pretend that the idea of duration is applicable in a proper sense to objects which are perfectly unchangeable ; and this I take to be the common opinion of philosophers as well as of the vulgar. But, though it be impossible to show the impression from which the idea of time without a changeable existence is derived, yet we can easily point out those appearances which make us fancy we have that idea. For we may observe that there is a continual succession of perceptions in our mind ; so that, the idea of time being forever present with us, when we consider a steadfast object at five o'clock and regard the same at six, we are apt to apply to it that idea in the same manner as if every moment

were distinguished by a different position or an alteration of the object. The first and second appearances of the object, being compared with the succession of our perceptions, seem equally removed as if the object had really changed. To which we may add, what experience shows us, that the object was susceptible of such a number of changes betwixt these appearances; as also that the unchangeable or rather fictitious duration has the same effect upon every quality, by increasing or diminishing it, as that succession which is obvious to the senses. From these three relations we are apt to confound our ideas, and imagine we can form the idea of a time and duration without any change or succession.

SECTION VI.

Of the idea of existence, and of external existence.

SINCE we never remember any idea or impression without attributing existence to it, the idea of existence must either be derived from a distinct impression, conjoined with every perception or object of our thought, or must be the very same with the idea of the perception or object.

As this dilemma is an evident consequence of the principle that every idea arises from a similar impression, so our decision betwixt the propositions of the dilemma is no more doubtful. So far from there being any distinct impression attending every impression and every idea, that I do not think there are any two distinct impressions which are inseparably con-

joined. Though certain sensations may at one time be united, we quickly find they admit of a separation, and may be presented apart. And thus, though every impression and idea we remember be considered as existent, the idea of existence is not derived from any particular impression.

The idea of existence, then, is the very same with the idea of what we conceive to be existent. To reflect on anything simply, and to reflect on it as existent, are nothing different from each other. That idea when conjoined with the idea of any object makes no addition to it. Whatever we conceive, we conceive to be existent. Any idea we please to form is the idea of a being; and the idea of a being is any idea we please to form.

Whoever opposes this must necessarily point out that distinct impression from which the idea of entity is derived, and must prove that this impression is inseparable from every perception we believe to be existent. This we may without hesitation conclude to be impossible. A like reasoning will account for the idea of *external existence.*

Since nothing is ever present to the mind but perceptions, and since all ideas are derived from something antecedently present to the mind, it follows that it is impossible for us so much as to conceive or form an idea of anything specifically different from ideas and impressions. Let us fix our attention out of ourselves as much as possible; let us chase our imagination to the heavens, or to the utmost limits of the universe: we never really advance a step beyond ourselves, nor can conceive any kind of existence but

those perceptions which have appeared in that narrow compass. This is the universe of the imagination, nor have we any idea but what is there produced.

The farthest we can go towards a conception of external objects, when supposed *specifically* different from our perceptions, is to form a relative idea of them, without pretending to comprehend the related objects. Generally speaking, we do not suppose them specifically different, but only attribute to them different relations, connections, and durations. But of this more fully hereafter.*

* Part IV., sec. II.

PART III.

OF KNOWLEDGE AND PROBABILITY.

SECTIONS I., II.

Of knowledge and probability and the idea of cause and effect.

THERE are *seven different kinds of philosophical relation, *viz.*, *resemblance*, *identity*, *relations of time and place*, *proportion in quantity or number*, *degrees in any quality*, *contrariety*, *and causation.* These relations may be divided into two classes : into such as depend entirely on the ideas which we compare together, and such as may be changed without any change in the ideas. It is from the idea of a triangle that we discover the relation of equality which its three angles bear to two right ones ; and this relation is invariable, as long as our idea remains the same. On the contrary, the relations of *contiguity* and *distance* betwixt two objects may be changed merely by an alteration of their place, without any change on the objects themselves or on their ideas ; and the place depends

* Part I., sec. v.

on a hundred different accidents which cannot be foreseen by the mind. It is the same case with *identity* and *causation*. Two objects, though perfectly resembling each other, and even appearing in the same place at different times, may be numerically different: and as the power by which one object produces another is never discoverable merely from their idea, it is evident *cause* and *effect* are relations of which we receive information from experience and not from any abstract reasoning or reflection. There is no single phænomenon, even the most simple, which can be accounted for from the qualities of the objects as they appear to us, or which we could foresee without the help of our memory and experience.

It appears, therefore, that of these seven philosophical relations there remain only four which, depending solely upon ideas, can be the objects of knowledge and certainty. These four are *resemblance*, *contrariety*, *degrees in quality*, *and proportions in quantity or number*. But as to the other three, which depend not upon the idea and may be absent or present even while *that* remains the same, it will be proper to explain them more particularly. These three relations are *identity*, *the situations in time and place*, *and causation*.

Of those three relations which depend not upon the mere ideas the only one that can be traced beyond our senses, and informs us of existences and objects which we do not see or feel, is *causation*. This relation, therefore, we shall endeavor to explain fully before we leave the subject of the understanding.

To begin regularly, we must consider the idea of *causation*, and see from what origin it is derived. It is

impossible to reason justly without understanding perfectly the idea concerning which we reason ; and it is impossible perfectly to understand any idea without tracing it up to its origin and examining that primary impression from which it arises. The examination of the impression bestows a clearness on the idea ; and the examination of the idea bestows a like clearness on all our reasoning.

Let us therefore cast our eye on any two objects which we call cause and effect, and turn them on all sides, in order to find that impression which produces an idea of such prodigious consequence. At first sight I perceive that I must not search for it in any of the particular *qualities* of the objects ; since, whichever of these qualities I pitch on, I find some object that is not possessed of it and yet falls under the denomination of cause or effect.

The idea, then, of causation must be derived from some *relation* among objects ; and that relation we must now endeavor to discover. I find, in the first place, that whatever objects are considered as causes or effects are *contiguous ;* and that nothing can operate in a time or place which is ever so little removed from those of its existence.

The second relation I shall observe as essential to causes and effects is not so universally acknowledged, but is liable to some controversy. It is that of *priority* of time in the cause before the effect.

Having thus discovered or supposed the two relations of CONTIGUITY and SUCCESSION to be essential to causes and effects, I find I am stopped short, and can proceed no farther in considering any single instance

of cause and effect. Motion in one body is regarded upon impulse as the cause of motion in another. When we consider these objects with the utmost attention we find only that the one body approaches the other ; and that the motion of it precedes that of the other, but without any sensible interval. It is in vain to rack ourselves with *farther* thought and reflection upon this subject. We can go no *farther* in considering this particular instance.

Should any one leave this instance and pretend to define a cause by saying it is something productive of another, it is evident he would say nothing. For what does he mean by *production ?* Can he give any definition of it that will not be the same with that of causation ? If he can ; I desire it may be produced. If he cannot ; he here runs in a circle and gives a synonymous term instead of a definition.

Shall we then rest contented with these two relations of contiguity and succession, as affording a complete idea of causation ? By no means. An object may be contiguous and prior to another without being considered as its cause. There is a NECESSARY CONNECTION to be taken into consideration ; and that relation is of much greater importance than any of the other two above mentioned.

Here again I turn the object on all sides, in order to discover the nature of this necessary connection, and find the impression, or impressions, from which its idea may be derived. When I cast my eye on the *known qualities* of objects, I immediately discover that the relation of cause and effect depends not in the least on *them.* When I consider their *relations,* I can

find none but those of contiguity and succession, which I have already regarded as imperfect and unsatisfactory. Shall the despair of success make me assert that I am here possessed of an idea which is not preceded by any similar impression? This would be too strong a proof of levity and inconstancy, since the contrary principle has been already so firmly established as to admit of no farther doubt, at least till we have more fully examined the present difficulty.

We must, therefore, proceed like those who, being in search of anything that lies concealed from them, and not finding it in the place they expected, beat about all the neighboring fields, without any certain view or design, in hopes their good fortune will at last guide them to what they search for. It is necessary for us to leave the direct survey of this question concerning the nature of that *necessary connection* which enters into our idea of cause and effect, and endeavor to find some other questions the examination of which will perhaps afford a hint that may serve to clear up the present difficulty. Of these questions there occur two, which I shall proceed to examine, *viz.:*

First, For what reason we pronounce it *necessary* that everything whose existence has a beginning should also have a cause?

Secondly, Why we conclude that such particular causes must *necessarily* have such particular effects; and what is the nature of that *inference* we draw from the one to the other, and of the *belief* we repose in it?

SECTION III.

Why a cause is always necessary.

To begin with the first question concerning the necessity of a cause: It is a general maxim in philosophy that *whatever begins to exist must have a cause of existence.* This is commonly taken for granted in all reasonings, without any proof given or demanded. It is supposed to be founded on intuition, and to be one of those maxims which, though they may be denied with the lips, it is impossible for men in their hearts really to doubt of. But all certainty arises from the comparison of ideas, and from the discovery of such relations as are unalterable so long as the ideas continue the same. These relations are *resemblance, proportions in quantity and number, degrees of any quality, and contrariety;* none of which are implied in this proposition: *Whatever has a beginning has also a cause of existence.* That proposition therefore is not intuitively certain.

But here is an argument which proves at once that the foregoing proposition is neither intuitively nor demonstrably certain. As all distinct ideas are separable from each other, and as the ideas of cause and effect are evidently distinct, it will be easy for us to conceive any object to be non-existent this moment and existent the next, without conjoining to it the distinct idea of a cause or productive principle. The separation, therefore, of the idea of a cause from that of a beginning of existence is plainly possible for the

imagination ; and consequently the actual separation of these objects is so far possible that it implies no contradiction nor absurdity, and is therefore incapable of being refuted by any reasoning from mere ideas ; without which it is impossible to demonstrate the necessity of a cause.

Accordingly we shall find upon examination that every demonstration which has been produced for the necessity of a cause is fallacious and sophistical. All the points of time and place, * say some philosophers, in which we can suppose any object to begin to exist, are in themselves equal ; and unless there be some cause which is peculiar to one time and to one place, and which by that means determines and fixes the existence, it must remain in eternal suspense ; and the object can never begin to be, for want of something to fix its beginning. But I ask, Is there any more difficulty in supposing the time and place to be fixed without a cause than to suppose the existence to be determined in that manner ? The first question that occurs on this subject is always *whether* the object shall exist or not. The next, *when* and *where* it shall begin to exist. If the removal of a cause be intuitively absurd in the one case, it must be so in the other : and if that absurdity be not clear without a proof in the one case, it will equally require one in the other. The absurdity, then, of the one supposition can never be a proof of that of the other ; since they are both upon the same footing and must stand or fall by the same reasoning.

The second argument † which I find used on this

* Mr. *Hobbes*. † Dr. *Clarke* and others.

head labors under an equal difficulty. Everything, it is said, must have a cause; for if anything wanted a cause *it* would produce *itself*; that is, exist before it existed; which is impossible. But this reasoning is plainly unconclusive; because it supposes that in our denial of a cause we still grant what we expressly deny, *viz.:* that there must be a cause; which therefore is taken to be the object itself; and *that*, no doubt, is an evident contradiction. But to say that anything is produced, or, to express myself more properly, comes into existence, without a cause, is not to affirm that it is itself its own cause; but on the contrary, in excluding all external causes, excludes *a fortiori* the thing itself which is created. An object that exists absolutely without any cause certainly is not its own cause; and when you assert that the one follows from the other you suppose the very point in question, and take it for granted that it is utterly impossible anything can ever begin to exist without a cause, but that upon the exclusion of one productive principle we must still have recourse to another.

It is exactly the same case with the * third argument which has been employed to demonstrate the necessity of a cause. Whatever is produced without any cause is produced by *nothing*; or, in other words, has nothing for its cause. But nothing can never be a cause, no more than it can be something, or equal to two right angles. By the same intuition that we perceive nothing not to be equal to two right angles, or not to be something, we perceive that it can never

* Mr. *Locke*.

be a cause; and consequently must perceive that every object has a real cause of its existence.

I believe it will not be necessary to employ many words in showing the weakness of this argument, after what I have said of the foregoing. They are all of them founded on the same fallacy, and are derived from the same turn of thought. It is sufficient only to observe that when we exclude all causes we really do exclude them, and neither suppose nothing nor the object itself to be the causes of the existence; and consequently can draw no argument from the absurdity of these suppositions to prove the absurdity of that exclusion. If everything must have a cause, it follows that upon the exclusion of other causes we must accept of the object itself or of nothing as causes. But it is the very point in question, whether everything must have a cause or not; and therefore, according to all just reasoning, it ought never to be taken for granted.

They are still more frivolous who say that every effect must have a cause, because it is implied in the very idea of effect. Every effect necessarily presupposes a cause; effect being a relative term, of which cause is the correlative. But this does not prove that every being must be preceded by a cause; no more than it follows because every husband must have a wife that therefore every man must be married. The true state of the question is, whether every object which begins to exist must owe its existence to a cause; and this I assert to be neither intuitively nor demonstratively certain, and hope to have proved it sufficiently by the foregoing arguments.

Since it is not from knowledge or any scientific reasoning that we derive the opinion of the necessity of a cause to every new production, that opinion must necessarily arise from observation and experience. The next question, then, should naturally be, *how experience gives rise to such a principle?* But as I find it will be more convenient to sink this question in the following: *Why we conclude that such particular causes must necessarily have such particular effects, and why we form an inference from one to another?* we shall make that the subject of our future enquiry. It will, perhaps, be found in the end that the same answer will serve for both questions.

SECTIONS IV., V.

Of the component parts of our reasonings concerning cause and effect, and of the impressions of the senses and memory.

THOUGH the mind in its reasonings from causes or effects carries its view beyond those objects which it sees or remembers, it must never lose sight of them entirely, nor reason merely upon its own ideas without some mixture of impressions, or at least of ideas of the memory which are equivalent to impressions. When we infer effects from causes, we must establish the existence of these causes; which we have only two ways of doing: either by an immediate perception of our memory or senses, or by an inference from other causes; which causes again we must ascertain in the same manner, either by a present impression, or by an

inference from *their* causes, and so on, till we arrive at some object which we see or remember. It is impossible for us to carry on our inferences *in infinitum*; and the only thing that can stop them is an impression of the memory or senses, beyond which there is no room for doubt or enquiry.

Here therefore we have three things to explain, *viz.: First*, the original impression. *Secondly*, the transition to the idea of the connected cause or effect. *Thirdly*, the nature and qualities of that idea.

[1] As to those *impressions* which arise from the *senses*, their ultimate cause is, in my opinion, perfectly inexplicable by human reason, and it will always be impossible to decide with certainty whether they arise immediately from the object, or are produced by the creative power of the mind, or are derived from the author of our being. Nor is such a question any way material to our present purpose. We may draw inferences from the coherence of our perceptions, whether they be true or false; whether they represent nature justly, or be mere illusions of the senses.

When we search for the characteristic which distinguishes the *memory* from the imagination, we must immediately perceive that it cannot lie in the simple ideas it presents to us; since both these faculties borrow their simple ideas from the impressions, and can never go beyond these original perceptions. These faculties are as little distinguished from each other by the arrangement of their complex ideas; it being impossible to recall the past impressions in order to compare them with our present ideas and see whether their arrangement be exactly similar. Since therefore

the memory is known neither by the order of its *complex* ideas nor the nature of its *simple* ones, it follows that the difference betwixt it and the imagination lies in its superior force and vivacity. A man may indulge his fancy in feigning any past scene of adventures ; nor would there be any possibility of distinguishing this from a remembrance of a like kind, were not the ideas of the imagination fainter and more obscure.

Thus it appears that the *belief* or *assent*, which always attends the memory and senses, is nothing but the vivacity of those perceptions they present ; and that this alone distinguishes them from the imagination. To believe is in this case to feel an immediate impression of the senses, or a repetition of that impression in the memory. It is merely the force and liveliness of the perception which constitutes the first act of the judgment, and lays the foundation of that reasoning which we build upon it when we trace the relation of cause and effect.

SECTION VI.

[2] *Of the inference from the impression to the idea.*

IT IS easy to observe that, in tracing this relation, the inference we draw from cause to effect is not derived merely from a survey of these particular objects and from such a penetration into their essences as may discover the dependence of the one upon the other. There is no object which implies the existence of any other if we consider these objects in

themselves and never look beyond the ideas which we form of them. Such an inference would amount to knowledge, and would imply the absolute contradiction and impossibility of conceiving anything different. But, as all distinct ideas are separable, it is evident there can be no impossibility of that kind. When we pass from a present impression to the idea of any object, we might possibly have separated the idea from the impression, and have substituted any other idea in its room.

It is therefore by EXPERIENCE only that we can infer the existence of one object from that of another. Thus we remember to have seen that species of object we call *flame*, and to have felt that species of sensation we call *heat*. We likewise call to mind their constant conjunction in all past instances. Without any farther ceremony, we call the one *cause* and the other *effect*, and infer the existence of the one from that of the other. In all those instances from which we learn the conjunction of particular causes and effects, both the causes and effects have been perceived by the senses and are remembered: but in all cases wherein we reason concerning them there is only one perceived or remembered, and the other is supplied in conformity to our past experience.

Thus in advancing we have insensibly discovered a new relation betwixt cause and effect when we least expected it and were entirely employed upon another subject. This relation is their CONSTANT CONJUNCTION. Contiguity and succession are not sufficient to make us pronounce any two objects to be cause and effect, unless we perceive that these two relations are

preserved in several instances. We may now see the advantage of quitting the direct survey of this relation in order to discover the nature of that *necessary connection* which makes so essential a part of it. Having found that after the discovery of the constant conjunction of any objects we always draw an inference from one object to another, we shall now examine the nature of that inference and of the transition from the impression to the idea. Perhaps it will appear in the end that the necessary connection depends on the inference, instead of the inference's depending on the necessary connection.

Since it appears that the transition from an impression present to the memory or senses to the idea of an object which we call cause or effect is founded on past *experience*, and on our remembrance of their *constant conjunction*, the next question is, Whether experience produces the idea by means of the understanding or of the imagination ; whether we are determined by reason to make the transition, or by a certain association and relation of perceptions? If reason determined us, it would proceed upon that principle *that instances of which we have had no experience must resemble those of which we have had experience, and that the course of nature continues always uniformly the same.*

The arguments upon which such a proposition may be supposed to be founded must be derived either from *knowledge* or *probability*. Our foregoing method of reasoning will easily convince us that there can be no *demonstrative* arguments to prove *that those instances of which we have had no experience resemble those of which we have had experience.* We can at least con-

ceive a change in the course of nature; which sufficiently proves that such a change is not absolutely impossible. To form a clear idea of anything is an undeniable argument for its possibility, and is alone a refutation of any pretended demonstration against it.

Probability is founded on the presumption of a resemblance betwixt those objects of which we have had experience and those of which we have had none; and therefore it is impossible this presumption can arise from probability. The same principle cannot be both the cause and effect of another; and this is, perhaps, the only proposition concerning that relation which is either intuitively or demonstratively certain.

Thus not only our reason fails us in the discovery of the *ultimate connection* of causes and effects, but even after experience has informed us of their *constant conjunction* it is impossible for us to satisfy ourselves by our reason why we should extend that experience beyond those particular instances which have fallen under our observation. We suppose, but are never able to prove, that there must be a resemblance betwixt those objects of which we have had experience and those which lie beyond the reach of our discovery.

When the mind, therefore, passes from the idea or impression of one object to the idea or belief of another, it is not determined by reason, but by certain principles which associate together the ideas of these objects and unite them in the imagination. Had ideas no more union in the fancy than objects seem to have to the understanding, we could never draw any inference from causes to effects, nor repose belief in any matter of fact. The inference, therefore,

depends solely on the union of ideas. When the impression of one object becomes present to us, we immediately form an idea of its usual attendant; and consequently we may establish this as one part of the definition of an opinion or belief, that it is *an idea related to or associated with a present impression.*

Thus, though causation be a *philosophical* relation, as implying contiguity, succession, and constant conjunction, yet it is only so far as it is a *natural* relation, and produces an union among our ideas, that we are unable to reason upon it, or draw any inference from it.

SECTION VII.

[3] *Of the nature of the idea or belief.*

IT is evident that all reasonings from causes or effects terminate in conclusions concerning matter of fact; that is, concerning the existence of objects or of their qualities. It is also evident that the idea of existence is nothing different from the idea of any object, and that when after the simple conception of anything we would conceive it as existent, we in reality make no addition to or alteration on our first idea. Thus, when we affirm that God is existent, we simply form the idea of such a being as he is represented to us; nor is the existence which we attribute to him conceived by a particular idea which we join to the idea of his other qualities and can again separate and distinguish from them. But I go farther; and, not content with asserting that the conception of

the existence of any object is no addition to the simple conception of it, I likewise maintain that the belief of the existence joins no new ideas to those which compose the idea of the object. When I think of God, when I think of him as existent, and when I believe him to be existent, my idea of him neither increases nor diminishes. But, as it is certain there is a great difference betwixt the simple conception of the existence of an object and the belief of it, and as this difference lies not in the parts or composition of the idea which we conceive, it follows that it must lie in the *manner* in which we conceive it.

I therefore ask, Wherein consists the difference betwixt believing and disbelieving any proposition? The answer is easy with regard to propositions that are proved by intuition or demonstration. In that case, the person who assents not only conceives the ideas according to the proposition, but is necessarily determined to conceive them in that particular manner, either immediately or by the interposition of other ideas. Whatever is absurd is unintelligible; nor is it possible for the imagination to conceive anything contrary to a demonstration. But, as in reasonings from causation and concerning matters of fact this absolute necessity cannot take place, and the imagination is free to conceive both sides of the question, I still ask, *Wherein consists the difference betwixt incredulity and belief?* since in both cases the conception of the idea is equally possible and requisite.

It is confessed that in all cases wherein we dissent from any person we conceive both sides of the question; but, as we can believe only one, it evidently

follows that the belief must make some difference betwixt that conception to which we assent and that from which we dissent. We may mingle, and unite, and separate, and confound, and vary our ideas in a hundred different ways ; but, until there appears some principle which fixes one of these different situations, we have in reality no opinion : and this principle, as it plainly makes no addition to our precedent ideas, can only change the *manner* of our conceiving them.

When you would any way vary the idea of a particular object, you can only increase or diminish its force and vivacity. If you make any other change on it, it represents a different object or impression. The case is the same as in colors. A particular shade of any color may acquire a new degree of liveliness or brightness without any other variation. But when you produce any other variation, it is no longer the same shade or color. So that, as belief does nothing but vary the manner in which we conceive any object, it can only bestow on our ideas an additional force and vivacity. An opinion, therefore, or belief may be most accurately defined, A LIVELY IDEA RELATED TO OR ASSOCIATED WITH A PRESENT IMPRESSION.

Here are the heads of those arguments which lead us to this conclusion. When we infer the existence of an object from that of others, some object must always be present either to the memory or senses in order to be the foundation of our reasoning ; since the mind cannot run up with its inferences *in infinitum*. Reason can never satisfy us that the existence of any one object does ever imply that of another ; so that when we pass from the impression of

one to the idea or belief of another, we are not determined by reason, but by custom or a principle of association. But belief is somewhat more than a simple idea. It is a particular manner of forming an idea: and as the same idea can only be varied by a variation of its degrees of force and vivacity, it follows, upon the whole, that belief is a lively idea produced by a relation to a present impression, according to the foregoing definition.

SECTION VIII.

Of the causes of belief.

I WOULD willingly establish it as a general maxim in the science of human nature *that when any impression becomes present to us, it not only transports the mind to such ideas as are related to it, but likewise communicates to them a share of its force and vivacity.*

Upon the appearance of the picture of an absent friend, our idea of him is evidently enlivened by the *resemblance*, and every passion which that idea occasions, whether of joy or sorrow, acquires new force and vigor.

The thinking on any object readily transports the mind to what is *contiguous;* but it is only the actual presence of an object that transports it with a superior vivacity. When I am a few miles from home, whatever relates to it touches me more nearly than when I am two hundred leagues distant; though even at that distance the reflecting on anything in the neigh-

borhood of my friends and family naturally produces an idea of them.

No one can doubt but *causation* has the same influence as the other two relations of resemblance and contiguity. The objects it presents are fixed and unalterable. The impressions of the memory never change in any considerable degree ; and each impression draws along with it a precise idea, which takes its place in the imagination as something solid and real, certain and invariable. The thought is always determined to pass from the impression to the idea, and from that particular impression to that particular idea, without any choice or hesitation.

Contiguity and resemblance have an effect much inferior to causation ; but still have some effect, and augment the conviction of any opinion and the vivacity of any conception.

Thus all probable reasoning is nothing but a species of sensation. It is not solely in poetry and music we must follow our taste and sentiment, but likewise in philosophy. When I am convinced of any principle, it is only an idea which strikes more strongly upon me. When I give the preference to one set of arguments above another, I do nothing but decide from my feeling concerning the superiority of their influence. Objects have no discoverable connection together ; nor is it from any other principle but custom operating upon the imagination that we can draw any inference from the appearance of one to the existence of another.

SECTIONS XI., XII., XIII.

Of probability.

BUT, in order to bestow on this system its full force and evidence, we must carry our eye from it a moment to consider its consequences, and explain from the same principles some other species of reasoning which are derived from the same origin.

Those philosophers who have divided human reason into *knowledge and probability*, and have defined the first to be *that evidence which arises from the comparison of ideas*, are obliged to comprehend all our arguments from causes or effects under the general term of probability. But though every one be free to use his terms in what sense he pleases, and accordingly in the precedent part of this discourse I have followed this method of expression; it is however certain that in common discourse we readily affirm that many arguments from causation exceed probability and may be received as a superior kind of evidence. One would appear ridiculous who would say that it is only probable the sun will rise to-morrow or that all men must die; though it is plain we have no further assurance of these facts than what experience affords us. For this reason, it would perhaps be more convenient, in order at once to preserve the common signification of words and mark the several degrees of evidence, to distinguish human reason into three kinds, *viz.*, *that from knowledge, from proofs, and from*

probabilities. By knowledge I mean the assurance arising from the comparison of ideas. By proofs, those arguments which are derived from the relation of cause and effect, and which are entirely free from doubt and uncertainty. By probability, that evidence which is still attended with uncertainty. It is this last species of reasoning I proceed to examine.

It is commonly allowed by philosophers that what the vulgar call chance is nothing but a secret and concealed cause. That species of probability, therefore, is what we must chiefly examine.

The probabilities of causes are of several kinds, but are all derived from the same origin, *viz.*, *the association of ideas to a present impression.* As the habit which produces the association arises from the frequent conjunction of objects, it must arrive at its perfection by degrees, and must acquire new force from each instance that falls under our observation. The first instance has little or no force ; the second makes some addition to it ; the third becomes still more sensible : and it is by these slow steps that our judgment arrives at a full assurance. But before it attains this pitch of perfection it passes through several inferior degrees, and in all of them is only to be esteemed a presumption or probability. The gradation, therefore, from probabilities to proofs is in many cases insensible ; and the difference betwixt these kinds of evidence is more easily perceived in the remote degrees than in the near and contiguous.

But, *secondly*, when in considering past experiments we find them of a contrary nature, the habit or determination of the mind to transfer the past to the future

and expect for the future the same train of objects to which we have been accustomed, though full and perfect in itself, presents us with no steady object, but offers us a number of disagreeing images in a certain order and proportion. The first impulse, therefore, is here broke into pieces, and diffuses itself over all those images, of which each partakes an equal share of that force and vivacity that is derived from the impulse. Any of these past events may happen again; and we judge that when they do happen they will be mixed in the same proportion as in the past.

Suppose, for instance, I have found by long observation that, of twenty ships which go to sea, only nineteen return. Suppose I see at present twenty ships that leave the port: I transfer my past experience to the future, and represent to myself nineteen of these ships as returning in safety, and one as perishing. Concerning this there can be no difficulty. But, as we frequently run over those several ideas of past events in order to form a judgment concerning one single event which appears uncertain, this consideration must change the *first form* of our ideas, and draw together the divided images presented by experience; since it is to *it* we refer the determination of that particular event upon which we reason. Many of these images are supposed to concur, and a superior number to concur on one side. These agreeing images unite together and render the idea more strong and lively, not only than a mere fiction of the imagination, but also than any idea which is supported by a lesser number of experiments. Each new experiment is as a new stroke of the pencil, which be-

stows an additional vivacity on the colors without either multiplying or enlarging the figure.

This is the manner in which past experiments *concur* when they are transferred to any future event. As to the manner of their *opposition*, it is evident that, as the contrary views are incompatible with each other and it is impossible the object can at once exist conformable to both of them, their influence becomes mutually destructive, and the mind is determined to the superior only with that force which remains after subtracting the inferior.

But, beside these two species of probability which are derived from an *imperfect* experience and from *contrary* causes, there is a third, arising from ANALOGY which differs from them in some material circumstances. According to the hypothesis above explained all kinds of reasoning from causes or effects are founded on two particulars, *viz.*, the constant conjunction of any two objects in all past experience, and the resemblance of a present object to any one of them. The effect of these two particulars is that the present object invigorates and enlivens the imagination; and the resemblance along with the constant union conveys this force and vivacity to the related idea; which we are therefore said to believe, or assent to. If you weaken either the union or resemblance, you weaken the principle of transition, and, of consequence, that belief which arises from it. The vivacity of the first impression cannot be fully conveyed to the related idea, either where the conjunction of their objects is not constant, or where the present impression does not perfectly resemble any of those whose

union we are accustomed to observe. In those probabilities of chance and causes above explained it is the constancy of the union which is diminished; and in the probability derived from analogy, it is the resemblance only which is affected. Without some degree of resemblance, as well as union, it is impossible there can be any reasoning: but, as this resemblance admits of many different degrees, the reasoning becomes proportionably more or less firm and certain. An experiment loses of its force when transferred to instances which are not exactly resembling; though it is evident it may still retain as much as may be the foundation of probability, as long as there is any resemblance remaining.

Thus it appears, upon the whole, that every kind of opinion or judgment which amounts not to knowledge is derived entirely from the force and vivacity of the perception, and that these qualities constitute in the mind what we call the BELIEF of the existence of any object. This force and this vivacity are most conspicuous in the memory; and therefore our confidence in the veracity of that faculty is the greatest imaginable, and equals in many respects the assurance of a demonstration. The next degree of these qualities is that derived from the relation of cause and effect; and this too is very great, especially when the conjunction is found by experience to be perfectly constant, and when the object which is present to us exactly resembles those of which we have had experience. But below this degree of evidence there are many others, which have an influence on the passions and imagination proportioned to that degree

of force and vivacity which they communicate to the ideas. It is by habit we make the transition from cause to effect; and it is from some present impression we borrow that vivacity which we diffuse over the correlative idea. But when we have not observed a sufficient number of instances to produce a strong habit; or when these instances are contrary to each other; or when the resemblance is not exact; or the present impression is faint and obscure; or the experience in some measure obliterated from the memory; or the connection dependent on a long chain of objects; or the inference derived from general rules, and yet not conformable to them: In all these cases the evidence diminishes by the diminution of the force and intenseness of the idea. This therefore is the nature of the judgment and probability.

SECTION XIV.

*Of the idea of necessary connection.**

HAVING thus explained the manner *in which we reason beyond our immediate impressions, and conclude that such particular causes must have such particular effects*, we must now return upon our footsteps to examine that question which † first occurred to us, and which we dropped in our way, *viz.*, *What is our idea of necessity when we say that two objects are necessarily connected together?* Upon this head I repeat

* [This section and Sections V. and VI. of Part I. are inserted in full.—ED.]

† Section II.

what I have often had occasion to observe, that, as we have no idea that is not derived from an impression, we must find some impression that gives rise to this idea of necessity, if we assert we have really such an idea. In order to this, I consider in what objects necessity is commonly supposed to lie; and, finding that it is always ascribed to causes and effects, I turn my eye to two objects supposed to be placed in that relation, and examine them in all the situations of which they are susceptible. I immediately perceive that they are *contiguous* in time and place and that the object we call cause *precedes* the other we call effect. In no one instance can I go any farther, nor is it possible for me to discover any third relation betwixt these objects. I therefore enlarge my view to comprehend several instances where I find like objects always existing in like relations of contiguity and succession. At first sight this seems to serve but little to my purpose. The reflection on several instances only repeats the same objects, and therefore can never give rise to a new idea. But upon farther inquiry I find that the repetition is not in every particular the same, but produces a new impression, and by that means the idea which I at present examine. For, after a frequent repetition, I find that upon the appearance of one of the objects the mind is *determined* by custom to consider its usual attendant, and to consider it in a stronger light upon account of its relation to the first object. It is this impression, then, or *determination*, which affords me the idea of necessity.

I doubt not but these consequences will at first

sight be received without difficulty, as being evident deductions from principles which we have already established and which we have often employed in our reasonings. This evidence, both in the first principles and in the deductions, may seduce us unwarily into the conclusion, and make us imagine it contains nothing extraordinary nor worthy of our curiosity. But, though such an inadvertence may facilitate the reception of this reasoning, it will make it be the more easily forgot; for which reason I think it proper to give warning that I have just now examined one of the most sublime questions in philosophy, *viz.*, *that concerning the power and efficacy of causes;* where all the sciences seem so much interested. Such a warning will naturally rouse up the attention of the reader and make him desire a more full account of my doctrine, as well as of the arguments on which it is founded. This request is so reasonable that I cannot refuse complying with it; especially as I am hopeful that these principles, the more they are examined, will acquire the more force and evidence.

There is no question which, on account of its importance as well as difficulty, has caused more disputes both among ancient and modern philosophers than this concerning the efficacy of causes, or that quality which makes them be followed by their effects. But, before they entered upon these disputes, methinks it would not have been improper to have examined what idea we have of that efficacy which is the subject of the controversy. This is what I find principally wanting in their reasonings, and what I shall here endeavor to supply.

I begin with observing that the terms of *efficacy*, *agency*, *power*, *force*, *energy*, *necessity*, *connection*, and *productive quality* are all nearly synonymous; and therefore it is an absurdity to employ any of them in defining the rest. By this observation we reject at once all the vulgar definitions which philosophers have given of power and efficacy; and, instead of searching for the idea in these definitions, must look for it in the impressions from which it is originally derived. If it be a compound idea, it must arise from compound impressions; if simple, from simple impressions.

I believe the most general and most popular explication of this matter is to say *that, finding from experience that there are several new productions in matter, such as the motions and variations of body, and concluding that there must somewhere be a power capable of producing them, we arrive at last by this reasoning at the idea of power and efficacy. But, to be convinced that this explication is more popular than philosophical, we need but reflect on two very obvious principles. *First*, that reason alone can never give rise to any original idea; and *secondly*, that reason, as distinguished from experience, can never make us conclude that a cause or productive quality is absolutely requisite to every beginning of existence. Both these considerations have been sufficiently explained; and therefore shall not at present be any farther insisted on.

I shall only infer from them that, since reason can never give rise to the idea of efficacy, that idea must be

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* See Mr. *Locke:* chapter of power,

derived from experience, and from some particular instances of this efficacy which make their passage into the mind by the common channels of sensation or reflection. Ideas always represent their objects or impressions; and, *vice versa*, there are some objects necessary to give rise to every idea. If we pretend, therefore, to have any just idea of this efficacy, we must produce some instance wherein the efficacy is plainly discoverable to the mind, and its operations obvious to our consciousness or sensation. By the refusal of this we acknowledge that the idea is impossible and imaginary, since the principle of innate ideas, which alone can save us from this dilemma, has been already refuted and is now almost universally rejected in the learned world. Our present business, then, must be to find some natural production where the operation and efficacy of a cause can be clearly conceived and comprehended by the mind without any danger of obscurity or mistake.

In this research we meet with very little encouragement from that prodigious diversity which is found in the opinions of those philosophers who have pretended to explain the secret force and energy of causes.* There are some who maintain that bodies operate by their substantial form; others, by their accidents or qualities; several, by their matter and form; some, by their form and accidents; others, by certain virtues and faculties distinct from all this. All these sentiments again are mixed and varied in a thousand different ways; and form a strong pre-

* See farther *Malbranche*, Book VI., part II., chap. iii., and the illustrations upon it.

sumption that none of them have any solidity or evidence, and that the supposition of an efficacy in any of the known qualities of matter is entirely without foundation. This presumption must increase upon us when we consider that these principles of substantial forms, and accidents, and faculties are not in reality any of the known properties of bodies, but are perfectly unintelligible and inexplicable. For it is evident philosophers would never have had recourse to such obscure and uncertain principles had they met with any satisfaction in such as are clear and intelligible ; especially in such an affair as this, which must be an object of the simplest understanding, if not of the senses. Upon the whole, we may conclude that it is impossible in any one instance to show the principle in which the force and agency of a cause is placed, and that the most refined and most vulgar understandings are equally at a loss in this particular. If any one think proper to refute this assertion, he need not put himself to the trouble of inventing any long reasonings ; but may at once show us an instance of a cause where we discover the power or operating principle. This defiance we are obliged frequently to make use of, as being almost the only means of proving a negative in philosophy.

The small success which has been met with in all the attempts to fix this power has at last obliged philosophers to conclude that the ultimate force and efficacy of nature is perfectly unknown to us, and that it is in vain we search for it in all the known qualities of matter. In this opinion they are almost unanimous ; and it is only in the inference they draw from it that

they discover any difference in their sentiments. For some of them, as the *Cartesians* in particular, having established it as a principle that we are perfectly acquainted with the essence of matter, have very naturally inferred that it is endowed with no efficacy, and that it is impossible for it of itself to communicate motion, or produce any of those effects which we ascribe to it. As the essence of matter consists in extension, and as extension implies, not actual motion, but only mobility, they conclude that the energy which produces the motion cannot lie in the extension.

This conclusion leads them into another, which they regard as perfectly unavoidable. Matter, say they, is in itself entirely unactive, and deprived of any power by which it may produce, or continue, or communicate motion : but, since these effects are evident to our senses, and since the power that produces them must be placed somewhere, it must lie in the DEITY, or that divine being who contains in his nature all excellency and perfection. It is the deity, therefore, who is the prime mover of the universe, and who not only first created matter and gave it its original impulse, but likewise by a continued exertion of omnipotence supports its existence, and successively bestows on it all those motions, and configurations, and qualities with which it is endowed.

This opinion is certainly very curious and well worth our attention ; but it will appear superfluous to examine it in this place, if we reflect a moment on our present purpose in taking notice of it. We have established it as a principle that, as all ideas are derived

from impressions, or some precedent *perceptions*, it is impossible we can have any idea of power and efficacy, unless some instances can be produced wherein this power *is perceived* to exert itself. Now, as these instances can never be discovered in body, the *Cartesians*, proceeding upon their principle of innate ideas, have had recourse to a supreme spirit or deity, whom they consider as the only active being in the universe and as the immediate cause of every alteration in matter. But, the principle of innate ideas being allowed to be false, it follows that the supposition of a deity can serve us in no stead in accounting for that idea of agency which we search for in vain in all the objects which are presented to our senses or which we are internally conscious of in our own minds. For, if every idea be derived from an impression, the idea of a deity proceeds from the same origin ; and, if no impression, either of sensation or reflection, implies any force or efficacy, it is equally impossible to discover or even imagine any such active principle in the deity. Since these philosophers, therefore, have concluded, that matter cannot be endowed with any efficacious principle, because it is impossible to discover in it such a principle, the same course of reasoning should determine them to exclude it from the supreme being. Or, if they esteem that opinion absurd and impious, as it really is, I shall tell them how they may avoid it ; and that is by concluding from the very first that they have no adequate idea of power or efficacy in any object ; since neither in body nor spirit, neither in superior nor inferior natures, are they able to discover one single instance of it.

The same conclusion is unavoidable upon the hypothesis of those who maintain the efficacy of second causes, and attribute a derivative, but a real, power and energy to matter. For, as they confess that this energy lies not in any of the known qualities of matter, the difficulty still remains concerning the origin of its idea. If we have really an idea of power, we may attribute power to an unknown quality : but, as it is impossible that that idea can be derived from such a quality, and as there is nothing in known qualities which can produce it, it follows that we deceive ourselves when we imagine we are possessed of any idea of this kind, after the manner we commonly understand it. All ideas are derived from, and represent, impressions. We never have any impression that contains any power or efficacy. We never therefore have any idea of power.

Some have asserted that we feel an energy or power in our mind ; and that, having in this manner acquired the idea of power, we transfer that quality to matter, where we are not able immediately to discover it. The motions of our body and the thoughts and sentiments of our mind (say they) obey the will ; nor do we seek any farther to acquire a just notion of force or power. But, to convince us how fallacious this reasoning is, we need only consider that the will, being here considered as a cause, has no more a discoverable connection with its effects than any material cause has with its proper effect. So far from perceiving the connection betwixt an act of volition and a motion of the body, it is allowed that no effect is more inexplicable from the powers and

essence of thought and matter. Nor is the empire of the will over our mind more intelligible. The effect is there distinguishable and separable from the cause, and could not be foreseen without the experience of their constant conjunction. We have command over our mind to a certain degree, but beyond *that* lose all empire over it: and it is evidently impossible to fix any precise bounds to our authority, where we consult not experience. In short, the actions of the mind are, in this respect, the same with those of matter. We perceive only their constant conjunction; nor can we ever reason beyond it. No internal impression has an apparent energy, more than external objects have. Since, therefore, matter is confessed by philosophers to operate by an unknown force, we should in vain hope to attain an idea of force by consulting our own minds.*

It has been established as a certain principle, that general or abstract ideas are nothing but individual ones taken in a certain light, and that, in reflecting on any object, it is as impossible to exclude from our thought all particular degrees of quantity and quality as from the real nature of things. If we be possessed,

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* The same imperfection attends our ideas of the Deity; but this can have no effect either on religion or morals. The order of the universe proves an omnipotent mind; that is, a mind whose will is *constantly attended* with the obedience of every creature and being. Nothing more is requisite to give a foundation to all the articles of religion, nor is it necessary we should form a distinct idea of the force and energy of the supreme Being. [This note and the paragraph to which it is added appeared originally in an appendix.—ED.]

therefore, of any idea of power in general, we must also be able to conceive some particular species of it; and, as power cannot subsist alone, but is always regarded as an attribute of some being or existence, we must be able to place this power in some particular being, and conceive that being as endowed with a real force and energy, by which such a particular effect necessarily results from its operation. We must distinctly and particularly conceive the connection betwixt the cause and effect, and be able to pronounce from a simple view of the one that it must be followed or preceded by the other. This is the true manner of conceiving a particular power in a particular body; and, a general idea being impossible without an individual, where the latter is impossible it is certain the former can never exist. Now nothing is more evident than that the human mind cannot form such an idea of two objects as to conceive any connection betwixt them, or comprehend distinctly that power or efficacy by which they are united. Such a connection would amount to a demonstration, and would imply the absolute impossibility for the one object not to follow, or to be conceived not to follow, upon the other: which kind of connection has already been rejected in all cases. If any one is of a contrary opinion and thinks he has attained a notion of power in any particular object, I desire he may point out to me that object. But till I meet with such a one, which I despair of, I cannot forbear concluding that, since we can never distinctly conceive how any particular power can possibly reside

in any particular object, we deceive ourselves in imagining we can form any such general idea.

Thus, upon the whole, we may infer that when we talk of any being, whether of a superior or inferior nature, as endowed with a power or force proportioned to any effect; when we speak of a necessary connection betwixt objects, and suppose that this connection depends upon an efficacy or energy with which any of these objects are endowed; in all these expressions, *so applied*, we have really no distinct meaning, and make use only of common words, without any clear and determinate ideas. But, as it is more probable that these expressions do here lose their true meaning by being *wrong applied*, than that they never have any meaning, it will be proper to bestow another consideration on this subject, to see if possibly we can discover the nature and origin of those ideas we annex to them.

Suppose two objects to be presented to us, of which the one is the cause and the other the effect; it is plain that from the simple consideration of one or both these objects we never shall perceive the tie by which they are united, or be able certainly to pronounce that there is a connection betwixt them. It is not, therefore, from any one instance that we arrive at the idea of cause and effect, of a necessary connection of power, of force, of energy, and of efficacy. Did we never see any but particular conjunctions of objects, entirely different from each other, we should never be able to form any such ideas.

But again: suppose we observe several instances in which the same objects are always conjoined to-

gether, we immediately conceive a connection betwixt them, and begin to draw an inference from one to another. This multiplicity of resembling instances, therefore, constitutes the very essence of power or connection, and is the source from which the idea of it arises. In order, then, to understand the idea of power, we must consider that multiplicity; nor do I ask more to give a solution of that difficulty which has so long perplexed us. For thus I reason. The repetition of perfectly similar instances can never *alone* give rise to an original idea, different from what is to be found in any particular instance, as has been observed, and as evidently follows from our fundamental principle *that all ideas are copied from impressions.* Since therefore the idea of power is a new original idea, not to be found in any one instance, and which yet arises from the repetition of several instances, it follows that the repetition *alone* has not that effect, but must either *discover* or *produce* something new which is the source of that idea. Did the repetition neither discover nor produce anything new, our ideas might be multiplied by it, but would not be enlarged above what they are upon the observation of one single instance. Every enlargement, therefore, (such as the idea of power or connection), which arises from the multiplicity of similar instances, is copied from some effects of the multiplicity, and will be perfectly understood by understanding these effects. Wherever we find anything new to be discovered or produced by the repetition, there we must place the power, and must never look for it in any other object.

But it is evident, in the first place, that the repeti-

tion of like objects in like relations of succession and contiguity *discovers* nothing new in any one of them; since we can draw no inference from it, nor make it a subject either of our demonstrative or probable reasonings; * as has been already proved. Nay, suppose we could draw an inference, it would be of no consequence in the present case; since no kind of reasoning can give rise to a new idea, such as this of power is; but wherever we reason, we must antecedently be possessed of clear ideas, which may be the objects of our reasoning. The conception always precedes the understanding; and where the one is obscure the other is uncertain; where the one fails the other must fail also.

Secondly, It is certain that this repetition of similar objects in similar situations *produces* nothing new either in these objects, or in any external body. For it will readily be allowed that the several instances we have of the conjunction of resembling causes and effects are in themselves entirely independent, and that the communication of motion which I see result at present from the shock of two billiard-balls is totally distinct from that which I saw result from such an impulse a twelvemonth ago. These impulses have no influence on each other. They are entirely divided by time and place; and the one might have existed and communicated motion though the other never had been in being.

There is, then, nothing new either discovered or produced in any objects by their constant conjunc-

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*Sec. vi.

tion and by the uninterrupted resemblance of their relations of succession and contiguity. But it is from this resemblance that the ideas of necessity, of power, and of efficacy are derived. These ideas, therefore, represent not anything that does or can belong to the objects which are constantly conjoined. This is an argument which, in every view we can examine it, will be found perfectly unanswerable. Similar instances are still the first source of our idea of power or necessity; at the same time that they have no influence by their similarity either on each other or on any external object. We must, therefore, turn ourselves to some other quarter to seek the origin of that idea.

Though the several resembling instances which give rise to the idea of power have no influence on each other, and can never produce any new quality *in the object* which can be the model of that idea, yet the *observation* of this resemblance produces a new impression *in the mind*, which is its real model. For, after we have observed the resemblance in a sufficient number of instances, we immediately feel a determination of the mind to pass from one object to its usual attendant, and to conceive it in a stronger light upon account of that relation. This determination is the only effect of the resemblance; and therefore must be the same with power or efficacy, whose idea is derived from the resemblance. The several instances of resembling conjunctions leads us into the notion of power and necessity. These instances are in themselves totally distinct from each other, and have no union but in the mind which observes them and col-

lects their ideas. Necessity, then, is the effect of this observation, and is nothing but an internal impression of the mind, or a determination to carry our thoughts from one object to another. Without considering it in this view, we can never arrive at the most distant notion of it, or be able to attribute it either to external or internal objects, to spirit or body, to causes or effects.

The necessary connection betwixt causes and effects is the foundation of our inference from one to the other. The foundation of our inference is the transition arising from the accustomed union. These are, therefore, the same.

The idea of necessity arises from some impression. There is no impression conveyed by our senses which can give rise to that idea. It must, therefore, be derived from some internal impression, or impression of reflection. There is no internal impression which has any relation to the present business but that propensity which custom produces to pass from an object to the idea of its usual attendant. This, therefore, is the essence of necessity. Upon the whole, necessity is something that exists in the mind, not in objects ; nor is it possible for us ever to form the most distant idea of it, considered as a quality in bodies. Either we have no idea of necessity, or necessity is nothing but that determination of the thought to pass from causes to effects and from effects to causes, according to their experienced union.

Thus, as the necessity which makes two times two equal to four, or three angles of a triangle equal to two right ones, lies only in the act of the understanding by which we consider and compare these ideas, in like

manner the necessity or power which unites causes and effects lies in the determination of the mind to pass from the one to the other. The efficacy or energy of causes is neither placed in the causes themselves, nor in the deity, nor in the concurrence of these two principles; but belongs entirely to the soul which considers the union of two or more objects in all past instances. It is here that the real power of causes is placed, along with their connection and necessity.

I am sensible that of all the paradoxes which I have had, or shall hereafter have, occasion to advance in the course of this treatise, the present one is the most violent, and that it is merely by dint of solid proof and reasoning I can ever hope it will have admission, and overcome the inveterate prejudices of mankind. Before we are reconciled to this doctrine, how often must we repeat to ourselves, *that* the simple view of any two objects or actions, however related, can never give us any idea of power, or of a connection betwixt them; *that* this idea arises from the repetition of their union; *that* the repetition neither discovers nor causes anything in the objects, but has an influence only on the mind, by that customary transition it produces; *that* this customary transition is, therefore, the same with the power and necessity; which are consequently qualities of perceptions, not of objects, and are internally felt by the soul, and not perceived externally in bodies? There is commonly an astonishment attending everything extraordinary; and this astonishment changes immediately into the highest degree of esteem or contempt, according as we

approve or disapprove of the subject. I am much afraid that though the foregoing reasoning appears to me the shortest and most decisive imaginable, yet with the generality of readers the bias of the mind will prevail, and give them a prejudice against the present doctrine.

This contrary bias is easily accounted for. It is a common observation that the mind has a great propensity to spread itself on external objects, and to conjoin with them any internal impressions which they occasion and which always make their appearance at the same time that these objects discover themselves to the senses. Thus, as certain sounds and smells are always found to attend certain visible objects, we naturally imagine a conjunction, even in place, betwixt the objects and qualities, though the qualities be of such a nature as to admit of no such conjunction, and really exist nowhere. But of this more fully * hereafter. Meanwhile it is sufficient to observe that the same propensity is the reason why we suppose necessity and power to lie in the objects we consider, not in our mind that considers them, notwithstanding it is not possible for us to form the most distant idea of that quality when it is not taken for the determination of the mind to pass from the idea of an object to that of its usual attendant.

But, though this be the only reasonable account we can give of necessity, the contrary notion is so riveted in the mind, from the principles above mentioned, that I doubt not but my sentiments will be treated by many as extravagant and ridiculous. What ! the efficacy of

* Part IV., sec. v.

causes lie in the determination of the mind! As if causes did not operate entirely independent of the mind, and would not continue their operation even though there was no mind existent to contemplate them or reason concerning them. Thought may well depend on causes for its operation, but not causes on thought. This is to reverse the order of nature, and make that secondary which is really primary. To every operation there is a power proportioned; and this power must be placed on the body that operates. If we remove the power from one cause, we must ascribe it to another; but to remove it from all causes and bestow it on a being that is no ways related to the cause or effect but by perceiving them, is a gross absurdity, and contrary to the most certain principles of human reason.

I can only reply to all these arguments that the case is here much the same as if a blind man should pretend to find a great many absurdities in the supposition that the color of scarlet is not the same with the sound of a trumpet, nor light the same with solidity. If we have really no idea of a power or efficacy in any object, or of any real connection betwixt causes and effects, it will be to little purpose to prove that an efficacy is necessary in all operations. We do not understand our own meaning in talking so, but ignorantly confound ideas which are entirely distinct from each other. I am, indeed, ready to allow that there may be several qualities, both in material and immaterial objects, with which we are utterly unacquainted; and if we please to call these *power* or *efficacy*, it will be of little consequence to the world. But, when,

instead of meaning these unknown qualities, we make the terms of power and efficacy signify something of which we have a clear idea and which is incompatible with those objects to which we apply it, obscurity and error begin then to take place, and we are led astray by a false philosophy. This is the case when we transfer the determination of the thought to external objects, and suppose any real intelligible connection betwixt them; that being a quality which can only belong to the mind that considers them.

As to what may be said that the operations of nature are independent of our thought and reasoning, I allow it; and accordingly have observed that objects bear to each other the relations of contiguity and succession, that like objects may be observed in several instances to have like relations, and that all this is independent of, and antecedent to, the operations of the understanding. But, if we go any farther and ascribe a power or necessary connection to these objects, this is what we can never observe in them, but must draw the idea of it from what we feel internally in contemplating them. And this I carry so far that I am ready to convert my present reasoning into an instance of it by a subtility which it will not be difficult to comprehend.

When any object is presented to us, it immediately conveys to the mind a lively idea of that object which is usually found to attend it; and this determination of the mind forms the necessary connection of these objects. But when we change the point of view from the objects to the perceptions: in that case the impression is to be considered as the cause, and the

lively idea as the effect; and their necessary connection is that new determination which we feel to pass from the idea of the one to that of the other. The uniting principle among our internal perceptions is as unintelligible as that among external objects, and is not known to us any other way than by experience. Now the nature and effects of experience have been already sufficiently examined and explained. It never gives us any insight into the internal structure or operating principle of objects, but only accustoms the mind to pass from one to another.

It is now time to collect all the different parts of this reasoning, and by joining them together form an exact definition of the relation of cause and effect, which makes the subject of the present inquiry. This order would not have been excusable, of first examining our inference from the relation before we had explained the relation itself, had it been possible to proceed in a different method. But, as the nature of the relation depends so much on that of the inference, we have been obliged to advance in this seemingly preposterous manner, and make use of terms before we were able exactly to define them or fix their meaning. We shall now correct this fault by giving a precise definition of cause and effect.

There may two definitions be given of this relation, which are only different by their presenting a different view of the same object, and making us consider it either as a *philosophical* or as a *natural* relation; either as a comparison of two ideas, or as an association betwixt them. We may define a CAUSE to be 'An object precedent and contiguous to another, and

where all the objects resembling the former are placed in like relations of precedency and contiguity to those objects that resemble the latter.' If this definition be esteemed defective because drawn from objects foreign to the cause, we may substitute this other definition in its place, *viz.*, 'A CAUSE is an object precedent and contiguous to another, and so united with it that the idea of the one determines the mind to form the idea of the other, and the impression of the one to form a more lively idea of the other.' Should this definition also be rejected for the same reason, I know no other remedy than that the persons who express this delicacy should substitute a juster definition in its place. But for my part I must own my incapacity for such an undertaking. When I examine with the utmost accuracy those objects which are commonly denominated causes and effects, I find, in considering a single instance, that the one object is precedent and contiguous to the other; and, in enlarging my view to consider several instances, I find only that like objects are constantly placed in like relations of succession and contiguity. Again, when I consider the influence of this constant conjuction, I perceive that such a relation can never be an object of reasoning, and can never operate upon the mind, but by means of custom, which determines the imagination to make a transition from the idea of one object to that of its usual attendant, and from the impression of one to a more lively idea of the other. However extraordinary these sentiments may appear, I think it fruitless to trouble myself with any farther

inquiry or reasoning upon the subject, but shall repose myself on them as on established maxims.

It will only be proper, before we leave this subject, to draw some corollaries from it, by which we may remove several prejudices and popular errors that have very much prevailed in philosophy. First, We may learn from the foregoing doctrine that all causes are of the same kind, and that in particular there is no foundation for that distinction which we sometimes make betwixt efficient causes and causes *sine qua non;* or betwixt efficient causes and formal, and material, and exemplary, and final causes. For, as our idea of efficiency is derived from the constant conjunction of two objects, wherever this is observed, the cause is efficient ; and where it is not, there can never be a cause of any kind. For the same reason we must reject the distinction between *cause* and *occasion*, when supposed to signify anything essentially different from each other. If constant conjunction be implied in what we call occasion, it is a real cause. If not, it is no relation at all, and cannot give rise to any argument or reasoning.

Secondly, The same course of reasoning will make us conclude that there is but one kind of *necessity*, as there is but one kind of cause, and that the common distinction betwixt *moral* and *physical* necessity is without any foundation in nature. This clearly appears from the precedent explication of necessity. It is the constant conjunction of objects, along with the determination of the mind, which constitutes a physical necessity : and the removal of these is the same thing with *chance*. As objects must either be

conjoined or not, and as the mind must either be determined or not to pass from one object to another, it is impossible to admit of any medium betwixt chance and an absolute necessity. In weakening this conjunction and determination you do not change the nature of the necessity; since even in the operation of bodies these have different degrees of constancy and force without producing a different species of that relation.

The distinction which we often make betwixt *power* and the *exercise* of it is equally without foundation.

Thirdly, We may now be able fully to overcome all that repugnance which it is so natural for us to entertain against the foregoing reasoning, by which we endeavored to prove that the necessity of a cause to every beginning of existence is not founded on any arguments either demonstrative or intuitive. Such an opinion will not appear strange after the foregoing definitions. If we define a cause to be *An object precedent and contiguous to another, and where all the objects resembling the former are placed in a like relation of priority and contiguity to those objects that resemble the latter*, we may easily conceive that there is no absolute nor metaphysical necessity that every beginning of existence should be attended with such an object. If we define a cause to be *An object precedent and contiguous to another, and so united with it in the imagination that the idea of the one determines the mind to form the idea of the other, and the impression of the one to form a more lively idea of the other*, we shall make still less difficulty of assenting to this opinion. Such

an influence on the mind is in itself perfectly extraordinary and incomprehensible ; nor can we be certain of its reality, but from experience and observation.

I shall add as a fourth corollary that we can never have reason to believe that any object exists of which we cannot form an idea. For, as all our reasonings concerning existence are derived from causation, and as all our reasonings concerning causation are derived from the experienced conjunction of objects, not from any reasoning or reflection, the same experience must give us a notion of these objects, and must remove all mystery from our conclusions. This is so evident that it would scarce have merited our attention, were it not to obviate certain objections of this kind which might arise against the following reasonings concerning *matter* and *substance*. I need not observe that a full knowledge of the object is not requisite, but only of those qualities of it which we believe to exist.

SECTION XV.

Rules by which to judge of causes and effects.

ACCORDING to the precedent doctrine, there are no objects which by the mere survey, without consulting experience, we can determine to be the causes of any other ; and no objects which we can certainly determine in the same manner not to be the causes. Anything may produce anything. Creation, annihilation, motion, reason, volition : all these may arise

from one another, or from any other object we can imagine. Nor will this appear strange if we compare two principles explained above, *that the constant conjunction of objects determines their causation*, and * *that, properly speaking, no objects are contrary to each other but existence and non-existence.* Where objects are not contrary, nothing hinders them from having that constant conjunction on which the relation of cause and effect totally depends.

Since therefore it is possible for all objects to become causes or effects to each other, it may be proper to fix some general rules by which we may know when they really are so.

1. The cause and effect must be contiguous in space and time.

2. The cause must be prior to the effect.

3. There must be a constant union betwixt the cause and effect. It is chiefly this quality that constitutes the relation.

4. The same cause always produces the same effect, and the same effect never arises but from the same cause. This principle we derive from experience, and is the source of most of our philosophical reasonings. For when by any clear experiment we have discovered the causes or effects of any phenomenon, we immediately extend our observation to every phenomenon of the same kind, without waiting for that constant repetition from which the first idea of this relation is derived.

5. There is another principle, which hangs upon

* Part I., sec. v.

this, *viz.*, that, where several different objects produce the same effect, it must be by means of some quality which we discover to be common amongst them. For, as like effects imply like causes, we must always ascribe the causation to the circumstance wherein we discover the resemblance.

6. The following principle is founded on the same reason. The difference in the effects of two resembling objects must proceed from that particular in which they differ. For, as like causes alway produce like effects, when in any instance we find our expectation to be disappointed, we must conclude that this irregularity proceeds from some difference in the causes.

7. When any object increases or diminishes with the increase or diminution of its cause, it is to be regarded as a compounded effect, derived from the union of the several different effects which arise from the several different parts of the cause. The absence or presence of one part of the cause is here supposed to be always attended with the absence or presence of a proportionable part of the effect. This constant conjunction sufficiently proves that the one part is the cause of the other. We must, however, beware not to draw such a conclusion from a few experiments. A certain degree of heat gives pleasure ; if you diminish that heat, the pleasure diminishes ; but it does not follow that if you augment it beyond a certain degree, the pleasure will likewise augment ; for we find that it degenerates into pain.

8. The eighth and last rule I shall take notice of is that an object which exists for any time in its

full perfection without any effect is not the sole cause of that effect, but requires to be assisted by some other principle which may forward its influence and operation. For, as like effects necessarily follow from like causes and in a contiguous time and place, their separation for a moment shows that these causes are not complete ones.

Of liberty and necessity.

(From Book II., Part III., Secs. I., II.)

We come now to explain the *direct* passions, or the impressions which arise immediately from good or evil, from pain or pleasure. Of this kind are *desire and aversion, grief and joy, hope and fear.*

If objects had not an uniform and regular conjunction with each other, we should never arrive at any idea of cause and effect; and, even after all, the necessity which enters into that idea is nothing but a determination of the mind to pass from one object to its usual attendant and infer the existence of one from that of the other. Here then are two particulars which we are to consider as essential to necessity, *viz.*, the constant *union*, and the *inference* of the mind; and wherever we discover these we must acknowledge a necessity. As the actions of matter have no necessity but what is derived from these circumstances, and it is not by any insight into the essence of bodies we discover their connection, the absence of this insight, while the union and inference

remain, will never, in any case, remove the necessity. It is the observation of the union which produces the inference ; for which reason it might be thought sufficient if we prove a constant union in the actions of the mind, in order to establish the inference along with the necessity of these actions. But that I may bestow a greater force on my reasoning, I shall examine these particulars apart, and shall first prove from experience that our actions have a constant union with our motives, tempers, and circumstances, before I consider the inferences we draw from it.

To this end a very slight and general view of the common course of human affairs will be sufficient. There is no light in which we can take them that does not confirm this principle. Whether we consider mankind according to the difference of sexes, ages, governments, conditions, or methods of education, the same uniformity and regular operation of natural principles are discernible. Like causes still produce like effects, in the same manner as in the mutual action of the elements and powers of nature. Are the products of *Guienne* and of *Champagne* more regularly different than the sentiments, actions, and passions of the two sexes? Are the changes of our body from infancy to old age more regular and certain than those of our mind and conduct? There is a general course of nature in human actions, as well as in the operations of the sun and the climate. There are also characters peculiar to different nations and particular persons, as well as common to mankind. The knowledge of these characters is founded on the observation of an uniformity in the actions

that flow from them; and this uniformity forms the very essence of necessity.

Now some may perhaps find a pretext to deny this regular union and connection. For what is more capricious than human actions? What more inconstant than the desires of man?

To this I reply that in judging of the actions of men we must proceed upon the same maxims as when we reason concerning external objects. No union can be more constant and certain than that of some actions with some motives and characters; and, if in other cases the union is uncertain, it is no more than what happens in the operations of body, nor can we conclude anything from the one irregularity, which will not follow equally from the other.

As the *union* betwixt motives and actions has the same constancy as that in any natural operations, so its influence on the understanding is also the same in *determining* us to infer the existence of one from that of another. *Moral evidence* is nothing but a conclusion concerning the actions of men derived from the consideration of their motives, temper, and situation. A prince who imposes a tax upon his subjects expects their compliance. A general who conducts an army makes account of a certain degree of courage. A merchant looks for fidelity and skill in his factor or supercargo. A man who gives orders for his dinner doubts not of the obedience of his servants. Now I assert that whoever reasons after this manner does *ipso facto* believe the actions of the will to arise from necessity, and that he knows not what he means when he denies it.

All those objects, of which we call the one *cause* and the other *effect*, considered in themselves, are as distinct and separate from each other as any two things in nature, nor can we ever, by the most accurate survey of them, infer the existence of the one from that of the other. It is only from experience and the observation of their constant union that we are able to form this inference ; and, even after all, the inference is nothing but the effects of custom on the imagination. We must not here be content with saying that the idea of cause and effect arises from objects constantly united ; but must affirm that it is the very same with the idea of these objects, and that the *necessary connection* is not discovered by a conclusion of the understanding, but is merely a perception of the mind. Wherever, therefore, we observe the same union, and wherever the union operates in the same manner upon the belief and opinion, we have the idea of causes and necessity, though perhaps we may avoid those expressions. Motion in one body, in all past instances that have fallen under our observation, is followed upon impulse by motion in another. It is impossible for the mind to penetrate farther. From this constant union it *forms* the idea of cause and effect, and by its influence *feels* the necessity. As there is the same constancy and the same influence in what we call moral evidence, I ask no more. What remains can only be a dispute of words.

The necessity of any action, whether of matter or of the mind, is not properly a quality in the agent, but in any thinking or intelligent being who may

consider the action, and consists in the determination of his thought to infer its existence from some preceding objects. We can never free ourselves from the bonds of necessity. We may imagine we feel a liberty within ourselves; but a spectator can commonly infer our actions from our motives and character; and, even where he cannot, he concludes in general that he might, were he perfectly acquainted with every circumstance of our situation and temper and the most secret springs of our complexion and disposition. Now this is the very essence of necessity, according to the foregoing doctrine.

PART IV.

OF THE SCEPTICAL AND OTHER SYSTEMS OF PHILOSOPHY.

SECTION I.

Of scepticism with regard to reason.

In all demonstrative sciences the rules are certain and infallible; but when we apply them our fallible and uncertain faculties are very apt to depart from them and fall into error. We must, therefore, in every reasoning form a new judgment as a check or control on our first judgment or belief; and must enlarge our view to comprehend a kind of history of all the instances wherein our understanding has deceived us, compared with those wherein its testimony was just and true. Our reason must be considered as a kind of cause, of which truth is the natural effect; but such a one as by the irruption of other causes, and by the inconstancy of our mental powers, may frequently be prevented. By this means all knowledge degenerates into probability; and this probability is greater or less, according to our experience of the veracity or deceitfulness of our understanding,

and according to the simplicity or intricacy of the question.

There is no algebraist nor mathematician so expert in his science as to place entire confidence in any truth immediately upon his discovery of it, or regard it as anything but a mere probability. Every time he runs over his proofs his confidence increases ; but still more by the approbation of his friends ; and is raised to its utmost perfection by the universal assent and applauses of the learned world. Now it is evident that this gradual increase of assurance is nothing but the addition of new probabilities, and is derived from the constant union of causes and effects, according to past experience and observation.

In accounts of any length or importance, merchants seldom trust to the infallible certainty of numbers for their security, but, by the artificial structure of the accounts, produce a probability beyond what is derived from the skill and experience of the accountant. For that is plainly of itself some degree of probability ; though uncertain and variable, according to the degrees of his experience and length of the account. Now, as none will maintain that our assurance in a long numeration exceeds probability, I may safely affirm that there scarce is any proposition concerning numbers of which we can have a fuller security. For it is easily possible, by gradually diminishing the numbers, to reduce the longest series of addition to the most simple question which can be formed, to an addition of two single numbers. If any single addition were certain, every one would be so, and consequently the whole or total sum.

Since, therefore, all knowledge resolves itself into probability, and becomes at last of the same nature with that evidence which we employ in common life, we must now examine this latter species of reasoning, and see on what foundation it stands.

In every judgment which we can form concerning probability as well as concerning knowledge, we ought always to correct the first judgment, derived from the nature of the object, by another judgment, derived from the nature of the understanding. Even the man of the best sense and longest experience must be conscious of many errors in the past, and must still dread the like for the future. Here then arises a new species of probability to correct and regulate the first, and fix its just standard and proportion.

Having adjusted these two together, we are obliged by our reason to add a new doubt derived from the possibility of error in the estimation we make of the truth and fidelity of our faculties. This is a doubt which immediately occurs to us, and of which, if we would closely pursue our reason, we cannot avoid giving a decision. But this decision, though it should be favorable to our preceding judgment, being founded only on probability, must weaken still further our first evidence, and must itself be weakened by a fourth doubt of the same kind, and so on *in infinitum;* till at last there remain nothing of the original probability, however great we may suppose it to have been, and however small the diminution by every new uncertainty. All the rules of logic require a continual diminution, and at last a total extinction, of belief and evidence.

Should it here be asked me whether I sincerely assent to this argument which I seem to take such pains to inculcate, and whether I be really one of those sceptics who hold that all is uncertain and that our judgment is not in *any* thing possessed of *any* measures of truth and falsehood; I should reply that this question is entirely superfluous, and that neither I nor any other person was ever sincerely and constantly of that opinion. Nature, by an absolute and uncontrollable necessity, has determined us to judge as well as to breathe and feel. My intention, then, in displaying so carefully the arguments of that fantastic sect is only to make the reader sensible of the truth of my hypothesis *that all our reasonings concerning causes and effects are derived from nothing but custom, and that belief is more properly an act of the sensitive than of the cogitative part of our natures.* If belief, therefore, were a simple act of the thought, without any peculiar manner of conception or the addition of a force and vivacity, it must infallibly destroy itself, and in every case terminate in a total suspense of judgment. But, as experience will sufficiently convince any one who thinks it worth while to try that though he can find no error in the foregoing arguments, yet he still continues to believe and think and reason as usual, he may safely conclude that his reasoning and belief is some sensation or peculiar manner of conception, which it is impossible for mere ideas and reflections to destroy.

It is therefore demanded *how it happens that even after all we retain a degree of belief which is sufficient for our purpose either in philosophy or common life?*

I answer that after the first and second decision, as the action of the mind becomes forced and unnatural and the ideas faint and obscure, though the principles of judgment and the balancing of opposite causes be the same as at the very beginning, yet their influence on the imagination and the vigor they add to or diminish from the thought is by no means equal.

No wonder, then, the conviction which arises from a subtile reasoning diminishes in proportion to the efforts which the imagination makes to enter into the reasoning and to conceive it in all its parts. Belief, being a lively conception, can never be entire where it is not founded on something natural and easy.

SECTION II.

Of scepticism with regard to the senses.

THUS the sceptic still continues to reason and believe, even though he asserts that he cannot defend his reason by reason ; and by the same rule he must assent to the principle concerning the existence of body, though he cannot pretend by any arguments of philosophy to maintain its veracity. We may well ask, *What causes induce us to believe in the existence of body?* but it is in vain to ask, *Whether there be body or not?* That is a point which we must take for granted in all our reasonings.

The subject, then, of our present enquiry is concerning the *causes* which induce us to believe in the existence of body.

We ought to examine apart those two questions

which are commonly confounded together, *viz.*, Why we attribute a CONTINUED existence to objects even when they are not present to the senses, and Why we suppose them to have an existence DISTINCT from the mind and perception. Under this last head I comprehend their situation as well as relations, their *external* position as well as the *independence* of their existence and operation. These two questions concerning the continued and distinct existence of body are intimately connected together. For, if the objects of our senses continue to exist even when they are not perceived, their existence is of course independent of and distinct from the perception; and, *vice versa*, if their existence be independent of the perception and distinct from it, they must continue to exist even though they be not perceived. But though the decision of the one question decides the other; yet, that we may the more easily discover the principles of human nature from whence the decision arises, we shall carry along with us this distinction, and shall consider whether it be the *senses*, *reason*, or the *imagination* that produces the opinion of a *continued* or of a *distinct* existence. These are the only questions that are intelligible on the present subject. For, as to the notion of external existence, when taken for something specifically different from our perceptions,* we have already shown its absurdity.

To begin with the SENSES, it is evident these faculties are incapable of giving rise to the notion of the *continued* existence of their objects after they no

* Part II., sec. VI.

longer appear to the senses. For that is a contradiction in terms, and supposes that the senses continue to operate even after they have ceased all manner of operation. These faculties, therefore, if they have any influence in the present case, must produce the opinion of a distinct, not of a continued, existence; and, in order to that, must present their impressions either as images and representations, or as these very distinct and external existences.

That our senses offer not their impressions as the images of something *distinct*, or *independent*, and *external*, is evident; because they convey to us nothing but a single perception, and never give us the least intimation of anything beyond. A single perception can never produce the idea of a double existence, but by some inference either of the reason or imagination. When the mind looks farther than what immediately appears to it, its conclusions can never be put to the account of the senses; and it certainly looks farther when from a single perception it infers a double existence, and supposes the relations of resemblance and causation betwixt them.

We may also observe that we can attribute a distinct, continued existence to objects without ever consulting REASON, or weighing our opinions by any philosophical principles. For philosophy informs us that every thing which appears to the mind is nothing but a perception, and is interrupted and dependent on the mind; whereas the vulgar confound perceptions and objects, and attribute a distinct, continued existence to the very things they feel or see. This sentiment, then, as it is entirely unreason-

able, must proceed from some other faculty than the understanding. That opinion must be entirely owing to the IMAGINATION : which must now be the subject of our enquiry.

Since all impressions are internal and perishing existences, and appear as such, the notion of their distinct and continued existence must arise from a concurrence of some of their qualities with the qualities of the imagination ; and since this notion does not extend to all of them, it must arise from certain qualities peculiar to some impressions. It will therefore be easy for us to discover these qualities by a comparison of the impressions to which we attribute a distinct and continued existence with those which we regard as internal and perishing.

We may observe, then, that it is neither upon account of the involuntariness of certain impressions, as is commonly supposed, nor of their superior force and violence, that we attribute to them a reality and continued existence which we refuse to others that are voluntary or feeble. For it is evident our pains and pleasures, our passions and affections, which we never suppose to have any existence beyond our perception, operate with greater violence and are equally involuntary as the impressions of figure and extension, color and sound, which we suppose to be permanent beings. The heat of a fire, when moderate, is supposed to exist in the fire ; but the pain which it causes upon a near approach is not taken to have any being except in the perception.

These vulgar opinions, then, being rejected, we must search for some other hypothesis by which we

may discover those peculiar qualities in our impressions which make us attribute to them a distinct and continued existence.

After a little examination, we shall find that all those objects to which we attribute a continued existence have a peculiar *constancy*, which distinguishes them from the impressions whose existence depends upon our perception. Those mountains, and houses, and trees which lie at present under my eye have always appeared to me in the same order; and when I lose sight of them by shutting my eyes or turning my head, I soon after find them return upon me without the least alteration. My bed and table, my books and papers present themselves in the same manner, and change not upon account of any interruption in my seeing or perceiving them. This is the case with all the impressions whose objects are supposed to have an external existence; and is the case with no other impressions, whether gentle or violent, voluntary or involuntary.

This constancy, however, is not so perfect as not to admit of very considerable exceptions. Bodies often change their position and qualities, and after a little absence or interruption may become hardly knowable. But here it is observable that even in these changes they preserve a *coherence*, and have a regular dependence on each other; which is the foundation of a kind of reasoning from causation, and produces the opinion of their continued existence. When I return to my chamber after an hour's absence, I find not my fire in the same situation in which I left it: but then I am accustomed in other instances to see a like alter-

ation produced in a like time, whether I am present or absent, near or remote. This coherence, therefore, in their changes is one of the characteristics of external objects, as well as their constancy.

Having found that the opinion of the continued existence of body depends on the COHERENCE and CONSTANCY of certain impressions, I now proceed to examine after what manner these qualities give rise to so extraordinary an opinion. To begin with the coherence: we may observe that though these internal impressions which we regard as fleeting and perishing have also a certain coherence or regularity in their appearances, yet it is of somewhat a different nature from that which we discover in bodies. Our passions are found by experience to have a mutual connection with and dependence on each other; but on no occasion is it necessary to suppose that they have existed and operated when they were not perceived, in order to preserve the same dependence and connection of which we have had experience. The case is not the same with relation to external objects. Those require a continued existence, or otherwise lose, in a great measure, the regularity of their operation. Here then I am naturally led to regard the world as something real and durable, and as preserving its existence even when it is no longer present to my perception.

But it is evident that, whenever we infer the continued existence of the objects of sense from their coherence and the frequency of their union, it is in order to bestow on the objects a greater regularity than what is observed in our mere perceptions. The imagination, when set into any train of thinking,

is apt to continue even when its object fails it, and, like a galley put in motion by the oars, carries on its course without any new impulse. Objects have a certain coherence even as they appear to our senses; but this coherence is much greater and more uniform if we suppose the objects to have a continued existence; and, as the mind is once in the train of observing an uniformity among objects, it naturally continues till it renders the uniformity as complete as possible. The simple supposition of their continued existence suffices for this purpose, and gives us a notion of a much greater regularity among objects than what they have when we look no farther than our senses.

But whatever force we may ascribe to this principle, I am afraid it is too weak to support alone so vast an edifice as is that of the continued existence of all external bodies, and that we must join the *constancy* of their appearance to the *coherence* in order to give a satisfactory account of that opinion. As the explication of this will lead me into a considerable compass of very profound reasoning, I think it proper, in order to avoid confusion, to give a short sketch or abridgment of my system, and afterwards draw out all its parts in their full compass. This inference from the constancy of our perceptions, like the precedent from their coherence, gives rise to the opinion of the *continued* existence of body, which is prior to that of its *distinct* existence and produces that latter principle.

When we have been accustomed to observe a constancy in certain impressions, and have found that the perception of the sun or ocean, for instance, re-

turns upon us after an absence or annihilation with like parts and in a like order as at its first appearance, we are not apt to regard these interrupted perceptions as different (which they really are), but on the contrary consider them as individually the same, upon account of their resemblance. But, as this interruption of their existence is contrary to their perfect identity, and makes us regard the first impression as annihilated and the second as newly created, we find ourselves somewhat at a loss, and are involved in a kind of contradiction. In order to free ourselves from this difficulty, we disguise as much as possible the interruption, or rather remove it entirely, by supposing that these interrupted perceptions are connected by a real existence of which we are insensible. This supposition, or idea of continued existence, acquires a force and vivacity from the memory of these broken impressions and from that propensity which they give us to suppose them the same ; and, according to the precedent reasoning, the very essence of belief consists in the force and vivacity of the conception.

In order to justify this system there are four things requisite. *First*, To explain the *principium individuationis*, or principle of identity. *Secondly*, Give a reason why the resemblance of our broken and interrupted perceptions induces us to attribute an identity to them. *Thirdly*, Account for that propensity, which this illusion gives, to unite these broken appearances by a continued existence. *Fourthly*, and lastly, Explain that force and vivacity of conception which arises from the propensity.

First, As to the principle of individuation ; we can-

not, in any propriety of speech, say that an object is the same with itself, unless we mean that the object existent at one time is the same with itself existent at another. Thus the principle of individuation is nothing but the *invariableness* and *uninterrupedness* of any object through a supposed variation of time, by which the mind can trace it in the different periods of its existence without any break of the view and without being obliged to form the idea of multiplicity or number.

I now proceed to explain the *second* part of my system, and show why the constancy of our perceptions makes us ascribe to them a perfect numerical identity, though there be very long intervals betwixt their appearance and they have only one of the essential qualities of identity, *viz.*, *invariableness*. That I may avoid all ambiguity and confusion on this head, I shall observe that I here account for the opinions and belief of the vulgar with regard to the existence of body ; and therefore must entirely conform myself to their manner of thinking and of expressing themselves. Now we have already observed that however philosophers may distinguish betwixt the objects and perceptions of the senses—which they suppose coexistent and resembling—yet this is a distinction which is not comprehended by the generality of mankind, who, as they perceive only one being, can never assent to the opinion of a double existence and representation. Those very sensations which enter by the eye or ear are with them the true objects, nor can they readily conceive that this pen or paper, which is immediately perceived, represents another, which is dif-

ferent from, but resembling it. In order therefore to accommodate myself to their notions, I shall at first suppose that there is only a single existence, which I shall call indifferently *object* or *perception*, according as it shall seem best to suit my purpose, understanding by both of them what any common man means by a hat, or shoe, or stone, or any other impression conveyed to him by his senses. I shall be sure to give warning when I return to a more philosophical way of speaking and thinking.

To enter, therefore, upon the question concerning the source of the error and deception with regard to identity when we attribute it to our resembling perceptions notwithstanding their interruption, I must here recall an observation which I have already proved and explained.* Nothing is more apt to make us mistake one idea for another than any relation betwixt them which associates them together in the imagination and makes it pass with facility from one to the other. Of all relations that of resemblance is in this respect the most efficacious; and that because it not only causes an association of ideas, but also of dispositions, and makes us conceive the one idea by an act or operation of the mind similar to that by which we conceive the other.

We find by experience that there is such a *constancy* in almost all the impressions of the senses that their interruption produces no alteration on them, and hinders them not from returning the same in appearance and in situation as at their first existence. I

* Part II. sec. v.

survey the furniture of my chamber; I shut my eyes, and afterwards open them; and find the new perceptions to resemble perfectly those which formerly struck my senses. This resemblance is observed in a thousand instances, and naturally connects together our ideas of these interrupted perceptions by the strongest relation, and conveys the mind with an easy transition from one to another. An easy transition or passage of the imagination along the ideas of these different and interrupted perceptions is almost the same disposition of mind with that in which we consider one constant and uninterrupted perception. It is therefore very natural for us to mistake the one for the other. The thought slides along the succession with equal facility, as if it considered only one object; and therefore confounds the succession with the identity.*

But, as the interruption of the appearance seems contrary to the identity, and naturally leads us to regard these resembling perceptions as different from each other, we here find ourselves at a loss how to reconcile such opposite opinions. The smooth passage of the imagination along the ideas of the resembling perceptions makes us ascribe to them a perfect identity. The interrupted manner of their appearance makes us consider them as so many resembling, but

* There are two relations, and both of them resemblances, which contribute to our mistaking the succession of our interrupted perceptions for an identical object. The first is the resemblance of the perceptions; the second is the resemblance which the act of the mind in surveying a succession of resembling objects bears to that in surveying an identical object.

still distinct, beings which appear after certain intervals. The perplexity arising from this contradiction produces a propension to unite these broken appearances by the fiction of a continued existence; which is the *third* part of that hypothesis I proposed to explain.

But as the *appearance* of a perception in the mind and its *existence* seem at first sight entirely the same, it may be doubted whether we can ever assent to so palpable a contradiction, and suppose a perception to exist without being present to the mind.

It is certain that almost all mankind, and even philosophers themselves, for the greatest part of their lives, take their perceptions to be their only objects, and suppose that the very being which is intimately present to the mind is the real body or material existence. It is also certain that this very perception or object is supposed to have a continued uninterrupted being, and neither to be annihilated by our absence, nor to be brought into existence by our presence. When we are absent from it, we say it still exists, but that we do not feel, we do not see it. When we are present, we say we feel, or see it. Here then may arise two questions: *First*, How we can satisfy ourselves in supposing a perception to be absent from the mind without being annihilated. *Secondly*, After what manner we conceive an object to become present to the mind without some new creation of a perception or image; and what we mean by this *seeing*, and *feeling*, and *perceiving*.

As to the first question: We may observe that what we call a *mind* is nothing but a heap or collection of different perceptions united together by certain rela-

tions, and supposed, though falsely, to be endowed with a perfect simplicity and identity. Now as every perception is distinguishable from another, and may be considered as separately existent, it evidently follows that there is no absurdity in separating any particular perception from the mind ; that is, in breaking off all its relations with that connected mass of perceptions which constitute a thinking being.

The same reasoning affords us an answer to the second question. If the name of *perception* renders not this separation from a mind absurd and contradictory, the name of *object*, standing for the very same thing, can never render their conjunction impossible. External objects are seen, and felt, and become present to the mind ; that is, they acquire such a relation to a connected heap of perceptions as to influence them very considerably in augmenting their number by present reflections and passions, and in storing the memory with ideas. The same continued and uninterrupted Being may, therefore, be sometimes present to the mind, and sometimes absent from it, without any real or essential change in the Being itself. An interrupted appearance to the senses implies not necessarily an interruption in the existence. The supposition of the continued existence of sensible objects or perceptions involves no contradiction.

But, as we here not only *feign* but *believe* this continued existence, the question is, *from whence arises such a belief;* and this question leads us to the *fourth* member of this system. It has been proved already that belief in general consists in nothing but the vivac-

ity of an idea, and that an idea may acquire this vivacity by its relation to some present impression.

Our memory presents us with a vast number of instances of perceptions perfectly resembling each other that return at different distances of time and after considerable interruptions. This resemblance gives us a propension to consider these interrupted perceptions as the same ; and also a propension to connect them by a continued existence, in order to justify this identity, and avoid the contradiction in which the interrupted appearance of these perceptions seems necessarily to involve us. Here then we have a propensity to feign the continued existence of all sensible objects ; and, as this propensity arises from some lively impressions of the memory, it bestows a vivacity on that fiction ; or, in other words, makes us believe the continued existence of body.

But, though we are led after this manner, by the natural propensity of the imagination, to ascribe a continued existence to those sensible objects or perceptions which we find to resemble each other in their interrupted appearance, yet a very little reflection and philosophy is sufficient to make us perceive the fallacy of that opinion. I have already observed that there is an intimate connection betwixt those two principles, of a *continued* and of a *distinct* or *independent* existence, and that we no sooner establish the one than the other follows, as a necessary consequence. It is the opinion of a continued existence which first takes place, and without much study or reflection draws the other along with it, wherever the mind follows its first and most natural tendency. But, when we compare

experiments, and reason a little upon them, we quickly perceive that the doctrine of the independent existence of our sensible perceptions is contrary to the plainest experience.

When we press one eye with a finger, we immediately perceive all the objects to become double, and one half of them to be removed from their common and natural position. But, as we do not attribute a continued existence to both these perceptions, and as they are both of the same nature, we clearly perceive that all our perceptions are dependent on our organs and the disposition of our nerves and animal spirits.

The natural consequence of this reasoning should be that our perceptions have no more a continued than an independent existence. The case, however, is otherwise. Philosophers are so far from rejecting the opinion of a continued existence upon rejecting that of the independence and continuance of our sensible perceptions, that, though all sects agree in the latter sentiment, the former, which is, in a manner, its necessary consequence, has been peculiar to a few extravagant sceptics ; who after all maintained that opinion in words only, and were never able to bring themselves sincerely to believe it.

There is a great difference betwixt such opinions as we form after a calm and profound reflection, and such as we embrace by a kind of instinct or natural impulse, on account of their suitableness and conformity to the mind. If these opinions become contrary, it is not difficult to foresee which of them will have the advantage. As long as our attention is bent upon the subject, the philosophical and studied

principle may prevail; but the moment we relax our thoughts, nature will display herself and draw us back to our former opinion. Nay, she has sometimes such an influence that she can stop our progress, even in the midst of our most profound reflections and keep us from running on with all the consequences of any philosophical opinion. Thus, though we clearly perceive the dependence and interruption of our perceptions, we stop short in our career, and never upon that account reject the notion of an independent and continued existence. That opinion has taken such a deep root in the imagination that it is impossible ever to eradicate it, nor will any strained metaphysical conviction of the dependence of our perceptions be sufficient for that purpose.

But, though our natural and obvious principles here prevail above our studied reflections, it is certain there must be some struggle and opposition in the case; at least so long as these reflections retain any force or vivacity. In order to set ourselves at ease in this particular, we contrive a new hypothesis, which seems to comprehend both these principles of reason and imagination, and distinguish (as we shall do for the future) betwixt perceptions and objects, of which the former are supposed to be interrupted and perishing and different at every different return; the latter to be uninterrupted, and to preserve a continued existence and identity. This hypothesis is the philosophical one of the double existence of perceptions and objects; which pleases our reason, in allowing that our dependent perceptions are interrupted and different; and at the same time is agreeable to the imagination,

in attributing a continued existence to something else, which we call *objects*. This philosophical system, therefore, is the monstrous offspring of two principles which are contrary to each other, which are both at once embraced by the mind, and which are unable mutually to destroy each other. Not being able to reconcile these two enemies, we endeavor to set ourselves at ease as much as possible, by successively granting to each whatever it demands, and by feigning a double existence, where each may find something that has all the conditions it desires.

Having thus given an account of all the systems, both popular and philosophical, with regard to external existences, I cannot forbear giving vent to a certain sentiment which arises upon reviewing those systems. I begun this subject with premising that we ought to have an implicit faith in our senses, and that this would be the conclusion I should draw from the whole of my reasoning. But to be ingenuous, I feel myself *at present* of a quite contrary sentiment, and am more inclined to repose no faith at all in my senses, or rather imagination, than to place in it such an implicit confidence. I cannot conceive how such trivial qualities of the fancy, conducted by such false suppositions, can ever lead to any solid and rational system. What then can we look for from this confusion of groundless and extraordinary opinions but error and falsehood? And how can we justify to ourselves any belief we repose in them?

This sceptical doubt, both with respect to reason and the senses, is a malady which can never be radically cured, but must return upon us every moment,

however we may chase it away and sometimes may seem entirely free from it. It is impossible upon any system to defend either our understanding or senses; and we but expose them farther when we endeavor to justify them in that manner. As the sceptical doubt arises naturally from a profound and intense reflection on those subjects, it always increases the farther we carry our reflections, whether in opposition or conformity to it. Carelessness and inattention alone can afford us any remedy. For this reason I rely entirely upon them; and take it for granted, whatever may be the reader's opinion at this present moment, that an hour hence he will be persuaded there is both an external and internal world.

SECTION V.

Of the immateriality of the soul.

THE intellectual world, though involved in infinite obscurities, is not perplexed with any such contradictions as those we have discovered in the natural. What is known concerning it agrees with itself; and what is unknown we must be contented to leave so.

It is true, would we hearken to certain philosophers, they promise to diminish our ignorance; but I am afraid it is at the hazard of running us into contradictions from which the subject is of itself exempted. These philosophers are the curious reasoners concerning the material or immaterial substances in which they suppose our perceptions to inhere. In order to

put a stop to these endless cavils on both sides, I know no better method than to ask these philosophers in a few words *What they mean by substance and inhesion?* And after they have answered this question, it will then be reasonable, and not till then, to enter seriously into the dispute.

This question we have found impossible to be answered with regard to matter and body; for it is confessed by the most judicious philosophers that our ideas of bodies are nothing but collections formed by the mind of the ideas of the several distinct sensible qualities of which objects are composed and which we find to have a constant union with each other. In the case of the mind it labors under all the same difficulties. As every idea is derived from a precedent impression, had we any idea of the substance of our minds, we must also have an impression of it; which is very difficult, if not impossible, to be conceived. For how can an impression represent a substance otherwise than by resembling it? And how can an impression resemble a substance since, according to this philosophy, it is not a substance, and has none of the peculiar qualities or characteristics of a substance?

But leaving the question *of what may or may not be* for that other *what actually is*, I desire those philosophers who pretend that we have an idea of the substance of our minds to point out the impression that produces it, and tell distinctly after what manner that impression operates and from what object it is derived. Is it an impression of sensation or of reflection? Is is pleasant, or painful, or indifferent? Does it attend us at all times, or does it only return at intervals?

If at intervals, at what times principally does it return, and by what causes is it produced?

If, instead of answering these questions, any one should evade the difficulty by saying that the definition of a substance is *something which may exist by itself*, and that this definition ought to satisfy us: should this be said, I should observe that this definition agrees to everything that can possibly be conceived, and never will serve to distinguish substance from accident, or the soul from its perceptions. For thus I reason: Whatever is clearly conceived may exist; and whatever is clearly conceived, after any manner, may exist after the same manner. This is one principle, which has been already acknowledged. Again, everything which is different is distinguishable, and everything which is distinguishable is separable by the imagination. This is another principle. My conclusion from both is that, since all our perceptions are different from each other and from every thing else in the universe, they are also distinct and separable, and may be considered as separately existent, and may exist separately, and have no need of anything else to support their existence. They are, therefore, substances, as far as this definition explains a substance.

Thus neither by considering the first origin of ideas nor by means of a definition are we able to arrive at any satisfactory notion of substance; which seems to me a sufficient reason for abandoning utterly that dispute concerning the materiality and immateriality of the soul, and makes me absolutely condemn even the question itself. We have no perfect idea of any

thing but of a perception. A substance is entirely different from a perception. We have, therefore, no idea of a substance. Inhesion in something is supposed to be requisite to support the existence of our perceptions. Nothing appears requisite to support the existence of a perception. We have, therefore, no idea of inhesion. What possibility then of answering that question *Whether perceptions inhere in a material or immaterial substance*, when we do not so much as understand the meaning of the question?

From these hypotheses concerning the *substance* of our perceptions we may pass to another, which is more intelligible, *viz.*, concerning the *cause* of our perceptions. Matter and motion, it is commonly said in the schools, however varied, are still matter and motion, and produce only a difference in the position and situation of objects. Divide a body as often as you please, it is still body. Place it in any figure, nothing ever results but figure, or the relation of parts. Move it in any manner, you still find motion or a change of relation. It is absurd to imagine that motion in a circle, for instance, should be nothing but merely motion in a circle; while motion in another direction, as in an ellipse, should also be a passion or moral reflection: that the shocking of two globular particles should become a sensation of pain, and that the meeting of two triangular ones should afford a pleasure. Now as these different shocks and variations and mixtures are the only changes of which matter is susceptible, and as these never afford us any idea of thought or perception, it is concluded to be impossible that thought can ever be caused by matter.

Few have been able to withstand the seeming evidence of this argument; and yet nothing in the world is more easy than to refute it. We need only reflect on what has been proved at large, that we are never sensible of any connection betwixt causes and effects, and that it is only by our experience of their constant conjunction we can arrive at any knowledge of this relation. Now as all objects which are not contrary are susceptible of a constant conjunction, and as no real objects are contrary,* I have inferred from these principles that, to consider the matter *a priori*, anything may produce anything, and that we shall never discover a reason why any object may or may not be the cause of any other, however great, or however little the resemblance may be betwixt them. This evidently destroys the precedent reasoning concerning the cause of thought or perception. For, though there appear no manner of connection betwixt motion or thought, the case is the same with all other causes and effects.

To pronounce, then, the final decision upon the whole: The question concerning the substance of the soul is absolutely unintelligible; and, as the constant conjunction of objects constitutes the very essence of cause and effect, matter and motion may often be regarded as the causes of thought, as far as we have any notion of that relation.

If any one should imagine that the foregoing arguments are any ways dangerous to religion, I hope the following apology will remove his apprehensions.

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* Part III. sec. xv.

There is no foundation for any conclusion *a priori*, either concerning the operations, or duration, of any object of which it is possible for the human mind to form a conception. Any object may be imagined to become entirely inactive, or to be annihilated in a moment; and it is an evident principle, *that whatever we can imagine, is possible.* Now this is no more true of matter than of spirit; of an extended compounded substance than of a simple and unextended. In both cases the metaphysical arguments for the immortality of the soul are equally inconclusive; and in both cases the moral arguments and those derived from the analogy of nature are equally strong and convincing. If my philosophy, therefore, makes no addition to the arguments for religion, I have at least the satisfaction to think it takes nothing from them, but that everything remains precisely as before.

SECTION VI.

Of personal identity.

THERE are some philosophers who imagine we are every moment intimately conscious of what we call our SELF; that we feel its existence and its continuance in existence, and are certain, beyond the evidence of a demonstration, both of its perfect identity and simplicity.

For my part, when I enter most intimately into what I call *myself*, I always stumble on some particular perception or other, of heat or cold, light or

shade, love or hatred, pain or pleasure. I never can catch *myself* at any time without a perception, and never can observe anything but the perception. When my perceptions are removed for any time, as by sound sleep, so long am I insensible of *myself*, and may truly be said not to exist. And were all my perceptions removed by death, and could I neither think, nor feel, nor see, nor love, nor hate after the dissolution of my body, I should be entirely annihilated, nor do I conceive what is farther requisite to make me a perfect nonentity. If any one, upon serious and unprejudiced reflection, thinks he has a different notion of *himself*, I must confess I can reason no longer with him. All I can allow him is that he may be in the right as well as I, and that we are essentially different in this particular. He may, perhaps, perceive something simple and continued, which he calls *himself;* though I am certain there is no such principle in me.

But, setting aside some metaphysicians of this kind, I may venture to affirm of the rest of mankind, that they are nothing but a bundle or collection of different perceptions, which succeed each other with an inconceivable rapidity and are in a perpetual flux and movement. The mind is a kind of theatre, where several perceptions successively make their appearance, pass, re-pass, glide away, and mingle in an infinite variety of postures and situations. There is properly no *simplicity* in it at one time, nor *identity* in different; whatever natural propension we may have to imagine that simplicity and identity. The comparison of the theatre must not mislead us. They

are the successive perceptions only, that constitute the mind; nor have we the most distant notion of the place where these scenes are represented, or of the materials of which it is composed.

What, then, gives us so great a propension to ascribe an identity to these successive perceptions, and to suppose ourselves possessed of an invariable and uninterrupted existence through the whole course of our lives?

We have a distinct idea of an object that remains invariable and uninterrupted through a supposed variation of time; and this idea we call that of *identity* or *sameness*. We have also a distinct idea of several different objects existing in succession, and connected together by a close relation; and this to an accurate view affords as perfect a notion of *diversity* as if there was no manner of relation among the objects. But though these two ideas, of identity and a succession of related objects, be in themselves perfectly distinct, and even contrary, yet it is certain that in our common way of thinking they are generally confounded with each other. That action of the imagination by which we consider the uninterrupted and invariable object, and that by which we reflect on the succession of related objects, are almost the same to the feeling, nor is there much more effort of thought required in the latter case than in the former. The relation facilitates the transition of the mind from one object to another, and renders its passage as smooth as if it contemplated one continued object. This resemblance is the cause of the confusion and mistake, and makes us substitute the notion

of identity, instead of that of related objects. However at one instant we may consider the related succession as variable or interrupted, we are sure the next to ascribe to it a perfect identity and regard it as invariable and uninterrupted. Our propensity to this mistake is so great from the resemblance above mentioned that we fall into it before we are aware; and, though we incessantly correct ourselves by reflection and return to a more accurate method of thinking, yet we cannot long sustain our philosophy, or take off this bias from the imagination. Our last resource is to yield to it and boldly assert that these different related objects are in effect the same, however interrupted and variable. In order to justify to ourselves this absurdity, we often feign some new and unintelligible principle that connects the objects together and prevents their interruption or variation. Thus we feign the continued existence of the perceptions of our senses, to remove the interruption; and run into the notion of a *soul*, and *self*, and *substance*, to disguise the variation. It evidently follows that identity is nothing really belonging to these different perceptions and uniting them together, but is merely a quality which we attribute to them because of the union of their ideas in the imagination when we reflect upon them.

What I have said concerning the first origin and uncertainty of our notion of identity, as applied to the human mind, may be extended with little or no variation to that of *simplicity*. An object whose different co-existent parts are bound together by a close relation operates upon the imagination after much the

same manner as one perfectly simple and indivisible, and requires not a much greater stretch of thought in order to its conception. From this similarity of operation we attribute a simplicity to it, and feign a principle of union as the support of this simplicity, and the centre of all the different parts and qualities of the object.

SECTION VII.

Conclusion of this book.

I AM first affrighted and confounded with that forlorn solitude in which I am placed in my philosophy. When I look abroad, I foresee on every side dispute, contradiction, anger, calumny, and detraction. When I turn my eye inward, I find nothing but doubt and ignorance. All the world conspires to oppose and contradict me; though such is my weakness that I feel all my opinions loosen and fall of themselves when unsupported by the approbation of others. Every step I take is with hesitation, and every new reflection makes me dread an error and absurdity in my reasoning.

After the most accurate and exact of my reasonings, I can give no reason why I should assent to it; and feel nothing but a *strong* propensity to consider objects *strongly* in that view under which they appear to me. The memory, senses, and understanding are all of them founded on the imagination, or the vivacity of our ideas. Yet if we assent to every trivial sugges-

tion of the fancy, beside that these suggestions are often contrary to each other, they lead us into such errors, absurdities, and obscurities that we must at last become ashamed of our credulity.

But, on the other hand, if the consideration of these instances makes us take a resolution to reject all the trivial suggestions of the fancy, and adhere to the understanding, that is, to the general and more established properties of the imagination; even this resolution, if steadily executed, would be dangerous and attended with the most fatal consequences. For I have already shown * that the understanding, when it acts alone and according to its most general principles, entirely subverts itself and leaves not the lowest degree of evidence in any proposition, either in philosophy or common life.

Most fortunately it happens that since reason is incapable of dispelling these clouds, nature herself suffices to that purpose, and cures me of this philosophical melancholy and delirium, either by relaxing this bent of mind or by some avocation and lively impression of my senses which obliterate all these chimeras. I dine, I play a game of backgammon, I converse, and am merry with my friends; and when, after three or four hours' amusement, I would return to these speculations, they appear so cold, and strained, and ridiculous, that I cannot find in my heart to enter into them any farther.

* Sec. I., p. 145.

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