

All sections are from *A Treatise of Human Nature*, by David Hume, BOOK I, PART III: "OF Knowledge and Probability"

SECT. II

Of Probability; and of the Idea of Cause and Effect

[Of the three relations] which depend not upon the idea, and may be absent or present even while that remains the same, 'twill be proper to explain them more particularly. These three relations are identity, the situations in time and place, and causation.

All kinds of reasoning consist in nothing but a comparison, and a discovery of those relations, either constant or inconstant, which two or more objects bear to each other. This comparison we may make, either when both the objects are present to the senses, or when neither of them is present, or when only one. When both the objects are present to the senses along with the relation, we call this perception rather than reasoning; nor is there in this case any exercise of the thought, or any action, properly speaking, but a mere passive admission of the impressions thro' the organs of sensation.' According to this way of thinking, we ought not to receive as reasoning any of the observations we may make concerning identity, and the relations of time and place; since in none of them the mind can go beyond what is immediately present to the senses, either to discover the real existence or the relations of objects. 'Tis only causation, which produces such a connexion, as to give us assurance from the existence or action of one object, that 'twas follow'd or preceded by any other existence or action; nor can the other two relations be ever made use of in reasoning, except so far as they either affect or are affected by it. There is nothing in any objects to perswade us, that they are either always remote or always contiguous; and when from experience and observation we discover, that their relation in this particular is invariable, we, always conclude there is some secret cause, which separates or unites them. The same reasoning extends to identity. We readily suppose an object may continue individually the same, tho' several times absent from and

present to the senses; and ascribe to it an identity, notwithstanding the interruption of the perception, whenever we conclude, that if we had kept our eye or hand constantly upon it, it wou'd have convey'd an invariable and uninterrupted perception. But this conclusion beyond the impressions of our senses can be founded only on the connexion of cause and effect; nor can we otherwise have any security, that the object is not chang'd upon us, however much the new object may resemble that which was formerly present to the senses." Whenever we discover such a perfect resemblance, we consider, whether it be common in that species of objects; whether possibly or probably any cause cou'd operate in producing the change and resemblance; and according as we determine concerning these causes and effects, we form our judgment concerning the identity of the object.

Here then it appears, that of those three relations, which depend not upon the mere ideas, the only one, that can be trac'd beyond our senses ' and informs us of existences and objects, which we do not see or feel, is causation. This relation, therefore, we shall endeavour 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 deriv'd. 'Tis impossible to reason justly, without understanding perfectly the idea concerning which we reason; and 'tis 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 -,all 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. which-ever of these qualities I pitch on, I find some object, that is not posse.t of it, and yet falls under the denomination of cause or effect. And indeed there is nothing existent, either externally or internally, which is not to be considered either as a cause or an effect;

tho' 'tis plain there is no one quality, which universally belongs to all beings, and gives them a title to that denomination.

The idea, then, of causation must be deriv'd from some relation among objects; and that relation we must now endeavour 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 remov'd from those of its existence. Tho' distant objects may sometimes seem productive of each other, they are commonly found upon examination to be link'd by a chain of causes, which are contiguous among themselves, and to the distant objects; and when in any particular instance we cannot discover this connexion, we still presume it to exist. We may therefore consider the relation of CONTIGUITY as essential to that of causation; at least may suppose it such, according to the general opinion, till we can find a more(15) proper occasion to clear up this matter, by examining what objects are or are not susceptible of juxtaposition and conjunction.

The second relation I shall observe as essential to causes and effects, is not so universally acknowledged, but is liable to some controversy. 'Tis that of PRIORITY Of time in the cause before the effect. Some pretend that 'tis not absolutely necessary a cause shou'd precede its effect; but that any object or action, in the very first moment of its existence, may exert its productive quality, and give rise to another object or action, perfectly co-temporary with itself. But beside that experience in most instances seems to contradict this opinion, we may establish the relation of priority by a kind of inference or reasoning. 'Tis an established maxim both in natural and moral philosophy, that an object, which exists for any time in its full perfection without producing another, is not its sole cause; but is assisted by some other principle, which pushes it from its state of inactivity, and makes it exert that energy, of which it was secretly possest. Now if any cause may be perfectly co-temporary with its effect, 'tis certain, according to this maxim, that they must all of them be so; since any one of them, which retards its operation for a single moment, exerts not itself at that very individual time, in which it might have operated; and therefore is no proper cause. The consequence of this wou'd be no less than the destruction of that succession of causes, which we observe in the world;

and indeed, the utter annihilation of time. For if one cause were co-temporary with its effect, and this effect with its effect, and so on, 'tis plain there wou'd be no such thing as succession, and all objects must be co-existent.

If this argument appear satisfactory, 'tis well. If not, I beg the reader to allow me the same liberty, which I have us'd in the preceding case, of supposing it such. For he shall find, that the affair is of no great importance.

Having thus discovered or suppos'd the two relations of contiguity and succession to be essential to causes and effects, I find I am stopt 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 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. 'Tis in vain to rack ourselves with farther thought and reflection upon this subject. We can go no farther in considering this particular instance.

Shou'd any one leave this instance, and pretend to define a cause, by saying it is something productive of another, 'tis evident he wou'd 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 produc'd. 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 CONNEXION to be taken into consideration; and that relation is of much greater importance, than any of the other two above-mention'd.

Here again I turn the object on all sides, in order to discover the nature of this necessary connexion, and find the impression, or impressions, from which its idea may be deriv'd. 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 possest of an idea, which is not preceded by any similar impression? This wou'd 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 examin'd the present difficulty.

We must, therefore, proceed like those, who being in search of any thing, that lies conceal'd from them, and not finding it in the place they expected, beat about all the neighbouring fields, without any certain view or design, in hopes their good fortune will at last guide them to what they search for. 'Tis necessary for us to leave the direct survey of this question concerning the nature of that necessary connexion, which enters into our idea of cause and effect; and endeavour 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 every thing whose existence has a beginning, shou'd 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?

I shall only observe before I proceed any farther, that tho' the ideas of cause and effect be deriv'd from the impressions of reflection as well as from those of sensation, yet for brevity's sake, I commonly mention only the latter as the origin of these ideas; tho' I desire that whatever I say of them may also extend to the former. Passions are connected with their objects and with one another; no less than external bodies are connected together. The same relation, then, of cause and effect, which belongs to one, must be common to all of them.

SECT. III

Why a Cause is always Necessary

To begin with the first question concerning the necessity of a cause: 'Tis 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. 'Tis suppos'd to be founded on intuition, and to be one of those maxims, which tho' they may be deny'd with the lips, 'tis impossible for men in their hearts really to doubt of. But if we examine this maxim by the idea of knowledge above- explain'd, we shall discover in it no mark of any such intuitive certainty; but on the contrary shall find, that 'tis of a nature quite foreign to that species of conviction.

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 imply'd in this proposition, Whatever has a beginning has also a cause of existence. That proposition therefore is not intuitively certain. At least any one, who wou'd assert it to be intuitively certain, must deny these to be the only infallible relations, and must find some other relation of that kind to be imply'd in it; which it will then be time enough to examine.

But here is an argument, which proves at once, that the foregoing proposition is neither intuitively nor demonstrably certain. We can never demonstrate the necessity of a cause to every new existence, or new modification of existence, without shewing at the same time the impossibility there is, that any thing can ever begin to exist without some productive principle; and where the latter proposition cannot be prov'd, we must despair of ever being able to prove the former. Now that

the latter proposition is utterly incapable of a demonstrative proof, we may satisfy ourselves by considering that as all distinct ideas are separable from each other, and as the ideas of cause and effect are evidently distinct, 'twill 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 'tis impossible to demonstrate the necessity of a cause.

Accordingly we shall find upon examination, that every demonstration, which has been produc'd for the necessity of a cause, is fallacious and sophistical. All the points of time and place,(16) say some philosophers, in which we can suppose any object to be-in 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 suspence; 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 fix'd 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,(17) which I find us'd on this head, labours under an equal difficulty. Every thing, 'tis said, must have a cause; for if any thing wanted a cause, it wou'd produce itself; that is, exist before it existed; which is impossible. But this reasoning is plainly unconvincive; 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 any thing is produc'd, or to express myself more properly, comes into existence, without a cause, is not to affirm, that 'tis 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 questions and take it for granted, that 'tis utterly impossible any thing can ever begin to exist without a cause, but that, upon the exclusion of one productive principle, we must still have recourse to another.

'Tis exactly the same case with the third argument,(18) which has been employ'd to demonstrate the necessity of a cause. Whatever is produc'd without any cause, is produc'd 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 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 shewing 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 deriv'd from the same turn of thought. 'Tis 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 every thing 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 'tis the very point in question, whether every thing 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 'tis imply'd in the very idea of effect. Every effect

necessarily pre-supposes 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 marry'd. 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 neither to be intuitively nor demonstratively certain, and hope to have prov'd 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, shou'd 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. 'Twill, perhaps, be found in the end, that the same answer will serve for both questions.

SECT. IV

Of the Component Parts of our Reasonings Concerning Cause and Effect

Tho' 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. 'Tis 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.

To give an instance of this, we may chuse any point of history, and consider for what reason we either believe or reject it. Thus we believe that Caesar was kill'd in the senate-house on the ides of March; and that because this fact is established on the unanimous testimony of historians, who agree to assign this precise time and place to that event. Here are certain characters and letters present either to our memory or senses; which characters we likewise remember to have been us'd as the signs of certain ideas; and these ideas were either in the minds of such as were immediately present at that action, and receiv'd the ideas directly from its existence; or they were deriv'd from the testimony of others, and that again from another testimony, by a visible gradation, 'till we arrive at those who were eyewitnesses and spectators of the event. 'Tis obvious all this chain of argument or connexion of causes and effects, is at first founded on those characters or letters, which are seen or remembered, and that without the authority either of the memory or senses our whole reasoning wou'd be chimerical and without foundation. Every link of the chain wou'd in that case hang upon another; but there wou'd not be any thing fix'd to one end of it, capable of sustaining the whole; and consequently there wou'd be no belief nor evidence. And this actually is the case with all hypothetical arguments, or reasonings upon a supposition; there being in them, neither any present impression, nor belief of a real existence,

I need not observe, that 'tis no just objection to the present doctrine, that we can reason upon our past conclusions or principles, without having recourse to those impressions, from which they first arose. For even supposing these impressions shou'd be entirely effac'd from the memory, the conviction they produc'd may still remain; and 'tis equally true, that all reasonings concerning causes and effects are originally deriv'd from some impression; in the same manner, as the assurance of a demonstration proceeds always from a comparison of ideas, tho' it may continue after the comparison is forgot.

SECT. XIV**Of the Idea of Necessary Connexion**

Having thus explain'd 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⁽²⁵⁾ first occur'd to us, and which we dropt 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 what I have often had occasion to observe, that as we have no idea, that is not deriv'd 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 suppos'd to lie; and finding that it is always ascrib'd to causes and effects, I turn my eye to two objects suppos'd to be plac'd 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 enquiry 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 determin'd by custom to consider its usual attendant, and to consider it in a stronger light upon account of its relation to the first object. 'Tis this impression, then, or determination, which affords me the idea of necessity.

I doubt not but these consequences will at first sight be receiv'd without difficulty, as being evident deductions from principles, which we have already established, and which we have often employ'd 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 tho' such an inadvertence may facilitate the reception of this reasoning, 'twill make it be the more easily forgot; for which reason I think it proper to give warning, that I have just now examin'd 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 rouze 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 examin'd, will acquire the more force and evidence.

There is no question, which on account of its importance, as well as difficulty, has caus'd more disputes both among antient and modern philosophers, than this concerning the efficacy of causes, or that quality which makes them be follow'd by their effects. But before they enter'd upon these disputes, methinks it wou'd not have been improper to have examin'd 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 endeavour to supply.

I begin with observing that the terms of efficacy, agency, power, force, energy, necessity, connexion, and productive quality, are all nearly synonymous; and therefore 'tis 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 deriv'd. 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,(26) 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 convinc'd 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 distinguish'd 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 explain'd: 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 deriv'd 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 conceiv'd 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.(27) 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 mix'd and vary'd in a thousand different ways; and form a strong presumption, 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 encrease 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 'tis evident philosophers wou'd 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 'tis impossible in any one instance to shew the principle, in which the force and agency of a cause is plac'd; and that the most refin'd 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 shew us an instance of a cause, where we discover the power or operating principle. This defiance we are oblig'd 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 oblig'd philosophers to conclude, that the ultimate force and efficacy of nature is perfectly unknown to us, and that 'tis in vain we search for it in all the known qualities of matter. In this opinion they are almost unanimous; and 'tis 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 inferr'd, that it is endow'd with no efficacy, and that 'tis 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 depriv'd

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 plac'd somewhere, it must lie in the DEITY, or that divine being, who contains in his nature all excellency and perfection. 'Tis the deity, therefore, who is the prime mover of the universe, and who not only first created matter, and gave it it's original impulse, but likewise by a continu'd exertion of omnipotence, supports its existence, and successively bestows on it all those motions, and configurations, and qualities, with which it is endow'd.

This opinion is certainly very curious, and well worth our attention; but 'twill 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 deriv'd from impressions, or some precedent perceptions, 'tis impossible we can have any idea of power and efficacy, unless some instances can be produc'd, wherein this power is perceiv'd 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 allow'd 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 deriv'd 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, 'tis equally impossible to discover or even imagine any such active principle in the deity. Since these philosophers, therefore, have concluded, that matter cannot be endow'd with any efficacious principle, because 'tis impossible to discover in it such a principle; the same course of reasoning shou'd 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 'tis impossible, that that idea can be deriv'd 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 possess'd of any idea of this kind, after the manner we commonly understand it. All ideas are deriv'd from, and represent impressions. We never have any impression, that contains any power or efficacy. We never therefore have any idea of power.

[This paragraph is inserted from the appendix.]

Some have asserted, that we feel an energy, or power, in our own mind; and that having in this manner acquir'd 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 consider'd as a cause, has no more a discoverable connexion with its effects, than any material cause has with its proper effect. So far from perceiving the connexion betwixt an act of volition, and a motion of the body; 'tis allow'd 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 cou'd 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 'tis 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 confess'd by philosophers to operate by an unknown force, we shou'd in vain hope to attain an idea of force by consulting our own minds.(28)

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, 'tis as impossible to exclude from our thought all particular degrees of quantity and quality as from the real nature of things. If we be possest, 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 endow'd with a real force and energy, by which such a particular effect necessarily results from its operation. We must distinctly and particularly conceive the connexion betwixt the cause and effect, and be able to pronounce, from a simple view of the one, that it must be follow'd 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, 'tis 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 connexion betwixt them, or comprehend distinctly that power or efficacy, by which they are united. Such a connexion wou'd amount to a demonstration, and wou'd imply the absolute impossibility for the one object not to follow, or to be conceiv'd not to follow upon the other: Which kind of connexion has already been rejected in all cases. If any one is of a contrary opinion, and thinks he has attain'd 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 endow'd with a power or force, proportioned to any effect; when we speak of a necessary

connexion betwixt objects, and suppose, that this connexion depends upon an efficacy or energy, with which any of these objects are endow'd; in all these expressions, so apply'd, we have really no distinct meaning, and make use only of common words, without any clear and determinate ideas. But as 'tis more probable, that these expressions do here lose their true meaning by being wrong apply'd, than that they never have any meaning; 'twill 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; 'tis 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 connexion betwixt them. 'Tis not, therefore, from any one instance, that we arrive at the idea of cause and effect, of a necessary connexion 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 shou'd never be able to form any such ideas.

But again; suppose we observe several instances, in which the same objects are always conjoin'd together, we immediately conceive a connexion 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 connexion, 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 perplex'd 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 observ'd, and as evidently follows from our fundamental principle, that all ideas are copy'd 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 multiply'd by it, but wou'd not be enlarg'd above

what they are upon the observation of one single instance. Every enlargement, therefore, (such as the idea of power or connexion) which arises from the multiplicity of similar instances, is copy'd from some effects of the multiplicity, and will be perfectly understood by understanding these effects. Wherever we find anything new to be discovered or produc'd by the repetition, there we must place the power, and must never look for it in any other object.

But 'tis evident, in the first place, that the repetition 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;(29) as has been already prov'd. Nay suppose we cou'd draw an inference, 'twou'd 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 possest 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, 'Tis certain that this repetition of similar objects in similar situations produces nothing new either in these objects, or in any external body. For 'twill readily be allow'd, 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 twelve-month 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, tho' the other never had been in being.

There is, then, nothing new either discovered or produc'd in any objects by their constant conjunction, and by the uninterrupted resemblance of their relations of succession and contiguity. But 'tis from this resemblance, that the ideas of necessity, of power, and of efficacy, are deriv'd. 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.

Tho' 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 observ'd 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 deriv'd from the resemblance. The several instances of resembling conjunctions lead 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 collects 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 connexion 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 convey'd by our senses, which can give rise to that idea. It must, therefore, be deriv'd 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 plac'd 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. 'Tis here that the real power of causes is plac'd along with their connexion 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 'tis 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 connexion betwixt them: that this idea arises from the repetition of their union: that the repetition neither discovers nor causes any thing 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 perceivd externally in bodies? There is commonly an astonishment attending every thing 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 tho' 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. 'Tis 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, tho' the qualities be of such a nature as to admit of no such conjunction, and really exist no where. But of this more fully⁽³⁰⁾ hereafter. Mean while 'tis 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 tho' this be the only reasonable account we can give of necessity, the contrary notion is; so riveted in the mind from the principles above-mention'd, that I doubt not but my sentiments will be treated by many as extravagant and ridiculous. What! the efficacy of causes lie in the determination of the mind! As if causes did not operate entirely independent of the mind, and wou'd not continue their operation, even tho' 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 plac'd 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 shou'd pretend to find a great many absurdities

in the supposition, that the colour 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 connexion betwixt causes and effects, 'twill 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, 'twill 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 connexion 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 observ'd, that objects bear to each other the relations of contiguity and succession: that like objects may be observ'd 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 connexion 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 subtilty, 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 connexion 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 connexion 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 examin'd and explain'd. 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.

'Tis 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 enquiry. This order wou'd not have been excusable, of first examining our inference from the relation before we had explain'd 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 oblig'd 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 plac'd in like relations of precedency and contiguity to those objects that resemble the latter.' 1 If this definition be esteem'd 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.' 2 Shou'd this definition also be rejected for the same reason, I know no other remedy, than that the persons, who express this delicacy, shou'd 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 plac'd in like relations of succession and contiguity. Again, when I consider the influence of this constant conjunction, 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 enquiry or reasoning upon the subject, but shall repose myself on them as on established maxims.

'Twill 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 prevail'd 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 deriv'd from the constant conjunction of two objects, wherever this is observ'd, 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 betwixt cause and occasion, when suppos'd to signify any thing essentially different from each other. If constant conjunction be imply'd in what we call occasion, 'tis a real cause. If not, 'tis 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. 'Tis 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 conjoin'd or not, and as the mind must either be determined or not to pass from one object to another, 'tis

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 'tis so natural for us to entertain against the foregoing reasoning, by which we endeavour'd 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 plac'd 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 shou'd 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 deriv'd from causation, and as all our reasonings concerning causation are deriv'd 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 'twou'd 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.