

Philosophical Essays Concerning Human Understanding

David Hume (1711-1776)



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PHILOSOPHICAL
ESSAYS
CONCERNING
Human Understanding.

By the AUTHOR of the
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ESSAY I.

Of the different Species of PHILOSOPHY.

MORAL Philosophy, or the Science of human Nature, may be treated after two different Manners; each of which has its peculiar Merit, and may contribute to the Entertainment, Instruction, and Reformation of Mankind. The one considers Man chiefly as born for Action; and as influenc'd in his Actions by Taste and Sentiment; pursuing one Object and avoiding another, according to the Value, which these Objects seem to possess, and according to the Light, in which they present themselves. Virtue, of all Objects, is the most valuable and lovely; and accordingly this Species of Philosophers paint her in the most amiable Colours, borrowing all Helps from Poetry and Eloquence, and treating their Subject in an easy and obvious Manner, such as is best fitted to please the Imagination, and engage the Affections. They select the most striking Observations and Instances from common Life; place opposite Characters in a proper Contrast; and alluring us into the Paths of Virtue, by the Views of Glory and of Happiness, direct our Steps into these Paths, by the soundest Precepts and most illustrious Examples. They make us *feel* the Difference

betwixt Vice and Virtue; they excite and regulate our Sentiments; and so they can but bend our Hearts to the Love of Probity and true Honour, they think, that they have fully attain'd the End of all their Labours.

THE other Species of Philosophers treat Man rather as a reasonable than an active Being, and endeavour to form his Understanding more than cultivate his Manners. They regard Mankind as a Subject of Speculation; and with a narrow Scrutiny examine human Nature, in order to find those Principles, which regulate our Understandings, excite our Sentiments, and make us approve or blame any particular Object, Action, or Behaviour. They think it a Reproach to all Literature, that Philosophy should not yet have fixt, beyond Controversy, the Foundation of Morals, Reasoning, and Criticism; and should for ever talk of Truth and Falshood, Vice and Virtue, Beauty and Deformity, without being able to determine the Source of these Distinctions. While they attempt this arduous Task, they are deter'd by no Difficulties; but proceeding from particular Instances to general Principles, they still push on their Enquiries to Principles more general, and rest not satisfy'd till they arrive at those original Principles, by which, in every Science, all human Curiosity must be bounded. Tho' their Speculations seem abstract and even unintelligible to common Readers, they please themselves with the Approbation of the Learned and the Wise; and think they are sufficiently compensated for the Labours of their whole

Lives, if they can discover some hidden Truths which may contribute to the Instruction of Posterity.

'Tis certain, that the easy and obvious Philosophy will always, with the Generality of Mankind, have the Preference to the accurate and abstruse; and by many will be recommended, not only as more agreeable, but more useful than the other. It enters more into common Life; moulds the Heart and Affections; and by touching those Principles, which actuate Men, reforms their Conduct, and brings them nearer that Model of Perfection, which it describes. On the contrary, the abstruse Philosophy, being founded on a Turn of Mind that cannot enter into Business and Action, vanishes when the Philosopher leaves the Shade and comes into open Day; nor can its Precepts and Principles easily retain any Influence over our Conduct and Behaviour. The Feelings of our Sentiments, the Agitation of our Passions, the Vehemence of our Affections, dissipate all its Conclusions, and reduce the profound Philosopher to a mere Plebeian.

THIS also must be confess, that the most durable, as well as justest Fame has been acquired by the easy Philosophy, and that abstract Reasoners seem hitherto to have enjoy'd only a momentary Reputation, from the Caprice or Ignorance of their own Age, but have not been able to support their Renown with more equitable Posterity. 'Tis easy for a profound Philosopher to commit a Mistake in his subtle Reasonings; and one Mistake is the necessary Parent of

another, while he pushes on his Consequences, and is not deter'd from embracing any Conclusion, by its unusual Appearance, or its Contradiction to popular Opinion: But a Philosopher, who proposes only to represent the common Sense of Mankind in more beautiful and more engaging Colours, if by Accident he commits a Mistake, goes no farther; but renewing his Appeal to common Sense, and the natural Sentiments of the Mind, returns into the right Path, and secures himself from any dangerous Illusions. The Fame of Cicero flourishes at present; but that of Aristotle is utterly decay'd. La Bruyere passes the Seas, and still encreases in Renown: But the Glory of Malebranche is confin'd to his own Nation and to his own Age. And Addison, perhaps, will be read with Pleasure, when Locke shall be entirely forgotten^[1].

THE mere Philosopher is a Character, which is commonly but little acceptable in the World, as being suppos'd to contribute nothing either to the Advantage or Pleasure of Society; while he lives remote from Communication with Mankind, and is wrapt up in Principles and Notions equally remote from their Comprehension. On the other hand, the mere Ignorant is still more despis'd; nor is any thing esteem'd a surer Sign of an illiberal Genius, in an Age and Nation where the Sciences flourish, than to be entirely void of all Taste and Relish for those noble Entertainments. The most perfect Character is suppos'd to lie betwixt those Extremes; retaining an equal Ability and Taste for Books, Company, and Business; preserving in Conversation that

Discernment and Delicacy, which arise from polite Letters, and in Business, that Probity and Accuracy, which are the natural Result of a just Philosophy. In order to diffuse and cultivate so accomplisht a Character, nothing can be more useful than Compositions of the easy Style and Manner, which draw not too much from Life, require no deep Application or Recess to be comprehended, and send back the Student among Mankind full of noble Sentiments and wise Precepts, applicable to every Emergence of human Life. By means of such Compositions, Virtue becomes amiable, Science agreeable, Company instructive, and Retirement entertaining.

MAN is a reasonable Being; and as such, receives from Science his proper Food and Nourishment: But so narrow are the Bounds of human Understanding, that little Satisfaction can be hop'd for, in this Particular, either from the Extent or Security of his Acquisitions. Man is a sociable, no less than a reasonanable Being: But neither can he always enjoy Company agreeable and amusing, or preserve the proper Relish of them. Man is also an active Being; and from that Disposition, as well as from the various Necessities of human Life, must submit to Business and Occupation: But the Mind requires some Relaxation, and cannot always support its Bent to Care and Industry. It seems, then, that Nature has pointed out a mixt kind of Life as most suitable to human Race, and secretly admonish'd them to allow none of these Byasses to *draw* too much, so as to incapacitate them for other Occupations and

Entertainments. Indulge your Passion for Science, says she; but let your Science be human, and such as may have a direct Reference to Action and Society. Abstruse Thought and profound Researches I prohibit, and will severely punish, by the pensive Melancholy, which they introduce, by the endless Uncertainty, in which they involve you, and by the cold Reception, which your pretended Discoveries will meet with, when communicated. Be a Philosopher; but amidst all your Philosophy, be still a Man.

WERE the Generality of Mankind contented to prefer the easy Philosophy to the abstract and profound, without throwing any Blame or Contempt on the latter, it might not be improper, perhaps, to comply with this general Opinion, and allow every Man to enjoy, without Opposition, his own Taste and Sentiment. But as the Matter is often carry'd farther, even to the absolute rejecting all profound Reasonings or what is commonly call'd *Metaphysics*, we shall now proceed to consider what can reasonably be pleaded in their Behalf.

WE may begin with observing, that one considerable Advantage, which results from the accurate and abstract Philosophy, is, its Subserviency to the easy and humane, which, without the former, can never attain a sufficient Degree of Exactness, in its Sentiments, Precepts, or Reasonings. All polite Letters are nothing but Pictures of human Life in various Attitudes and Situations; and inspire us with different Sentiments of Praise or Blame, Admiration

or Ridicule, according to the Qualities of the Object, which they set before us. An Artist must be better qualify'd to succeed in this Undertaking, who, besides a delicate Taste and a quick Apprehension, possesses an accurate Knowledge of the internal Fabric, the Operations of the Understanding, the Workings of the Passions, and the various Species of Sentiments, which discriminate Vice and Virtue. However painful this inward Search or Enquiry may appear, it becomes, in some measure, requisite to those, who would describe with Success the obvious and outward Appearances of Life and Manners. The Anatomist presents to the Eye the most hideous and disagreeable Objects; but his Science is highly useful to the Painter in delineating even a *Venus* or an *Helen*. While the latter employs all the richest Colours of his Art, and gives his Figures the most graceful and engaging Airs; he must still carry his Attention to the inward Structure of the human Body, the Position of the Muscles, the Fabric of the Bones, and the Use and Figure of every Part or Organ. Accuracy is, in every Case, advantageous to Beauty, and just Reasoning to delicate Sentiments. In vain would we exalt the one, by depreciating the other.

BESIDES, we may observe, in every Art or Profession, even those which most concern Life or Action, that a Spirit of Accuracy, however acquir'd, carries all of them nearer their Perfection, and renders them more subservient to the Interests of Society. And tho' a Philosopher may live remote from Business and Employment, the Genius of Philosophy,

if carefully cultivated by several, must gradually diffuse itself thro' the whole Society, and bestow a similar Accuracy on every Art and Calling. The Politician will acquire greater Foresight and Subtilty, in the subdividing and ballancing of Power; the Lawyer more Method and finer Principles in his Reasonings; and the General more Regularity in his Discipline, and more Caution in his Plans and Operations. The Stability of modern Governments above the antient, and the Accuracy of modern Philosophy, have improv'd and probably will still improve, by similar Gradations.

WERE there no Advantage to be reap'd from these Studies beyond the Gratification of an innocent Curiosity, yet ought not even this to be despis'd; as being one Accession to those few safe and harmless Pleasures, which are bestow'd on human Race. The sweetest and most inoffensive Path of Life leads thro' the Avenues of Science and Learning; and whoever can either remove any Obstructions in this Way, or open up any new Prospect, ought so far to be esteem'd a Benefactor to Mankind. And tho' these Researches may appear painful and fatiguing; 'tis with some Minds as with some Bodies, which, being endow'd with vigorous and florid Health, require severe Exercise, and reap a Pleasure from what, to the Generality of Mankind, may seem burthensome and laborious. Obscurity, indeed, is painful to the Mind as well as to the Eye; but to bring Light from Obscurity, by whatever Labour, must needs be delightful and rejoicing.

BUT this Obscurity, in the profound and abstract Philosophy, is objected to, not only as painful and disagreeable, but as the inevitable Source of Uncertainty and Error. Here indeed lie the justest and most plausible Objection against a considerable Part of Metaphysics, that they are not properly a Science, but arise either from the fruitless Efforts of human Vanity, which would penetrate into Subjects utterly inaccessible to the Understanding, or from the Craft of popular Superstitions, which, being unable to defend themselves on fair Ground, raise these entangling Brambles to cover and protect their Weakness. Chac'd from the open Country, these Robbers fly into the Forest, and lie in wait to break in upon every unguarded Avenue of the Mind, and over-whelm it with religious Fears and Prejudices. The stoutest Antagonist, if he remits his Watch a Moment, is opprest: And many, thro' Cowardice and Folly, open the Gates to the Enemies, and willingly receive them with Reverence and Submission, as their legal Sovereigns.

BUT is this a just Cause why Philosophers should desist from such Researches, and leave Superstition still in Possession of her Retreat? Is it not reasonable to draw a direct contrary Conclusion, and perceive the Necessity of carrying the War into the most secret Recesses of the Enemy? In vain do we hope, that Men, from frequent Disappointments, will at last abandon such airy Sciences, and discover the proper Province of human Reason. For besides, that many Persons find too sensible an Interest in perpetually recalling such Topics; besides this, I say, the

Motive of blind Despair can never reasonably have place in the Sciences; since, however unsuccessful former Attempts may have prov'd, there is still room to hope, that the Industry, Good-fortune, or improv'd Sagacity of succeeding Generations may reach Discoveries unknown to former Ages. Each adventurous Genius will still leap at the arduous Prize, and find himself stimulated, rather than discourag'd, by the Failures of his Predecessors; while he hopes, that the Glory of atchieving so hard an Adventure is reserv'd for him alone. The only Method of freeing Learning, at once, from these abstruse Questions, is to enquire seriously into the Nature of human Understanding, and shew, from an exact Analysis of its Powers and Capacity, that it is, by no means, fitted for such remote and abstruse Subjects. We must submit to this Fatigue, in order to live at Ease ever after: And must cultivate true Metaphysics with some Care, in order to destroy the false and adulterate. Indolence, which, to some Persons, affords a Safeguard against this deceitful Philosophy, is, with others, over-ballanc'd by Curiosity; and Despair, which, at some Moments, prevails, may give place afterwards to sanguine Hopes and Expectations. Accurate and just Reasoning is the only catholic Remedy, fitted for all Persons and all Dispositions, and is alone able to subvert that abstruse Philosophy and metaphysical Jargon, which, being mixt up with popular Superstition, renders it, in a manner, impenetrable to careless Reasoners, and gives it the Air of Science and Wisdom.

BESIDE this Advantage of rejecting, after deliberate Enquiry, the most uncertain and disagreeable Part of Learning, there are many positive Advantages, which result from an accurate Scrutiny into the Powers and Faculties of human Nature. 'Tis remarkable concerning the Operations of the Mind, that tho' most intimately present to us, yet whenever they become the Object of Reflection, they seem involv'd in Obscurity, nor can the Eye readily find those Lines and Boundaries, which discriminate and distinguish them. The Objects are too fine to remain long in the same Aspect or Situation; and must be apprehended, in an Instant, by a superior Subtilty and Penetration, deriv'd from Nature, and improv'd by Habit and Reflection. It becomes, therefore, no inconsiderable Part of Science barely to know the different Operations of the Mind, to separate them from each other, to class them under their proper Divisions, and to correct all that seeming Disorder, in which they lie involv'd, when made the Object of Reflection and Enquiry. This Task of ordering and distinguishing, which has no Merit, when perform'd with regard to external Bodies, the Objects of our Senses, rises in its Value, when directed towards the Operations of the Mind, in proportion to the Difficulty and Labour, which we meet with in performing it. And if we can go no farther than this mental Geography or Delineation of the distinct Parts and Powers of the Mind, 'tis at least a Satisfaction to go so far; and the more contemptible this Science may appear (and it is by no means contemptible) the more contemptible still must the Ignorance of it appear, in all Pretenders to Learning and Philosophy.

NOR can there remain any Suspicion, that this Science is uncertain and chimerical; unless we should entertain such a Scepticism, as is entirely subversive of all Speculation, and even Action. It cannot be doubted, that the Mind is endow'd with several Powers and Faculties, that these Powers are totally distinct from each other, that what is really distinct to the immediate Perception may be distinguish'd by Reflection; and consequently, that there is a Truth and Falshood in all Propositions on this Subject, and a Truth and Falshood, which lies not beyond the Compass of human Understanding. There are many obvious Distinctions of this kind, such as those betwixt the Will and Understanding, the Imagination and Passions, which fall within the Comprehension of every human Creature; and the finer and more philosophical Distinctions are no less real and certain, tho' more difficult to be comprehended. Some Instances, especially late ones, of Success in these Enquiries, may give us a juster Notion of the Certainty and Solidity of this Branch of Learning. And shall we esteem it worthy the Labour of a Philosopher to give us a true System of the Planets, and adjust the Position and Order of those remote Bodies; while we affect to overlook those, who, with so much Success, delineate and describe the Parts of the Mind, in which we are so intimately concern'd^[2]?

BUT may we not hope, that Philosophy, if cultivated with Care, and encourag'd by the Attention of the Public, may carry its Researches still farther, and discover, at least in some degree, the secret Springs and Principles, by which

the human Mind is actuated in its Operations? Astronomers had long contented themselves with proving, from the Phænomena, the true Motions, Order, and Magnitude of the heavenly Bodies: Till a Philosopher, at last, arose, who seems, from the happiest Reasoning, to have also determin'd the Laws and Forces, by which their Revolutions are govern'd and directed. The like has been perform'd with regard to other Parts of Nature. And there is no Reason to despair of equal Success in our Enquiries concerning the mental Powers and Oeconomy, if prosecuted with equal Capacity and Caution. 'Tis probable, that one Operation and Principle of the Mind depends on another; which, again, may be resolv'd into one more general and universal: And how far these Researches may possibly be carry'd, 'twill be difficult for us, before, or even after, a care ful Tryal, exactly to determine. This is certain, that Attempts of this Kind are every day made even by those, who philosophize the most negligently; and nothing can be more requisite than to enter upon the Enterprize with thorough Care and Attention; that, if it lie within the Compass of human Understanding, it may at last be happily atchiev'd; if not, it may, however, be rejected with some Confidence and Security. This last Conclusion, surely, is not desirable, nor ought it to be embrac'd too rashly. For how much must we diminish from the Beauty and Value of this Species of Philosophy, upon such a Supposition? Moralists have hitherto been accustom'd, when they consider'd the vast Multitude and Diversity of Actions, that excite our Approbation or Dislike, to search for some common

Principle, on which this Variety of Sentiments might depend. And tho' they have sometimes carry'd the Matter too far, by their Passion for some one general Principle; it must, however, be confess, that they are excusable, in expecting to find some general Principles, into which all the Vices and Virtues were justly to be resolv'd. The like has been the Endeavour of Critics, Logicians, and even Politicians: Nor have their Attempts been altogether unsuccessful; tho' perhaps longer Time, greater Accuracy, and more ardent Application may bring these Sciences still nearer their Perfection. To throw up at once all Pretensions of this Kind may be justly esteem'd more rash, precipitate, and dogmatical, than even the boldest and most affirmative Philosophy, which has ever attempted to impose its crude Dictates and Principles on Mankind.

WHAT tho' those Reasonings concerning human Nature seem abstract, and of difficult Comprehension? This affords no Presumption of their Falshood. On the contrary, it seems impossible, that what has hitherto escap'd so many wise and profound Philosophers can be very obvious and easy. And whatever Pains these Researches may cost us, we may think ourselves sufficiently rewarded, not only in point of Profit but of Pleasure, if, by that means, we can make any Addition to our Stock of Knowledge, in Subjects of such unspeakable Importance.

BUT as, after all, the Abstractedness of these Speculations is no Recommendation, but rather a Disadvantage to them,

and as this Difficulty may perhaps be surmounted by Care and Art, and the avoiding all unnecessary Detail, we have, in the following Essays, attempted to throw some Light upon Subjects, from which Uncertainty has hitherto deter'd the Wise, and Obscurity the Ignorant. Happy, if we can unite the Boundaries of the different Species of Philosophy, by reconciling profound Enquiry, with Clearness, and Truth with Novelty! And still more happy, if, reasoning in this easy Manner, we can undermine the Foundations of an abstruse Philosophy, which seems to have serv'd hitherto only as a Shelter to Superstition and a Cover to Absurdity and Error!

1. ↑ This is not intended any way to detract from the Merit of Mr. *Locke*, who was really a great Philosopher, and a just and modest Reasoner. 'Tis only meant to shew the common Fate of such abstract Philosophy.
2. ↑ That Faculty, by which we discern Truth and Falshood, and that by which we perceive Vice and Virtue had long been confounded with each other, and all Morality was suppos'd to be built on eternal and immutable Relations, which to every intelligent Mind were equally invariable as any Proposition concerning Quantity or Numbers. But a † late Philosopher has taught us, by the most convincing Arguments, that Morality is nothing in the abstract Nature of Things,

but is entirely relative to the Sentiment or mental Taste of each particular Being; in the same Manner as the Distinction of sweet and bitter, hot and cold, arise from the the particular Feeling of each Sense or Organ. Moral Perceptions therefore, ought not to be class'd with the Operations of the Understanding, but with the Tastes or Sentiments.

It had been usual with Philosophers to divide all the Passions of the Mind into two Classes, the selfish and benevolent, which were suppos'd to stand in constant Opposition and Contrariety; nor was it thought that the latter could ever attain their proper Object but at the Expence of the former. Among the selfish Passions were rank'd Avarice, Ambition, Revenge: Among the benevolent, natural Affection, Friendship, public Spirit. Philosophers may now § perceive the Impropriety of this Division. It has been prov'd, beyond all Controversy, that even the Passions, commonly esteem'd selfish, carry the Mind beyond Self, directly

† Mr. *Hutcheson*. § See *Butler's Sermons*.

to the Object; that tho' the Satisfaction of these Passions gives us Enjoyment, yet the Prospect of this Enjoyment is not the Cause of the Passion, but on the contrary the Passion is antecedent to the Enjoyment, and without the former, the latter could never possibly exist; that the Case is precisely the same with the

Passions, denominated benevolent, and consequently that a Man is no more interested when he seeks his own Glory than when the Happiness of his Friend is the Object of his Wishes; nor is he any more disinterested when he sacrifices his Ease and Quiet to public good than when he labours for the Gratification of Avarice and Ambition. Here therefore is a considerable Adjustment in the Boundaries of the Passions, which had been confounded by the Negligence or Inaccuracy of former Philosophers. These two Instances may suffice to show us the Nature and Importance of this Species of Philosophy.

ESSAY II.

Of the ORIGIN of IDEAS.

EVERY one will readily allow, that there is a considerable Difference betwixt the Perceptions of the Mind, when a Man feels the Pain of excessive Heat or the Pleasure of moderate Warmth, and when he afterwards recalls to his Memory this Sensation, or anticipates it by his Imagination. These Faculties may mimick or copy the Perceptions of the Senses; but they never can reach entirely the Force and Vivacity of the original Sentiment. The utmost we say of them, even when they operate with greatest Vigour, is, that they represent their Object in so lively a Manner, that we could *almost* say we feel or see it: But, except the Mind be disorder'd by Disease or Madness, they never can arrive at such a pitch of Vivacity as to render these Perceptions altogether undistinguishable. All the Colours of Poetry, however splendid, can never paint natural Objects in such a manner as to make the Description be taken for a real Landskip. The most lively Thought is still inferior to the dullest Sensation.

WE may observe a like Distinction to run thro' all the other Perceptions of the Mind. A Man, in a Fit of Anger, is actuated in a very different Manner from one, who only thinks of that Emotion. If you tell me, that any Person is in Love, I easily understand your Meaning, and form a just Conception of his Situation; but never can mistake that Conception for the real Disorders and Agitations of the Passion. When we reflect on all our past Sentiments and Affections, our Thought is a faithful Mirror, and copies its Objects truly; but the Colours it employs are faded and dead, in comparison of those, in which our original Perceptions were cloth'd. It requires no nice Discernment nor metaphysical Head to mark the Distinction betwixt them.

HERE therefore we may divide all the Perceptions of the Mind into two Classes or Species, which are distinguish'd by their different Degrees of Force and Vivacity. The less forcible and lively are commonly denominated THOUGHTS or IDEAS. The other Species want a Name in our Language, and in most others; I suppose, because it was not requisite for any, but philosophical Purposes, to rank them under a general Term or Appellation. Let us, therefore, use a little Freedom, and call them IMPRESSIONS, employing that Word in a Sense somewhat different from the usual. By the Term, *Impressions*, then, we mean all our more lively Perceptions, when we hear, or see, or feel, or love, or hate, or desire, or will. And Impressions are contradistinguish'd from Ideas, which are the less lively Perceptions we are conscious of,

when we reflect on any of these Sensations or Movements above mention'd.

NOTHING, at first View, may seem more unbounded than the Thought of Man, which not only escapes all human Power and Authority, but is not even restrain'd within the Limits of Nature and Reality. To form Monsters, and join incongruous Shapes and Appearances costs it no more Trouble than to conceive the most natural and familiar Objects. And while the Body is confin'd to one Planet, along which it creeps with Pain and Difficulty; the Thought can in an Instant transport us into the most distant Regions of the Universe; or even beyond the Universe, into the unbounded Chaos, where Nature is suppos'd to lie in total Confusion. What never was seen, nor heard of may yet be conceiv'd; nor is any thing beyond the Power of Thought, except what implies an absolute Contradiction.

BUT tho' Thought seems to possess this unbounded Liberty, we shall find, upon a nearer Examination, that it is really confin'd within very narrow Limits, and that all this creative Power of the Mind amounts to no more than the compounding, transposing, augmenting, or diminishing the Materials afforded us by the Senses and Experience. When we think of a golden Mountain, we only join two consistent Ideas, *Gold*, and *Mountain*, with which we were formerly acquainted. A virtuous Horse we can conceive; because, from our own Feeling, we can conceive Virtue, and this we may unite to the Figure and Shape of a Horse, which is an

Animal familiar to us. In short all the Materials of thinking are deriv'd either from our outward or inward Sentiment: The Mixture and Composition of these belongs alone to the Mind and Will. Or to express myself in more philosophical Language, all our Ideas or more feeble Perceptions are Copies of our Impressions or more lively ones.

To prove this, the two following Arguments will, I hope, be sufficient. First, When we analyse our Thoughts or Ideas, however compounded or sublime, we always find, that they resolve themselves into such simple Ideas as were copy'd from a precedent Feeling or Sentiment. Even those Ideas, which, at first View, seem the most wide of this Origin, are found, upon a narrower Scrutiny, to be deriv'd from it. The Idea of God, as meaning an infinitely intelligent, wise, and good Being, arises from reflecting on the Operations of our own Mind, and augmenting those Qualities of Goodness and Wisdom, without Bound or Limit. We may prosecute this Enquiry to what Length we please; where we shall always find, that every Idea we examine is copy'd from a similar Impression. Those, who would assert, that this Position is not absolutely universal and without Exception, have only one, and that an easy Method of refuting it, by producing that Idea, which, in their Opinion, is not deriv'd from this Source. It will then be incumbent on us, if we would maintain our Doctrine, to produce the Impression or lively Perception, that corresponds to it.

SECONDLY. If it happen, from a Defect of the Organ, that a Man is not susceptible of any Species of Sensations, we always find, that he is as little susceptible of the correspondent Ideas. A blind Man can form no Notion of Colours; a deaf Man of Sounds. Restore either of them that Sense, in which he is deficient; by opening this new Inlet for his Sensations, you also open an Inlet for the Ideas, and he finds no Difficulty of conceiving these Objects. The Case is the same if the Object, proper for exciting any Sensation, has never been apply'd to the Organ. A *Laplander* or *Negro* has no Notion of the Relish of Wine. And tho' there are few or no Instances of a like Deficiency in the Mind, where a Person has never felt or is altogether incapable of a Sentiment or Passion, that belongs to his Species; yet we find the same Observation to take place in a lesser Degree. A Man of mild Manners can form no Notion of inveterate Revenge or Cruelty; nor can a selfish Heart easily conceive the Heights of Friendship and Generosity. 'Tis readily allow'd, that other Beings may possess many Senses, of which we can have no Conception; because the Ideas of them have never been introduc'd to us in the only Manner, by which an Idea can have access to the Mind, viz. by the actual Feeling and Sensation.

THERE is, however, one contradictory Phænomenon, which may prove, that 'tis not absolutely impossible for Ideas to go before their correspondent Impressions. I believe it will readily be allow'd, that the several distinct Ideas of Colours, which enter by the Eyes, or those of Sounds, which are

convey'd by the Hearing, are really different from each other; tho', at the same time, resembling. Now if this be true of different Colours, it must be no less so, of the different Shades of the same Colour; and each Shade produces a distinct Idea, independent of the rest. For if this should be deny'd, 'tis possible, by the continual Gradation of Shades, to run a Colour insensibly into what is most remote from it; and if you will not allow any of the Means to be different, you cannot, without Absurdity, deny the Extremes to be the same. Suppose, therefore, a Person to have enjoy'd his Sight for thirty Years, and to have become perfectly well acquainted with Colours of all kinds, excepting one particular Shade of Blue, for Instance, which it never has been his fortune to meet with. Let all the different Shades of that Colour, except that single one, be plac'd before him, descending gradually from the deepest to the lightest; 'tis plain, that he will perceive a Blank, where that Shade is wanting, and will be sensible, that there is a greater Distance in that Place betwixt the contiguous Colours than in any other. Now I ask, whether 'tis possible for him, from his own Imagination, to supply this Deficiency, and raise up to himself the Idea of that particular Shade, tho' it had never been convey'd to him by his Senses? I believe there are few but will be of Opinion that he can; and this may serve as a Proof, that the simple Ideas are not always, in every Instance, deriv'd from the correspondent Impressions; tho' this Instance is so particular and singular, that 'tis scarce worth our observing, and does not merit, that for it alone we should alter our general Maxim.

HERE, therefore, is a Proposition, which not only seems, in itself, simple and intelligible; but, if properly employ'd, might render every Dispute equally intelligible, and banish all that Jargon, which has so long taken possession of metaphysical Reasonings, and drawn such Disgrace upon them: All Ideas, especially abstract ones, are naturally faint and obscure: The Mind has but a slender Hold of them: They are apt to be confounded with other resembling Ideas: And when we have often employ'd any Term, tho' without a distinct Meaning, we are apt to imagine it has a determinate Idea, annex'd to it. On the contrary, all Impressions, that is, all Sensations, either outward or inward, are strong and sensible: The Limits betwixt them are more exactly determin'd: Nor is it easy to fall into any Error or Mistake with regard to them. When therefore we entertain any Suspicion, that a philosophical Term is employ'd without any Meaning or Idea (as is but too frequent) we need but enquire, *from what Impression is that suppos'd Idea deriv'd?* And if it be impossible to assign any, this will serve to confirm our Suspicion. By bringing Ideas into so clear a Light, we may reasonably hope to remove all Dispute, that may arise, concerning their Nature and Reality^[1].

1. ↑ 'Tis probable, that no more was meant by those, who deny'd innate Ideas, than that all our Ideas were Copies of our Impressions; tho' it must be confess'd, that the Terms they employ'd were not chosen with such Caution, nor so exactly defin'd as to prevent all

Mistakes about their Doctrine. For what is meant by *innate*? If innate be equivalent to natural, then all the Perceptions and Ideas of the Mind must be allow'd to be innate or natural, in whatever Sense we take the latter Word, whether in Opposition to what is uncommon, artificial, or miraculous. If by innate be meant, cotemporary to our Birth, the Dispute seems to be frivolous; nor is it worth while to enquire at what time Thinking begins, whether before, at, or after our Birth. Again, the Word, *Idea*, seems to be commonly taken in a very loose Sense, even by Mr. *Locke* himself, as standing for any of our Perceptions, our Sensations and Passions, as well as Thoughts. Now in this Sense I would desire to know, what can be meant by asserting, that Self-Love, or Resentment of Injuries, or the Passion betwixt the Sexes is not innate?

But admitting these Terms, *Impressions* and *Ideas*, in the Sense above explain'd, and understanding by *innate* what is original or copy'd from no precedent Perception, then may we assert, that all our Impressions are innate, and our Ideas not innate.

To be ingenuous, I must own it to be my Opinion, that Mr. *Locke* was betray'd into this Question by the Schoolmen, who making use of undefin'd Terms, draw out their Disputes to a tedious Length, without ever touching the Point in Question. A like Ambiguity and Circumlocution seems to run thro' all that treat Man's Reasonings on this Subject.

ESSAY III.

Of the CONNEXION of IDEAS.

IT IS evident, that there is a Principle of Connexion betwixt the different Thoughts or Ideas of the Mind, and that in their Appearance to the Memory or Imagination, they introduce each other with a certain Degree of Method and Regularity. In our more serious Thinking or Discourse, this is so observable, that any particular Thought, which breaks in upon this regular Tract or Chain of Ideas, is immediately remark'd and rejected. And even in our wildest and most wandering Reveries, nay in our very Dreams, we shall find, if we reflect, that the Imagination run not altogether at Adventures, but that there was still a Connexion upheld among the different Ideas, which succeeded each other. Were the loosest and freest Conversation to be transcrib'd, there would immediately be observ'd something, which connected it in all its Transitions. Or where this is wanting, the Person, who broke the Thread of Discourse, might still inform you, that there had secretly revolv'd in his Mind a Succession of Thought, which had gradually led him away from the Subject of Conversation. Amongst the Languages of

different Nations, even where we cannot suspect the least Connexion or Communication, 'tis found, that the Words, expressive of the most compound Ideas, do yet nearly correspond to each other: A certain Proof, that the simple Ideas, which they express, were bound together by some universal Principle, which had an equal Influence on all Mankind.

THO' it be too obvious to escape our Observation, that different Ideas are connected together; I do not find, that any Philosopher has attempted to enumerate or class all the Principles of Connexion; a Subject, however, that seems very worthy of our Curiosity. To me, there appears to be only three Principles of Connexion among Ideas, viz. *Resemblance*, *Contiguity* in Time or Place, and *Cause* or *Effect*.

THAT these Principles serve to connect Ideas will not, I believe, be much doubted. A Picture naturally leads our Thoughts to the Original^[1]: The Mention of one Apartment in a Building naturally introduces an Enquiry or Discourse concerning the others^[2]: And if we think of an Wound, we can scarce forbear reflecting on the Pain, which follows it^[3]. But that this Enumeration is compleat, and that there are no other Principles of Connexion, except these, may be difficult to prove to the Satisfaction of the Reader, or even to a Man's own Satisfaction. All we can do, in such Cases, is to run over several Instances, and examine carefully the Principle, that binds the different Thoughts to each other,

never stoping till we render the Principle as general as possible. The more instances we examine, and the more Care we employ, the more Assurance shall we acquire, that the Enumeration which we form from the Whole, is compleat and entire. Instead of entering into a Detail of this kind, which would lead us into many useless Subtilties, we shall consider some of the Effects of this Connexion upon the Passions and Imagination; where we may open up a Field of Speculation more entertaining, and perhaps more instructive, than the other.

As Man is a reasonable Being, and is continually in Pursuit of Happiness, which he hopes to find in the Gratification of some Passion or Affection, he seldom acts or speaks or thinks without a Purpose and Intention. He has still some Object in View; and however improper the Means may sometimes be, which he chuses for the Attainment of his End, he never loses View of an End, nor will he so much as throw away his Thoughts or Reflections, where he hopes not to reap any Satisfaction from them.

In all Compositions of Genius, therefore, 'tis requisite that the Writer have some Plan or Object; and tho' he may be hurry'd from this Plan by the Vehemence of Thought, as in an Ode, or drop it carelessly, as in an Epistle or Essay, there must appear some Aim or Intention, in his first setting out, if not in the Composition of the whole Work. A Production without a Design would resemble more the Ravings of a Madman, than the sober Efforts of Genius and Learning.

As this Rule admits of no Exception, it follows, that in narrative Compositions, the Events or Actions, which the Writer relates, must be connected together, by some Bond or Tye: They must be related to each other in the Imagination, and form a kind of *Unity*, which may bring them under one Plan or View, and which may be the Object or End of the Writer in his first Undertaking.

THIS connecting Principle among the several Events, which form the Subject of a Poem or History may be very different, according to the different Designs of the Poet or Historian. Ovid has form'd his Plan upon the connecting Principle of Resemblance. Every fabulous Transformation, produc'd by the miraculous Power of the Gods, falls within the Compass of his Work. There needs but this one Circumstance in any Event to bring it under his original Plan or Intention.

AN Annalist or Historian, who should undertake to write the History of *Europe* during any Century, would be influenc'd by the Connexion of Contiguity in Time or Place. All Events, which happen in that Portion of Space, and Period of Time, are comprehended in his Design, tho' in other respects different and unconnected. They have still a Species of Unity, amidst all their Diversity.

BUT the most usual Species of Connexion among the different Events, which enter into any narrative Composition, is that of Cause and Effect; while the

Historian traces the Series of Actions according to their natural Order, remounts to their secret Springs and Principles, and delineates their most remote Consequences. He chuses for his Subject a certain Portion of that great Chain of Events, which compose the History of Mankind: Each Link in this Chain he endeavours to touch in his Narration: Sometimes, un avoidable Ignorance renders all his Attempts fruitless: Sometimes, he supplies by Conjecture what is wanting in Knowledge: And always, he is sensible, that the more unbroken the Chain is, which he presents to his Readers, the more perfect is his Production. He fees, that the Knowledge of Causes is not only the most satisfactory; this Relation or Connexion being the strongest of all others; but also the most instructive; since it is by this Knowledge alone, we are enabled to controul Events, and govern Futurity.

HERE therefore we may attain some Notion of that *Unity* of *Action*, about which all Critics, after Aristotle, have talk'd so much: Perhaps, to little Purpose, while they directed not their Taste or Sentiment by the Accuracy of Philosophy. It appears, that in all Productions, as well as in the Epic and Tragic, there is a certain Unity requir'd, and that, on no Occasion, our Thoughts can be allow'd to run at Adventures, if we would produce a Work, that will give any lasting Entertainment to Mankind. It appears also, that even a Biographer, who should write the Life of *Achilles*, would connect the Events, by shewing their mutual Dependance and Relation, as much as a Poet, who should make the

Anger of that Hero, the Subject of his Narration^[4]. Nor only in any limited Portion of Life, a Man's Actions have a Dependance on each other, but also during the whole Period of his Duration, from the Cradle to the Grave; nor is it possible to strike off one Link, however minute, in this regular Chain, without affecting the whole Series of Events, which follow. The Unity of Action, therefore, which is to be found in Biography or History, differs from that of Epic Poetry, not in Kind, but in Degree. In Epic Poetry, the Connexion among the Events is more close and sensible: The Narration is not carry'd on thro' such a Length of Time: And the Actors hasten to some remarkable Period, which satisfies the Curiosity of the Reader. This Conduct of the Epic Poet depends on that particular Situation of the *Imagination* and of the *Passions*, which is suppos'd in that Production. The Imagination, both of Writer and Reader, is more enliven'd, and the Passions more enflam'd than in History, Biography, or any Species of Narration, that confine themselves to strict Truth and Reality. Let us consider the Effect of these two Circumstances, of an enliven'd Imagination and enflam'd Passions, which belong to Poetry, especially the Epic Kind, above any other Species of Composition; and let us see for what Reason they require a stricter and closer Unity in the Fable.

FIRST. All Poetry, being a Species of Painting, approaches us nearer to the Objects than any other Species of Narration, throws a stronger Light upon them, and delineates more distinctly those minute Circumstances, which, tho' to the

Historian they seem superfluous, serve mightily to enliven the Imagery, and gratify the Fancy. If it be not necessary, as in the *Iliad*, to inform us each time the Hero buckles his Shoes, and ties his Garters, 'twill be requisite, perhaps, to enter into a greater Detail than in the *Henriade*; where the Events are run over with such Rapidity, that we scarce have Leizure to become acquainted with the Scene or Action. Were a Poet, therefore, to comprehend in his Subject any great Compass of Time or Series of Events, and trace up the Death of *Hector* to its remote Causes, in the Rape of *Helen*, or the Judgment of *Paris*; he must draw out his Poem to an immeasurable Length, in order to fill this large Canvas with just Painting and Imagery. The Reader's Imagination, enflam'd with such a Series of poetical Descriptions, and his Passions, agitated by a continual Sympathy with the Actors, must flag long before the Period of the Narration, and must sink into Lassitude and Disgust, from the repeated Violence of the same Movements.

SECONDLY. That an Epic Poet must not trace the Causes to any great Distance, will farther appear, if we consider another Reason, which is drawn from a Property of the Passions still more remarkable and singular. 'Tis evident, that, in a just Composition, all the Affections, excited by the different Events, describ'd and represented, add mutual Force to each other; and that, while the Heroes are all engag'd in one common Scene, and each Action is strongly connected with the whole, the Concern is continually awake, and the Passions make an easy Transition from one

Object to another. The strong Connexion of the Events, as it facilitates the Passage of the Thought or Imagination from one to another, facilitates also the Transfusion of the Passions, and preserves the Affection still in the same Channel and Direction. Our Sympathy and Concern for *Eve* prepares the Way for a like Sympathy with *Adam*: The Affection is preserv'd almost entire in the Transition; and the Mind seizes immediately the new Object as strongly related to that which formerly engag'd its Attention. But were the Poet to make a total Digression from his Subject, and introduce a new Actor, no way connected with the Personages, the Imagination, feeling a Breach in the Transition, would enter coldly into the new Scene; would kindle by slow Degrees; and in returning to the main Subject of the Poem, would pass, as it were, upon foreign Ground, and have its Concern to excite anew, in order to take Party with the principal Actors. The same Inconvenience follows in a lesser Degree, where the Poet traces his Events to too great a Distance, and binds together Actions, which, tho' not altogether disjoin'd, have not so strong a Connexion as is requisite to forward the Transition of the Passions. Hence arises the Artifice of oblique Narration, employ'd in the *Odyssey* and *Aeneid*; where the Hero is introduc'd, at first, near the Period of his Designs, and afterwards shows us, as it were in Perspective, the more distant Events and Causes. By this means, the Reader's Curiosity is immediately excited: The Events follow with Rapidity, and in a very close Connexion: And the Concern is preserv'd alive, and continually encreases, by means of

the near Relation of the Objects, from the Beginning to the End of the Narration.

THE same Rule takes place in dramatic Poetry; nor is it ever permitted, in a regular Composition, to introduce an Actor, who has no Connexion, or but a small one, with the principal Personages of the Fable. The Spectator's Concern must not be diverted by any Scenes, disjoin'd and separate from the rest. This breaks the Course of the Passions, and prevents that Communication of the several Emotions, by which one Scene adds Force to another, and transfuses the Pity and Terror it excites upon each succeeding Scene, 'till the whole produces that Rapidity of Movement, which is peculiar to the Theatre. How must it extinguish this Warmth of Affection to be entertain'd, on a sudden, with a new Action and new Personages, no way related to the former; to find so sensible a Breach or Vacuity in the Course of the Passions, by means of this Breach in the Connexion of Ideas; and instead of carrying the Sympathy of one Scene into the following, to be oblig'd, every Moment, to excite a new Concern, and take Party in a new Scene of Action?

BUT tho' this Rule of Unity of Action be common to dramatic and epic Poetry; we may still observe a Difference betwixt them, which may, perhaps, deserve our Attention. In both these Species of Composition, tis requisite the Action be one and simple, in order to preserve the Concern or Sympathy entire and undiverted: But in epic or narrative Poetry, this Rule is also establish'd upon another

Foundation, viz. the Necessity, that is incumbent on every Writer, to form some Plan or Design, before he enter on any Discourse or Narration, and to comprehend his Subject in some general Aspect or united View, which may be the constant Object of his Attention. As the Author is entirely lost in dramatic Compositions, and the Spectator supposes himself to be really present at the Actions represented; this Reason has no Place with regard to the Stage; but any Dialogue or Conversation may be introduc'd, which, without Improbability, might have pass'd in that determinate Portion of Space, represented by the Theatre. Hence in all our *English* Comedies, even those of Congreve, the Unity of Action is never strictly observ'd; but the Poet thinks it sufficient, if his Personages be any way related to each other, by Blood, or by living in the same Family; and he afterwards introduces them in particular Scenes, where they display their Humours and Characters, without much forwarding the main Action. The double Plots of Terence are Licences of the same Kind; but in a lesser Degree. And tho' this Conduct be not perfectly regular, it is not wholly unsuitable to the Nature of Comedy, where the Movements and Passions are not rais'd to such a height as in Tragedy; at the same time, that the Fiction or Representation palliates, in some Degree, such Licences. In a narrative Poem, the first Proposition or Design confines the Author to one Subject; and any Digressions of this Nature would, at first View, be rejected, as absurd and monstrous. Neither Boccace, la Fontaine, nor any Author of that Kind, tho' Pleasantry be their chief Object, have ever indulg'd them.

To return to the Comparison of History and epic Poetry, we may conclude, from the foregoing Reasonings, that as a certain Unity is requisite in all Productions, it cannot be wanting to History more than to any other; that in History, the Connexion among the several Events, which unites them into one Body, is the Relation of Cause and Effect, the same which takes place in epic Poetry; and that in the latter Composition, this Connexion is only requir'd to be closer and more sensible, on account of the lively Imagination and strong Passions, which must be touch'd by the Poet in his Narration. The *Peloponnesian War* is a proper Subject for History, the Siege of *Athens* for an epic Poem, and the Death of *Alcibiades* for a Tragedy.

As the Difference, therefore, betwixt History and epic Poetry consists only in the Degrees of Connexion, which bind together those several Events, of which their Subject is compos'd, 'twill be difficult, if not impossible, by Words, to determine exactly the Bounds, which separate them from each other. That is a Matter of Taste more than of Reasoning; and perhaps, this Unity may often be discovered in a Subject, where, at first View, and from an abstract Consideration, we should least expect to find it.

'Tis evident, that Homer, in the Course of his Narration, exceeds the first Proposition of his Subject; and that the Anger of *Achilles*, which caus'd the Death of *Hector*, is not the same with that which produc'd so many Ills to the *Greeks*. But the strong Connexion betwixt these two

Movements, the quick Transition from one to the other, the Contraste^[5] betwixt the Effects of Concord and Discord amongst the Princes, and the natural Curiosity we have to see *Achilles* in Action, after so long Repose; all these Causes carry on the Reader, and produce a sufficient Unity in the Subject.

It may be objected to Milton, that he has trac'd up his Causes to too great a Distance, and that the Rebellion of the Angels produces the Fall of Man by a Train of Events, which is both very long and very casual. Not to mention that the Creation of the World, which he has related at Length, is no more the Cause of that Catastrophe, than of the Battle of *Pharsalia*, or any other Event, that has ever happen'd. But if we consider, on the other hand, that all these Events, the Rebellion of the Angels, the Creation of the World, and the Fall of Man, *resemble* each other, in being miraculous and out of the common Course of Nature; that they are suppos'd to be *contiguous* in Time; and that being detach'd from all other Events, and being the only original Facts, which Revelation discovers, they strike the Eye at once, and naturally recall each other to the Thought or Imagination: If we consider all these Circumstances, I say, we shall find, that these Parts of the Action have a sufficient Unity to make them be comprehended in one Fable or Narration. To which we may add, that the Rebellion of the Angels and the Fall of Man have a peculiar Resemblance as being Counterparts to each other, and

presenting to the Reader, the same Moral, of Obedience to our Creator.

THESE loose Hints I have thrown together, in order to excite the Curiosity of Philosophers, and beget a Suspicion at least, if not a full Persuasion, that this Subject is very copious, and that many Operations of the human Mind depend on the Connexion or Association of Ideas, which is here explain'd. Particularly, the Sympathy betwixt the Passions and Imagination will, perhaps, appear remarkable; while we observe that the Affections, excited by one Object, pass easily to another connected with it; but transfuse themselves with Difficulty, or not at all, along different Objects, which have no manner of Connexion together. By introducing, into any Composition, Personages and Actions, foreign to each other, an injudicious Author loses that Communication of Emotions, by which alone he can interest the Heart, and raise the Passions to their proper Height and Period. The full Explication of this Principle and all its Consequences would lead us into Reasonings too profound and too copious for these Essays. 'Tis sufficient for us, at present, to have establish'd this Conclusion, that the three connecting Principles of all Ideas are the Relations of *Resemblance*, *Contiguity*, and *Causation*.

1. ↑ Resemblance.
2. ↑ Contiguity.
3. ↑ Cause and Effect.

4. ↑ Contrary to Aristotle Μῆθος δέ ἐστιν εἰς, οὐχ, ὡσπερ τινὲς ὄιονται, ἐὰν περι, θέντος ἦ. Πολλὰ γαρ, καὶ απείρα τῷ γενεῖ συμβαίνει, εξ ᾧ ἐνίων οὐδέν ἐστιν ἔν. Ὅτω δὲ καὶ πραξεὶς ἐνός πολλαί ἐσιν, ἐξ ᾧ μία οὐδεμία γίνεται πρᾶξις, &c. Κέφ. η.
5. ↑ Contraste or Contrariety is a Species of Connexion among Ideas, which may, perhaps, be consider'd as a Species of Resemblance. Where two Objects are contrary, the one destroys the other, *i.e.* is the Cause of its Annihilation, and the Idea of the Annihilation of an Object implies the Idea of its former Existence.

ESSAY IV.

SCEPTICAL DOUBTS *concerning the OPERATIONS of the UNDERSTANDING.*

PART I.

ALL the Objects of human Reason or Enquiry may naturally be divided into two Kinds, *viz.* *Relations of Ideas* and *Matters of Fact*. Of the first Kind are the Propositions in Geometry, Algebra, and Arithmetic; and in short, every Proposition, that is either intuitively or demonstratively certain. *That the Square of the Hypotenuse is equal to the Squares of the two Sides*, is a Proposition, that expresses a Relation betwixt these Figures. *That three times five is equal to the half of thirty*, expresses a Relation betwixt these Numbers. Propositions of this Kind are discoverable by the mere Operation of Thought, without Dependance on what is any where existent in the Universe. Tho' there never were a true Circle or Triangle in Nature, the Propositions, demonstrated by Euclid, would for ever retain all their Truth and Evidence.

MATTERS of Fact, which are the second Objects of human Reason, are not ascertain'd to us in the same Manner; nor is our Evidence of their Truth, however great, of a like Nature with the foregoing. The contrary of every Matter of Fact is still possible; because it can never imply a Contradiction, and is conceiv'd by the Mind with equal Distinctness and Facility, as if ever so conformable to Truth and Reality. *That the Sun will not rise To-morrow* is no less intelligible a Proposition, and implies no more Contradiction, than the Affirmation, *that it will rise*. We should in vain, therefore, attempt to demonstrate its Falshood. Were it demonstratively false, it would imply a Contradiction, and could never be distinctly conceiv'd by the Mind.

IT may, therefore, be a Subject, worthy Curiosity, to enquire what is the Nature of that Evidence, which assures us of any real Existence and Matter of Fact, beyond the present Testimony of our Senses, or the Records of our Memory. This Part of Philosophy, 'tis observable, has been little cultivated, either by the Antients or Moderns; and therefore our Doubts and Errors, in the Prosecution of so important an Enquiry, may be the more excusable, while we march thro' such difficult Paths, without any Guide or Direction. They may even prove useful, by exciting Curiosity, and destroying that implicite Faith and Security, which is the Bane of all Reasoning and free Enquiry. The Discovery of Defects in the common Philosophy, if any such there be, will not, I presume, be a Discouragement, but rather an

Incitement, as is usual, to attempt something more full and satisfactory, than has yet been propos'd to the Public.

ALL Reasonings concerning Matter of Fact seem to be founded on the Relation of *Cause* and *Effect*. By Means of that Relation alone can we go beyond the Evidence of our Memory and Senses. If you were to ask a Man, why he believes any Matter of Fact, which is absent; for Instance, that his Friend is in the Country, or in *France*; he would give you a Reason; and this Reason would be some other Fact; as a Letter receiv'd from him, or the Knowledge of his former Resolutions and Promises. A Man, finding a Watch or any other Machine in a desert Island, would conclude, that there had once been Men in that Island. All our Reasonings concerning Fact are of the same Nature. And here 'tis constantly suppos'd, that there is a Connexion betwixt the present Fact and that infer'd from it. Were there nothing to bind them together, the Inference would be altogether precarious. The hearing of an articulate Voice and rational Discourse in the Dark assures us of the Presence of some Person: Why? Because these are the Effects of the human Make and Fabric, and closely connected with it. If we anatomize all the other Reasonings of this Nature, we shall find, that they are founded on the Relation of Cause and Effect, and that this Relation is either near or remote, direct or collateral. Heat and Light are collateral Effects of Fire, and the one Effect may justly be infer'd from the other.

IF we would satisfy ourselves, therefore, concerning the Nature of that Evidence, which assures us of all Matters of Fact, we must enquire how we arrive at the Knowledge of Causes and Effects.

I SHALL venture to affirm, as a general Proposition, which admits of no Exception, that the Knowledge of this Relation of Cause and Effect is not, in any Instance, attain'd by Reasonings *a priori*; but arises entirely from Experience, when we find, that particular Objects are constantly conjoin'd with each other. Let any Object be presented to a Man of ever so strong natural Reason and Abilities; if that Object be entirely new to him, he will never be able, by the most accurate Examination of its sensible Qualities, to discover any of its Causes or Effects. *Adam*, tho' his rational Faculties be suppos'd, at the very first, ever so perfect, could not have infer'd from the Fluidity and Transparency of Water, that it would suffocate him, or from the Light and Warmth of Fire, that it would consume him. No Object ever discovers, by the Qualities, which appear to the Senses, either the Causes, which produc'd it, or the Effects, which will arise from it; nor can our Reason, unassisted by Experience, ever draw any Inferences concerning real Existence and Matter of Fact.

THIS Proposition, that *Causes and Effects are discoverable, not by Reason, but by Experience*, will readily be admitted with regard to such Objects, as we remember, to have been once altogether unknown to us; since we must be conscious

of the utter Inability we then lay under of foretelling what would arise from them. Present two smooth Pieces of Marble to a Man, who has no Tincture of natural Philosophy; and whatever Degree of Sense or Reason he may be endow'd with, he will never discover, that they will adhere together in such a Manner as to require great Force to separate them in a direct Line, while they make so small Resistance to a lateral Pressure. Such Events, as bear little Analogy to the common Course of Nature, are also readily acknowledged to be known only by Experience; nor does any Man imagine that the Explosion of Gunpowder, or the Attraction of a Loadstone could ever be discover'd by Arguments *a priori*. In like manner, when an Effect is suppos'd to depend upon an intricate Machinery or secret Structure, of Parts, we make no Difficulty to attribute all our Knowledge of it to Experience. Who will assert, that he can give the ultimate Reason, why Milk or Bread is proper Nourishment for a Man, not for a Lyon or a Tyger?

BUT the same Truth may not appear, at first View, to have the same Evidence with regard to Events, which have become familiar to us from our first Appearance in the World, which bear a close Analogy to the whole Course of Nature, and which are suppos'd to depend on the simple Qualities of Objects, without any secret Structure of Parts. We are apt to imagine, that we could discover these Effects, by the mere Operations of our Reason, without Experience. We fancy, that, were we brought, of a sudden, into this World, we could at first have infer'd, that one Billiard-ball

would communicate Motion to another upon Impulse; and that we needed not to have waited for the Event, in order to pronounce with Certainty concerning it. Such is the Influence of Custom, that, where it is strongest, it not only covers our natural Ignorance, but even conceals itself, and seems not to take place, merely because it is found in the highest Degree.

BUT to convince us, that all the Laws of Nature and all the Operations of Bodies, without Exception, are known only by Experience, the following Reflections may, perhaps, suffice. Were any Object presented to us, and were we requir'd to pronounce concerning the Effect, that will result from it, without consulting past Observation; after what Manner, I beseech you, must the Mind proceed in this Operation? It must invent or imagine some Event, which it ascribes to the Object as its Effect; and 'tis plain this Invention must be entirely arbitrary. It can never possibly find the Effect in the suppos'd Cause, by the most accurate Scrutiny and Examination. For the Effect is totally different from the Cause, and consequently can never be discover'd in it. Motion in the second Billiard-ball is a quite distinct Event from Motion in the first; nor is there any thing in the one to suggest the smallest Hint of the other. A Stone or Piece of Metal rais'd into the Air, and left without any Support, immediately falls: But to consider the Matter *a priori*; is there any thing we discover in this Situation, which can beget the Idea of a downward, rather than an upward, or any other Motion, in the Stone or Metal?

AND as the first Imagination or Invention of a particular Effect, in all natural Operations, is arbitrary, where we consult not Experience; so must we also esteem the suppos'd Tye or Connexion betwixt the Cause and Effect, which binds them together, and renders it impossible, that any other Effect could result from the Operation of that Cause. When I see, for Instance, a Billiard-ball moving in a strait Line towards another; even suppose Motion in the second Ball should by Accident be suggested to me, as the Result of their Contact or Impulse; might I not conceive, that a hundred other different Events might as well follow from that Cause? May not both these Balls remain at absolute Rest? May not the first Ball return in a strait Line, or leap off from the second in any Line or Direction? All these Suppositions are consistent and conceivable. Why then should we give the Preference to one, which is no more consistent nor conceivable than the rest? All our Reasonings *a priori* will never be able to shew us any Foundation for this Preference.

In a word, then, every Effect is a distinct Event from its Cause. It could not, therefore, be discover'd in the Cause, and the first Invention or Conception of it, *a priori*, must be entirely arbitrary. And even after it is suggested, the Conjunction of it with the Cause must appear equally arbitrary; since there are always many other Effects, which, to Reason, must seem fully as consistent and natural. 'Twould, therefore, be in vain for us to pretend to determine

any single Event, or infer any Cause or Effect, without the Assistance of Observation and Experience.

HENCE we may discover the Reason, why no Philosopher, that has been rational and modest, has ever pretended to assign the ultimate Causes of any of the Operations of Nature, or to show distinctly the Actions of that Power, which produces any single Effect in the Universe. 'Tis confess'd, that the utmost Effort of human Reason is, to reduce the Principles, productive of natural Phænomena, to a greater Simplicity, and to resolve the many particular Effects into a few general Causes, by Means of Reasonings from Analogy, Experience, and Observation. But as to the Causes of these general Causes, we should in vain attempt their Discovery; nor shall we ever be able to satisfy ourselves, by any particular Explication of them. These ultimate Springs and Principles are totally shut up from human Curiosity and Enquiry. Elasticity, Gravity, Cohesion of Parts, Communication of Motion by Impulse; these are probably the ultimate Causes and Principles we shall ever discover in Nature; and we may esteem ourselves sufficiently happy, if, by accurate Enquiry and Reasoning, we can trace up the particular Phænomena to, or near to, these general Principles. The most perfect Philosophy of the natural Kind does only stave off our Ignorance a little longer: As perhaps the most perfect Philosophy of the moral or metaphysical Kind serves only to discover larger Portions of our Ignorance. Thus the Observation of human Ignorance and Weakness is the Result of all our Philosophy,

and meets us, at every Turn, in spite of our Endeavours to conquer, or avoid it.

NOR is Geometry, when taken into the Assistance of natural Philosophy, ever able to remedy this Defect, or lead us into the Knowledge of ultimate Causes, by all that Accuracy of Reasoning, for which it is so justly celebrated. Every Part of mix'd Mathematics still upon the Supposition, that certain Laws are establish'd by Nature in her Operations; and abstract Reasonings are employ'd, either to assist Experience in the Discovery of these Laws, or to determine their Influence in particular Instances, where it depends upon any precise Degrees of Distance and Quantity. Thus 'tis a Law of Motion, discover'd by Experience, that the Moment or Force of any Body in Motion is in the compound Ratio or Proportion of its solid Contents and its Velocity; and consequently, that a small Force may remove the greatest Obstacle or raise the greatest Weight, if by any Contrivance or Machinery we can encrease the Velocity of that Force, so as to make it an Overmatch for its Antagonist. Geometry assists us in the Application of this Law, by giving us the just Dimensions of all the Parts and Figures, which can enter into any Species of Machine; but still the Discovery of the Law itself is owing merely to Experience, and all the abstract Reasonings in the World could never lead us one Step towards the Knowledge of it. When we reason *a priori*, and consider merely any Object or Cause, as it appears to the Mind, independent of all Observation, it never could suggest to us the Notion of any distinct Object,

such as its Effect; much less, show us the inseparable and inviolable Connexion betwixt them. A Man must be very sagacious, who could discover by Reasoning, that Crystal is the Effect of Heat and Ice of Cold, without being previously acquainted with the Operations of these Qualities.

PART II.

BUT we have not, as yet, attain'd any tolerable Satisfaction with regard to the Question first propos'd. Each Solution still gives rise to a new Question as difficult as the foregoing, and leads us on to farther Enquiries. When it is ask'd, *What is the Nature of all our Reasonings concerning Matter of Fact?* the proper Answer seems to be, that they are founded on the Relation of Cause and Effect. When again it is ask'd, *What is the Foundation of all our Reasonings and Conclusions concerning that Relation?* it may be reply'd in one Word, EXPERIENCE. But if we still carry on our sifting and examining Humour, and ask, *What is the Foundation of all our Conclusions from Experience?* this produces a new Question, which may be of more difficult Solution and Explication. Philosophers, that give themselves Airs of superior Wisdom and Sufficiency, have a hard Task, when they encounter Persons of inquisitive Dispositions, who push them from every Corner, to which they retreat, and who are sure at last to bring them to some dangerous Dilemma. The best Expedient to prevent this

Confusion is to be modest in our Pretensions; and even to discover the Difficulty ourselves before it is objected to us. By this Means, we may make a kind of Merit of our very Ignorance.

I SHALL content myself, in this Essay, with an easy Task, and shall pretend only to give a negative Answer to the Question here propos'd. I say then, that even after we have Experience of the Operations of Cause and Effect, our Conclusions from that Experience are not founded on Reasoning or any Process of the Understanding. This Answer we must endeavour, both to explain, and to defend.

IT must certainly be allow'd, that Nature has kept us at a great Distance from all her Secrets, and has afforded us only the Knowledge of a few superficial Qualities of Objects, while she conceals from us those Powers and Principles, on which the Influence of these Objects entirely depends. Our Senses inform us of the Colour, Weight, and Consistence of Bread; but neither Senses nor Reason ever can inform us of those Qualities, which fit it for the Nourishment and Support of a human Body. Sight or Feeling convey an Idea of the actual Motion of Bodies; but as to that wonderful Force or Power, which would carry on a moving Body for ever in a continu'd Change of Place, and which Bodies never lose but by communicating it to others; of this we cannot from the most distant Conception. But notwithstanding this Ignorance of natural Powers and Principles, we always presume, where we see like sensible

Qualities, that they have like secret Powers, and lay our Account, that Effects, similar to those, which we have experienc'd, will follow from them. If a Body of like Colour and Consistence with that Bread, which we have formerly eat, be presented to us, we make no Scruple of repeating the Experiment, and expect, with Certainty, like Nourishment and Support. Now this is a Process of the Mind or Thought, of which I would willingly know the Foundation. 'Tis allow'd on all hands, that there is no known Connexion betwixt the sensible Qualities and the secret Powers; and consequently, that the Mind is not led to form such a Conclusion concerning their constant and regular Conjunction, by any thing it knows of their Nature. As to past *Experience*, it can be allow'd to give *direct* and *certain* Information only of those precise Objects, and that precise Period of Time, which fell under its Cognizance: But why this Experience should be extended to future Times, and to other Objects, which, for aught we know, may be only in Appearance similar; this is the main Question I would insist on. The Bread I formerly eat nourish'd me; that is, a Body, of such sensible Qualities, was, at that Time, endow'd with such secret Powers: But does it follow, that other Bread must also nourish me at another Time, and that like sensible Qualities must always be attended with like secret Powers? The Consequence seems no way necessary. At least, it must be acknowleg'd, that there is here a Consequence drawn by the Mind; that there is a certain Step taken; a Process of Thought, and an Inference, which wants to be explain'd. These two Propositions are far from being the same, *I have*

found that such an Object has always been attended with such an Effect, and I foresee, that other Objects, which are, to Appearance, similar, will be attended with similar Effects. I shall allow, if you please, that the one Proposition may justly be infer'd from the other: I know in fact, that it always is infer'd. But if you insist, that the Inference is made by a Chain of Reasoning, I desire you may produce that Reasoning. The Connexion betwixt these Propositions is not intuitive. There is requir'd a Medium, which may enable the Mind to draw such an Inference if indeed it be drawn by Reasoning and Argument. What that Medium is, I must confess, passes my Comprehension; and 'tis incumbent on those to produce it, who assert, that it really exists, and is the Origin of all our Conclusions concerning Matter of Fact.

THIS negative Argument must certainly, in Process of Time, become altogether convincing, if many penetrating and able Philosophers shall turn their Enquiries this Way; and no one be ever able to discover any connecting Proposition or intermediate Step, which supports the Understanding in this Conclusion. But as the Question is yet new, every Reader may not trust so far to his own Penetration, as to conclude, because an Argument escapes his Research and Enquiry, that therefore it does not really exist. For this Reason it may be requisite to venture upon a more difficult Task; and enumerating all the Branches of human Knowledge, endeavour to show, that none of them can afford such an Argument.

ALL Reasonings may be divided into two Kinds, viz. demonstrative Reasonings, or those concerning Relations of Ideas, and moral or probable Reasonings, or those concerning Matter of Fact and Existence. That there are no demonstrative Arguments in the Case, seems evident; since it implies no Contradiction, that the Course of Nature may change, and that Objects seemingly like those we have experienc'd may be attended with different or contrary Effects. May I not clearly and distinctly conceive, that a Body falling from the Clouds, and which, in all other respects, resembles Snow, has yet the Taste of Salt or Feeling of Fire? Is there any more intelligible Proposition than to affirm, that all the Trees flourish in *December* and *January*, and decay in *May* and *June*? Now whatever is intelligible, and can be distinctly conceiv'd, implies no Contradiction, and can never be prov'd false by any demonstrative Arguments or abstract Reasonings *a priori*.

IF we be, therefore, engag'd by Arguments to put trust in past Experience, and make it the Standard of our future Judgment, these Arguments must be probable only, or such as regard Matter of Fact and real Existence, according to the Division above mention'd. But that there are no Arguments of this Kind, must appear, if our Explication of that Species of Reasoning be admitted as solid and satisfactory. We have said, that all Arguments concerning Existence are founded on the Relation of Cause and Effect; that our Knowledge of that Relation is deriv'd entirely from Experience; and that all our experimental Conclusions proceed upon the

Supposition, that the future will be conformable to the past. To endeavour, therefore, the Proof of this last Supposition by probable Arguments, or Arguments regarding Existence, must be evidently going in a Circle, and taking that for granted, which is the very Point in Question.

IN Reality, all Arguments from Experience are founded on the Similarity, which we discover among natural Objects, and by which we are induc'd to expect Effects similar to those, which we have found to follow from such Objects. And tho' none but a Fool or Madman will ever pretend to dispute the Authority of Experience, or to reject that great Guide of human Life; it may surely be allow'd a Philosopher to have so much Curiosity, at least, as to examine the Principle of human Nature, which gives this mighty Authority to Experience, and makes us draw Advantage from that Similarity, which Nature has plac'd among different Objects. From Causes, which *appear* similar, we expect similar Effects. This is the Sum of all our experimental Conclusions. Now it seems evident, that if this Conclusion were form'd by Reason, it would be as perfect at first, and upon one Instance, as after ever so long a Course of Experience. But the Case is far otherwise. Nothing so like as Eggs; yet no one, on account of this apparent Similarity, expects the same Taste and Relish in all of them. 'Tis only after a long Course of uniform Experiments in any Kind, that we attain a firm Reliance and Security with regard to a particular Event. Now where is that Process of Reasoning, which from one Instance draws a

Conclusion, so different from that which it infers from a hundred Instances, that are no way different from that single Instance? This Question I propose as much for the Sake of Information, as with an Intention of raising Difficulties. I cannot find, I cannot imagine any such Reasoning. But I keep my Mind still open to Instruction, if any one will vouchsafe to bestow it on me.

SHOULD it be said, that from a Number of uniform Experiments, we *infer* a Connexion betwixt the sensible Qualities and the secret Powers; this, I must confess, seems the same Difficulty, couch'd in different Terms. The Question still recurs, On what Process of Argument this *Inference* is founded? Where is the Medium, the interposing Ideas, which join Propositions so very wide of each other? 'Tis confess'd, that the Colour, Consistence, and other sensible Qualities of Bread appear not, of themselves, to have any Connexion with the secret Powers of Nourishment and Support. For otherwise we could infer these secret Powers from the first Appearance of these sensible Qualities, without the Aid of Experience, contrary to the Sentiment of all Philosophers; and contrary to plain Matter of Fact. Here then is our natural State of Ignorance with regard to the Powers and Influence of all Objects. How is this remedy'd by Experience? It only shews us a Number of uniform Effects, resulting from certain Objects, and teaches us, that those particular Objects, at that particular Time, were endow'd with such Powers and Forces. When a new Object of similar sensible Qualities is produc'd, we expect

similar Powers and Forces, and lay our Account with a like Effect. From a Body of a like Colour and Consistence with Bread, we look for like Nourishment and Support. But this surely is a Step or Progress of the Mind, which wants to be explain'd. When a Man says, *I have found, in all past Instances, such sensible Qualities, conjoin'd with such secret Powers:* And when he says, similar sensible Qualities will always be conjoin'd with similar secret Powers; he is not guilty of a Tautology, nor are these Propositions in any respect the same. You say the one Proposition is an Inference from the other. But you must confess, that the Inference is not intuitive; neither is it demonstrative: Of what Nature is it then? To say it is experimental is begging the Question. For all Inferences from Experience suppose, as their Foundation, that the future will resemble the past, and that similar Powers will be conjoin'd with similar sensible Qualities. If there be any Suspicion, that the Course of Nature may change, and that the past may be no Rule for the future, all Experience becomes useless, and can give rise to no Inferences or Conclusions. 'Tis impossible, therefore, that any Arguments from Experience can prove this Resemblance of the past to the future; since all these Arguments are founded on the Supposition of that Resemblance. Let the Course of Things be allow'd hitherto never so regular; that alone, without some new Argument or Inference, proves not, that, for the future, it will continue so. In vain do you pretend to have learnt the Nature of Bodies from your past Experience. Their secret Nature, and consequently, all their Effects and Influence may change,

without any Change in their sensible Qualities. This happens sometimes, and with regard to some Objects: Why may it not happen always, and with regard to all Objects? What Logic, what Process of Argument secures you against this Supposition? My Practice, you say, refutes my Doubts. But you mistake the Purport of my Question. As an Agent, I am quite satisfy'd in the Point: But as a Philosopher, who has some Share of Curiosity, I will not say Scepticism, I want to learn the Foundation of this Inference. No Reading, no Enquiry has yet been able to remove my Difficulty, or give me Satisfaction in a Matter of such vast Importance. Can I do better than propose the Difficulty to the Public, even tho', perhaps, I have small Hopes of obtaining a Solution? We shall at least, by this Means, be sensible of our Ignorance, if we do not augment our Knowledge.

I MUST confess, that a Man is guilty of unpardonable Arrogance, who concludes, because an Argument has escap'd his own Investigation and Enquiry, that therefore it does not really exist. I must also confess, that tho' all the Learned, for several Ages, should have employ'd their Time in fruitless Search upon any Subject, it may still perhaps, be rash to conclude positively, that the Subject must, therefore, pass all human Comprehension. Even tho' we examine all the Sources of our Knowledge, and conclude them unfit for such a Subject, there may still remain a Suspicion, that the Enumeration is not compleat, or the Examination not accurate. But with regard to the present Subject, there are

some Considerations, which seem to remove all this Accusation of Arrogance or Suspicion of Mistake.

'Tis certain, that the most ignorant and stupid Peasants, nay Infants, nay even brute Beasts improve by Experience, and learn the Qualities of natural Objects, by observing the Effects, which result from them. When a Child has felt the Sensation of Pain from touching the Flame of a Candle, he will be careful not to put his Hand near any Candle; but will expect a similar Effect from a Cause, which is similar to its sensible Qualities and Appearance. If you assert, therefore, that the Understanding of the Child is led into this Conclusion by any Process of Argument or Ratiocination, I may justly require you to produce that Argument; nor have you any Pretext to refuse so equitable a Demand. You cannot say, that the Argument is abstruse, and may possibly escape your Search and Enquiry; since you confess, that it is obvious to the Capacity of a mere Infant. If you hesitate, therefore, a Moment, or if, after Reflection, you produce any intricate and profound Argument, you, in a Manner, give up the Question, and confess, that it is not Reasoning, which engages us to suppose the past resembling the future, and to expect similar Effects from Causes, which are, to Appearance, similar. This is the Proposition, which I intended to enforce by the present Essay. If I be right, I pretend to have made no mighty Discovery. And if I be wrong, I must acknowledge myself to be indeed a very backward Scholar; since I cannot now discover an

Argument, which, it seems, was perfectly familiar to me, long before I was out of my Cradle.

ESSAY V.

SCEPTICAL SOLUTION *of these* DOUBTS.

PART I.

THE Passion for Philosophy, like that for Religion, seems liable to this Inconvenience, that, tho' it aims at the Correction of our Manners and Extirpation of our Vices, it may only serve, by imprudent Management, to foster a predominant Inclination, and push the Mind, with more determin'd Resolution, towards that Side, which already draws too much, by the Byass and Propensity of the natural Temper. 'Tis certain, that, while we aspire to the magnanimous Firmness of the philosophic Sage, and endeavour to confine our Pleasures altogether within our own Minds, we may, at last, render our Philosophy, like that of Epictetus and other Stoics, only a more refin'd System of Selfishness, and reason ourselves out of all Virtue, as well as social Enjoyment. While we study with Attention the Vanity of human Life, and turn all our Thoughts on the empty and transitory Nature of Riches and Honours, we are, perhaps, all the while flattering our natural Indolence, which, hating the Bustle of the World and Drudgery of

Business, seeks a Pretext of Reason, to give itself a full and uncontrol'd Indulgence. There is, however, one Species of Philosophy, which seems little liable to this Inconvenience, and that because it strikes in with no disorderly Passion of the human Mind, nor can mingle itself with any natural Affection or Propensity; and that is the ACADEMIC or SCEPTICAL Philosophy. The Academics talk always of Doubts and Suspense of Judgment, of Danger in hasty Determinations, of confining to very narrow Bounds the Enquiries of the Understanding, and of renouncing all Speculations that lie not within the Limits of common Life and Practice. Nothing, therefore, can be more contrary than such a Philosophy to the supine Indolence of the Mind, its rash Arrogance, its lofty Pretensions, and its superstitious Credulity. Every Passion is mortify'd by it, except the Love of Truth; and that Passion never is, nor can be carry'd to too high a Degree. 'Tis surprising, therefore, that this Philosophy, which, in almost every Instance, must be harmless and innocent, should be the Subject of so much groundless Reproach and Obloquy. But, perhaps, the very Circumstance, which renders it so innocent, is what chiefly exposes it to the public Hatred and Resentment. By flattering no irregular Passion, it gains few Partizans: By opposing so many Vices and Follies, it raises to itself abundance of Enemies, who stigmatize it as libertine, prophane, and irreligious.

NOR need we fear, that this Philosophy, while it endeavours to limit our Enquiries to common Life, should ever

undermine the Reasonings of common Life, and carry its Doubts so far as to destroy all Action, as well as Speculation. Nature will always maintain her Rights, and prevail in the End over any abstract Reasoning whatsoever. Tho' we should conclude, for Instance, as in the foregoing Essay, that, in all Reasonings from Experience, there is a Step taken by the Mind, which is not supported by any Argument or Process of the Understanding; there is no Danger, that these Reasonings, on which almost all Knowledge depends, will ever be affected by such a Discovery. If the Mind be not engag'd by Argument to make this Step, it must be induc'd by some other Principle of equal Weight and Authority; and that Principle will preserve its Influence as long as human Nature remains the same. What that Principle is, may well be worth the Pains of Enquiry.

SUPPOSE a Person, tho' endow'd with the strongest Faculties of Reason and Reflection, to be brought of a sudden into this World; he would, indeed, immediately observe a continual Succession of Objects, and one Event following another; but he would not be able to discover any thing farther. He would not, at first, by any Reasoning, be able to reach the Idea of Cause and Effect; since the particular Powers, by which all natural Operations are perform'd, never appear to the Senses; nor is it reasonable to conclude, merely because one Event, in one Instance, precedes another, that therefore the one is the Cause, and the other the Effect. Their Conjunction may be arbitrary and casual.

There may be no Reason to infer the Existence of the one from the Appearance of the other. And in a word, such a Person, without more Experience, could never employ his Conjecture or Reasoning concerning any Matter of Fact, or be assur'd of any thing beyond what was immediately present to his Memory and Senses.

SUPPOSE again, that he has acquir'd more Experience, and has liv'd so long in the World as to have observ'd similar Objects or Events to be constantly conjoin'd together; What is the Consequence of this Experience? He immediately infers the Existence or the one Object from the Appearance of the other. Yet he has not, by all his Experience, acquir'd any Idea or Knowledge of the secret Power, by which the one Object produces the other; nor is it, by any Process of Reasoning, he is engag'd to draw this Inference. But still he finds himself determin'd to draw it: And tho' he should be convinc'd, that his Understanding has no Part in the Operation, he would nevertheless continue in the same Course of Thinking. There is some other Principle, which determines him to form such a Conclusion.

THIS Principle is CUSTOM or HABIT. For where-ever the Repetition of any particular Act or Operation produces a Propensity to renew the same Act or Operation, without being impell'd by any Reasoning or Process of the Understanding; we always say, that this Propensity is the Effect of *Custom*. By employing that Word, we pretend not to have given the ultimate Reason of such a Propensity. We

only point out a Principle of human Nature, which is universally acknowledg'd, and which is well known by its Effects. Perhaps, we can push our Enquiries no farther, or pretend to give the Cause of this Cause; but must rest contented with it as the ultimate Principle, which we can assign, of all our Conclusions from Experience. 'Tis sufficient Satisfaction, that we can go so far; without repining at the Narrowness of our Faculties, because they will carry us no farther. And 'tis certain we here advance a very intelligible Proposition, at least, if not a true one, when we assert, that, after the constant Conjunction of two Objects, Heat and Flame, for Instance, Weight and Solidity, we are determin'd by Custom alone to expect the one from the Appearance of the other. This Hypothesis seems even the only one, which explains the Difficulty, why we draw an Inference from a thousand Instances, which we are not able to draw from one Instance, that is, in no respect, different from them. Reason is incapable of any such Variation. The Conclusions it draws from considering one Circle are the same, which it would form upon surveying all the Circles in the Universe. But no Man, having seen only one Body move after being impell'd by another, could infer, that every other Body will move after a like Impulse. All Inferences from Experience, therefore, are Effects of Custom, not of Reasoning^[1].

CUSTOM, then, is the great Guide of human Life. 'Tis that Principle alone, which renders our Experience useful to us, and makes us expect for the future a similar Train of Events

with those which have appear'd in the past. Without the Influence of Custom, we should be entirely ignorant of every Matter of Fact, beyond what is immediately present to the Memory and Senses. We should never know how to adjust Means to Ends, or to employ our natural Powers in the Production of any Effect. There would be an End at once of all Action, as well as of the chief Part of Speculation.

BUT here it may be proper to remark, that tho' our Conclusions from Experience carry us beyond our Memory and Senses, and assure us of Matters of Fact, which happen'd in the most distant Places and most remote Ages; yet some Fact must always be present to the Senses or Memory, from which we may first proceed in drawing these Conclusions. A Man, who should find in a desert Country the Remains of pompous Buildings, would conclude, that the Country had, in antient Times, been cultivated by civiliz'd Inhabitants; but did nothing of this Nature occur to him, he could never be able to form such an Inference. We learn the Events of former Ages from History; but then we must peruse the Volumes, in which this Instruction is contain'd, and thence carry up our Inferences from one Testimony to another, till we arrive at the Eye-witnesses and Spectators of these distant Events. In a word, if we proceed not upon some Fact, present to our Memory or Senses, our Reasonings would be merely hypothetical; and however the particular Links might be connected with each other, the whole Chain of Inferences would have nothing to

support it, nor could we ever, by its Means, arrive at the Knowledge of any real Existence. If I ask, why you believe any particular Matter of Fact, which you relate, you must tell me some Reason; and this Reason will be some other Fact, connected with it: But as you cannot proceed after this Manner, *in infinitum*, you must at last terminate in some Fact, which is present to your Memory or Senses; or must allow, that your Belief is entirely without Foundation.

WHAT then is the Conclusion of the whole Matter? A simple one; tho' it must be confess'd, pretty remote from the common Theories of Philosophy. All Belief of Matter of Fact or real Existence is deriv'd merely from some Object, present to the Memory or Senses, and a customary Conjunction betwixt that and any other Object. Or in other Words; having found, in many Instances, that any two Kinds of Objects, Flame and Heat, Snow and Cold, have always been conjoin'd together; if Flame or Snow be presented anew to our Senses; the Mind is carry'd by Custom to expect Heat or Cold, and to *believe*, that such a Quality does exist, and will discover itself upon a nearer Approach. This Belief is the necessary Result of placing the Mind in such Circumstances. 'Tis an Operation of the Soul, when we are so situated, as unavoidable as to feel the Passion of Love, when we receive Benefits, or Hatred, when we meet with Injuries. All these Operations are a Species of natural Instincts, which no Reason or Process of the Thought and Understanding is able, either to produce, or to prevent.

At this Point, 'twould be very allowable for us to stop our philosophical Researches. In most Questions, we can never make a single Step farther; and in all Questions, we must terminate here at last, after our most restless and curious Enquiries. But still our Curiosity will be pardonable, perhaps commendable, if it carry us on to still farther Researches, and make us examine more accurately the Nature of this *Belief*, and of the *customary Conjunction*, whence it is deriv'd. By this Means, we may meet with some Explications and Analogies, that will give Satisfaction; at least to such as love the abstract Sciences, and can be entertain'd with Speculations, which, however accurate, may still retain a Degree of Doubt and Uncertainty. As to Readers of a different Taste; the remaining Part of this Essay is not calculated for them, and the following Essays may well be understood, tho' it be neglected.

PART II.

THERE is nothing more free than the Imagination of Man; and tho' it cannot exceed that original Stock of Ideas, which is furnish'd by our internal and external Senses, it has unlimited Power of mixing, compounding, separating and dividing these Ideas, to all the Varieties of Fiction and Vision. It can feign a Train of Events, with all the Appearance of Reality, ascribe to them a particular Time and Place, conceive them as existent, and paint them out to itself with every Circumstance, that belongs to any

historical Fact, which it believes with the greatest Certainty. Wherein, therefore, consists the Difference betwixt such a Fiction and Belief? It lies not merely in any peculiar Idea, which is annex'd to a Conception, that commands our assent, and which is wanting to every known Fiction. For as the Mind has Authority over all its Ideas, it could voluntarily annex this particular Idea to any Fiction, and consequently be able to believe whatever it pleases; contrary to what we find by daily Experience. We can, in our Conception, join the Head of a Man to the Body of a Horse; but it is not in our Power to believe, that such an Animal has ever really existed.

It follows, therefore, that the Difference betwixt *Fiction* and *Belief* lies in some Sentiment or Feeling, which is annex'd to the latter, not to the former, and which depends not on the Will, nor can be commanded at Pleasure. It must be excited by Nature, like all other Sentiments; and must arise from the particular Situation, in which the Mind is plac'd at any particular Juncture. Whenever any Object is presented to the Memory or Senses, it immediately, by the Force of Custom, carries the Imagination to conceive that Object, which is usually conjoin'd to it; and this Conception is attended with a Feeling or Sentiment, different from the loose Reveries of the Fancy. Herein consists the whole Nature of Belief. For as there is no Matter of Fact we believe so firmly, that we cannot conceive the contrary, there would be no Difference betwixt the Conception assented to, and that which is rejected, were it not for some

Sentiment, that distinguishes the one from the other. If I see a Billiard-Ball moving towards another, on a smooth Table, I can easily conceive it to stop upon Contact. This Conception implies no Contradiction; but still it feels very differently from that Conception, by which I represent to myself the Impulse, and the Communication of Motion from one Ball to another.

WERE we to attempt a Definition or Description of this Sentiment, we should, perhaps, find it a very difficult, if not impossible Task; in the same Manner as if we should endeavour to define the Feeling of Cold or Passion of Anger, to such as never had an Experience of these Sentiments. BELIEF is the true and proper Name of this Feeling; and no one is ever at a loss to know the Meaning of that Term; because every Man is every Moment conscious of the Sentiment, represented by it. It may not, however, be improper to attempt a *Description* of this Sentiment; in hopes we may, by that means, arrive at some Analogies, that may afford a more perfect Explication of it. I say then, that Belief is nothing but a more vivid, lively, forcible, firm, steady Conception of an Object, than what the Imagination alone is ever able to attain. This Variety of Terms, which may seem so unphilosophical, is intended only to express that Act of the Mind, which renders Realities, or what is taken for such, more present to us than Fictions, causes them to weigh more in the Thought, and gives them a superior Influence on the Passions and Imagination. Provided we agree about the Thing, 'tis needless to dispute

about the Terms. The Imagination has the Command over all its Ideas, and can join and mix and vary them, in all the Ways possible. It may conceive fictitious Objects with all the Circumstances of Place and Time. It may set them, in a Manner, before our Eyes, in their true Colours, just as they might have existed. But as it is impossible, that that Faculty of Imagination can ever, of itself, reach Belief; 'tis evident, that Belief consists not in the peculiar Nature or Order of Ideas, but in the *Manner* of their Conception, and in their Feeling to the Mind. I confess, that 'tis impossible perfectly to explain this Feeling or Manner of Conception. We may make use of Words, that express something near it. But its true and proper Name, as we observ'd before, is *Belief*; which is a Term, that every one sufficiently understands in common Life. And in Philosophy, we can go no farther than assert, that *Belief* is something felt by the Mind, which distinguishes the Ideas of the Judgment from the Fictions of the Imagination. It gives them more Force and Influence; makes them appear of greater Importance; inforces them in the Mind, and renders them the governing Principle of all our Actions. I hear at present, for Instance, a Person's Voice, whom I am acquainted with; and this Sound comes as from the next Room. This Impression of my Senses immediately conveys my Thoughts to the Person, along with all the surrounding Objects. I paint them out to myself as existing at present, with the same Qualities and Relations, that I formerly knew them possest of. These Ideas take faster hold of my Mind, than Ideas of an enchanted Castle. They are very different to the Feeling, and have a much greater

Influence of every Kind, either to give Pleasure or Pain, Joy or Sorrow.

LET us, then, take in the whole Compass of this Doctrine, and allow, that the Sentiment of Belief is nothing but a Conception of an Object more intense and steady than what attends the mere Fictions of the Imagination, and that this *Manner* of Conception arises from a customary Conjunction of the Object with something present to the Memory or Senses: I believe it will not be difficult, upon these Suppositions, to find other Operations of the Mind analogous to it, and to trace up these Phænomena to Principles still more general.

WE have already observ'd, that Nature has establish'd Connexions among particular Ideas, and that no sooner one occurs to our Thoughts than it introduces its correlative, and carries our Attention towards it, by a gentle and insensible Movement. These Principles of Connexion or Association we have reduc'd to three, viz. *Resemblance*, *Contiguity*, and *Causation*; which are the only Bonds, that unite our Thoughts together, and beget that regular Train of Reflection or Discourse, which, in a greater or lesser Degree, takes place amongst all Mankind. Now here arises a Question, on which the Solution of the present Difficulty will depend. Does it happen, in all these Relations, that when one of the Objects is presented to the Senses or Memory, the Mind is not only carry'd to the Conception of the Correlative, but reaches a steadier and stronger

Conception of it than what otherwise it would have been able to attain? This seems to be the Case with that Belief, which arises from the Relation of Cause and Effect. And if the Case be the same with the other Relations or Principles of Association, we may establish this as a general Law, that takes place in all the Operations of the Mind.

We may, therefore, observe, as the first Experiment to our present Purpose, that upon the Appearance of the Picture of an absent Friend, our Idea of him is evidently enliven'd by the *Resemblance*, and that every Passion, which that Idea occasions, whether of Joy or Sorrow, acquires new Force and Vigour. In producing this Effect, there concur both a Relation and a present Impression. Where the Picture bears him no Resemblance, or at least was not intended for him, it never so much as conveys our Thought to him: And where it is absent, as well as the Person; tho' the Mind may pass from the Thought of the one to that of the other; it feels its Idea to be rather weaken'd than enliven'd by that Transition. We take a Pleasure in viewing the Picture of a Friend, when 'tis set before us; but when 'tis remov'd, rather chuse to consider him directly, than by Reflexion in an image, which is equally distant and obscure.

THE Ceremonies of the *Roman Catholic* Religion may be consider'd as Experiments of the same Nature. The Devotees of that strange Superstition usually plead in Excuse of the Mummeries, with which they are upbraided, that they feel the good Effect of those external Motions, and

Postures, and Actions, in enlivening their Devotion and quickning their Fervour, which otherwise would decay away, if directed entirely to distant and immaterial Objects. We shadow out the Objects of our Faith, say they, in sensible Types and Images, and render them more present to us by the immediate Presence of these Types, than 'tis possible for us to do, merely by an intellectual View and Contemplation. Sensible Objects have always a greater Influence on the Fancy than any other; and this Influence they readily convey to those Ideas, to which they are related, and which they resemble. I shall only infer from these Practices, and this Reasoning, that the Effect of Resemblance in enlivening the Idea is very common; and as in every Case a Resemblance and a present Impression must concur, we are abundantly supply'd with Experiments to prove the Reality of the foregoing Principle.

WE may add Force to these Experiments by others of a different Kind, in considering the Effects of *Contiguity* as well as of *Resemblance*. 'Tis certain that Distance diminishes the Force of every Idea, and that upon our Approach to any Object; tho' it does not discover itself to our Senses; it operates upon the Mind with an Influence, that imitates an immediate Impression. The thinking on any Object readily transports the Mind to what is contiguous; but 'tis 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; tho' even at that

Distance the reflecting on any thing in the Neighbourhood of my Friends or Family naturally produces an Idea of them. But as in this latter Case, both the Objects of the Mind are Ideas; notwithstanding there is an easy Transition betwixt them; that Transition alone is not able to give a superior Vivacity to any of the Ideas, for want of some immediate Impression^[2].

No one can doubt but Causation has the same Influence as the other two Relations of Resemblance and Contiguity. Superstitious People are fond of the Relicts of Saints and holy Men, for the same Reason, that they seek after Types or Images, in order to enliven their Devotion, and give them a more intimate and strong Conception of those exemplary Lives, which they desire to imitate. Now 'tis evident one of the best Relicts a Devotee could procure would be the Handywork of a Saint; and if his Cloaths and Furniture are ever to be consider'd in this Light, 'tis because they were once at his Disposal, and were mov'd and affected by him; in which Respect they are to be consider'd as imperfect Effects, and as connected with him by a shorter Chain of Consequences than any of those, by which we learn the Reality of his Existence.

SUPPOSE the Son of a Friend, who had been long dead or absent, were presented to us; 'tis evident, that this Object would instantly revive its correlative Idea, and recall to our Thoughts all our past Intimacies and Familiarities in more lively Colours than they would otherwise have appear'd to

us. This is another Phænomenon, which seems to prove the Principle above mentioned.

We may observe, that in these Phænomena the Belief of the correlative Object is always pre-suppos'd; without which the Relation could have no Effect in inlivening the Idea. The Influence of the Picture supposes, that we *believe* our Friend to have once existed. Contiguity to Home can never excite our Ideas of Home, unless we *believe* that it really exists. Now I assert, that this Belief, where it reaches beyond the Memory or Senses, is of a similar Nature, and arises from similar Causes, with the Transition of Thought and Vivacity of Conception here explain'd. When I throw a Piece of dry Wood into a Fire, my Mind is immediately carry'd to conceive, that its augments, not extinguishes the Flame. This Transition of Thought from the Cause to the Effect proceeds not from Reason. It derives its Origin altogether from Custom and Experience. And as it first begins from an Object, present to the Senses, it renders the Idea or Conception of Flame more strong and lively than any loose, floating Reverie of the Imagination. That Idea arises immediately. The Thought passes instantly to it, and conveys to it all that Force of Conception, which is deriv'd from the Impression present to the Senses. When a Sword is level'd at my Breast, does not the Idea of Wound and Pain strike me more strongly, than when a Glass of Wine is presented to me, even tho' by Accident this Idea should be presented after the Appearance of the latter Object? But what is there in this whole Matter to cause such a strong

Conception, but only a present Object and a customary Transition to the Idea of another Object, which we have been accustom'd to conjoin with the former? This is the whole Operation of the Mind in all our Conclusions concerning Matter of Fact and Existence; and 'tis a Satisfaction to find some Analogies, by which it may be explain'd. The Transition from a present Object does in all Cases give Strength and Solidity to the related Idea.

HERE is a kind of pre-establish'd Harmony betwixt the Course of Nature and the Successions of our Ideas; and tho' the Powers and Forces, by which the former is govern'd, be wholly unknown to us, yet our Thoughts and Conceptions have still, we find, gone on in the same Train with the other Works of Nature. Custom is that admirable Principle, by which this Correspondence has been effected; so necessary to the Subsistence of our Species, and the Regulation of our Conduct, in every Circumstance and Occurrence of human Life. Had not the Presence of an Object instantly excited the Idea of those Objects, commonly conjoin'd with it, all our Knowledge must have been limited to the narrow Sphere of our Memory and Senses; and we should never have been able to adjust Means to Ends, nor employ our natural Powers, either to the producing of Good, or avoiding of Evil. Those, who delight in the Discovery and Contemplation of *final Causes*, have here ample Subject to employ their Wonder and Admiration.

I SHALL add, as a farther Confirmation of the foregoing Theory, that as this Operation of the Mind, by which we infer like Effects from like Causes, and vice versa, is so essential to the Subsistence of all human Creatures, it is not probable it could be trusted to the fallacious Deductions of our Reason, which is slow in its Operations, appears not, in any Degree, during the first Years of Infancy, and at best is, in every Age and Period of human Life, extremely liable to Error and Mistake. 'Tis more like the ordinary Prudence of Nature to secure so necessary an Act of the Mind, by some Instinct or mechanical Tendency, which may be infallible in its Operations, may discover itself at the first Appearance of Life and Thought, and may be independent of all the labour'd Deductions of the Understanding. As Nature has taught us the Use of our Limbs, without giving us the Knowledge of the Muscles and Nerves, by which they are actuated; so has she implanted in us an Instinct, that carries forward the Thought in a correspondent Course to that which she has establish'd among external Objects; tho' we are ignorant of those Powers and Forces, on which this regular Course and Succession of Objects totally depends.

1. ↑ Nothing is more usual than for Writers even on *moral*, *political*, or *physical* Subjects, to distinguish betwixt *Reason* and *Experience*, and to suppose, that these Species of Argumentation are entirely different from each other. The former are taken for the mere Result of our intellectual Faculties, which, by considering *a priori* the Nature of Things, and

examining the Effects, that must follow from their Operation, establish particular Principles of Science and Philosophy. The latter are suppos'd to be deriv'd entirely from Sense and Observation, by which we learn what has actually resulted from the Operation of particular Objects, and are thence able to infer what will, for the future, result from them. Thus, for Instance, the Limitations and Restraints of civil Government and a legal Constitution may be defended, either from *Reason*, which, reflecting on the great Frailty and Corruption of human Nature, teaches, that no Man can safely be trusted with unlimited Authority; or from *Experience* and History, which inform us of the enormous Abuses, that Ambition, in every Age and Country, has been found to make of so imprudent a Confidence.

The same Distinction betwixt Reason and Experience is maintain'd in all our Deliberations concerning the Conduct of Life; while the experienc'd Statesman, General, Physician, or Merchant is trusted and follow'd; and the unpractic'd Novice, with whatever natural Talents endow'd, neglected and despis'd. Tho' it be allow'd, that Reason may form very plausible Conjectures with regard to the Consequences of such a particular Conduct in such particular Circumstances; 'tis still suppos'd imperfect, without the Assistance of Experience, which is alone able to give Stability and Certainty to the Maxims, deriv'd from Study and Reflection.

But notwithstanding that this Distinction be thus universally receiv'd, both in the active and speculative Scenes of Life, I shall not scruple to pronounce, that, in my Opinion, it is, at the Bottom, erroneous, or at least, superficial.

If we examine those Arguments, which, in any of the Sciences above mentioned, are suppos'd to be the mere Effects of Reasoning and Reflection, they will all be found to terminate, at last, in some general Principle or Conclusion, for which we can assign no Reason but Observation and Experience. The only Difference betwixt them and those Maxims, which are vulgarly esteem'd the Result of pure Experience, is, that the former cannot be establish'd without some Process of Thought, and some Reflection on what we have observ'd, in order to distinguish its Circumstances, and trace its Consequences: Whereas in the latter the experienc'd Event is exactly and fully similar to that which we infer as the Result of any particular Situation. The History of a *Tiberius* or a *Nero* makes us dread a like Tyranny were our Monarchs freed from the Restraints of Laws and Senates: But the Observation of any Fraud or Cruelty in private Life is sufficient, with the Aid of a little Thought, to give us the same Apprehension; while it serves as an Instance of the general Corruption of human Nature, and shows us the Danger we must incur by reposing an entire Confidence in Mankind. 'Tis Experience, in both Cases, which is ultimately the Foundation of our

Inference and Conclusion.

There is no Man so young and unexperienc'd, as not to have form'd, from Observation, many general and just Maxims concerning human Affairs and the Conduct of Life; but it must be confess'd, that, when he comes to put these in Practice, he will be extremely liable to Error, till Time and farther Experience, both enlarge these Maxims, and teach him their proper Use and Application. In every Situation or Incident, there are many particular and seemingly minute Circumstances, which the Man of greatest Talents is, at first, apt to overlook, tho' on them the Justness of his Conclusions, and consequently, the Prudence of his Conduct, entirely depend. Not to mention, that, to a young Beginner, the general Observations and Maxims occur not always on the proper Occasions, nor can be immediately apply'd with due Calmness and Distinction. The Truth is, an unexperienc'd Reasoner could be no Reasoner at all, were he absolutely unexperienc'd; and when we assign that Character to any one, we mean it only in a comparative Sense, and suppose him possess'd of Experience in a smaller and more imperfect Degree.

2. ↑ *Naturane nobis, inquit, datum dicam, an errore quodam, ut, cum ea loca videamus, in quibus memoria dignos viros acceperimus multum esse versatos, magis moveamur, quam siquando eorum ipsorum aut facta audiamus aut scriptum aliquod legamus? Velut ego nunc moveor. Venit enim mihi Platonis in mentem,*

quem accepimus primum h̄ic disputare solitum: Cujus etiam illi hortuli propinquui non memoriam solum mihi afferunt, sed ipsum videntur in conspectu meo h̄ic ponere. H̄ic Speufippus, h̄ic Xenocrates, h̄ic ejus auditor Polemo; cujus ipsa illa sessio suit, quam videamus. Evidet etiam curiam nostram, Hostilium dico, non hanc novam, quæ mihi minor esse videtur postquam est major, solebam intuens, Scipionem, Catonem, Lælium, nostrum vero in primis a'vum cogitare. Tanta vis admonitionis est in locis; ut non sine causa ex his memoriæ deducta sit disciplina.

Cicero de Finibus. Lib. 5.

ESSAY VI.

Of PROBABILITY [1].

THO' there be no such Thing as *Chance* in the World; our Ignorance of the real Cause of any Event has the same Influence on the Understanding, and begets a like Species of Belief or Opinion.

THERE is certainly a Probability, which arises from a Superiority of Chances on any Side; and according as this Superiority encreases, and surpasses the opposite Chances, the Probability receives a proportionable Encrease, and begets still a higher Degree of Belief or Assent to that Side, in which we discover the Superiority. If a Dye were mark'd with one Figure or Number of Spots on four Sides, and with another Figure or Number of Spots on the two remaining Sides, 'twould be more probable, that the former should turn up than the latter; tho' if it had a thousand Sides mark'd in the same Manner, and only one opposite Side, the Probability would be much higher, and our Belief or Expectation of the Event more steady and secure. This Process of the Thought or Reasoning may seem trivial and obvious; but to those, who consider it more narrowly, it may, perhaps, afford Matter for very curious Speculation.

IT seems evident, that when the Mind looks forward to discover the Event, which may result from the Throw of such a Dye, it considers the turning up of each particular Side as alike probable; and this is the very Nature of Chance to render all the particular Events, comprehended in it, entirely equal. But finding a greater Number of Sides concur in the one Event than in the other, the View is carry'd more frequently to that Event, and meets it oftner, in revolving the various Possibilities or Chances, on which the ultimate Result depends. This Concurrence of the several Views in one particular Event begets immediately, by an inexplicable Contrivance of Nature, the Sentiment of Belief, and gives that Event the Advantage over its Antagonist, which is supported by a lesser Number of Views, and recurs less frequently to the Mind. If we allow, that Belief is nothing but a firmer and stronger Conception of an Object than what attends the mere Fictions of the Imagination, this Operation may, perhaps, in some measure, be accounted for. The Concurrence of these several Views or Glimpses imprints its Idea more strongly on the Imagination; gives it superior Force and Vigour; renders its Influence on the Passions and Affections more sensible; and in a word, begets that Reliance or Security, which constitutes the Nature of Belief and Opinion.

THE Case is the same with the Probability of Causes as with that of Chance. There are some Causes, which are entirely uniform and constant in producing a particular Effect; and no Instance has ever yet been found of any Failure or

Irregularity in their Operation. Fire has always burnt, and Water suffocated every human Creature: The Production of Motion by Impulse and Gravity is an universal Law, that has hitherto admitted of no Exception. But there are other Causes which have been found more irregular and uncertain; nor has Rhubarb prov'd always a Purge, or Opium a Soporific to every one, who has taken these Medicines. 'Tis true; when any Cause fails of producing its usual Effect, Philosophers ascribe not this to any Irregularity in Nature; but suppose, that some secret Causes, in the particular Structure of Parts, have prevented the Operation. Our Reasonings, however, and Conclusions concerning the Event are the same as if this Principle had no Place. Being determin'd by Custom to transfer the past to the future, in all our Inferences; where the past has been entirely regular and uniform, we expect the Event with the greatest Assurance, and leave no room for any contrary Supposition. But where different Effects have been sound to follow from Causes, which are *to Appearance* exactly similar, all these various Effects must occur to the Mind in transferring the past to the future, and enter into our Consideration, when we determine the Probability of the Event. Tho' we give the Preference to that which has been found most usual, and believe that this Effect will exist, we must not overlook the other Effects, but must give each of them a particular Weight and Authority, in Proportion as we have found it to be more or less frequent. 'Tis more probable, in every Place of *Europe*, that there will be Frost sometime in *January*, than that the Weather will continue

fresh throughout that whole Month; tho' this Probability varies according to the different Climates, and approaches to a Certainty in the more northern Kingdoms. Here then it seems evident that when we transfer the past to the future, in order to determine the Effect that will result from any Cause, we transfer all the different Events, in the same Proportion as they have appear'd in the past, and conceive one to have existed a hundred Times, for Instance, another ten Times, and another once. As a great Number of Views do here concur in one Event, they fortify and confirm it to the Imagination, beget that Sentiment we call *Belief*, and give it the Preference above its Antagonist, which is not supported by an equal Number of Experiments, and occurs not so frequently to the Thought in transferring the past to the future. Let any one try to account for this Operation of the Mind upon any of the receiv'd Systems of Philosophy, and he will be sensible of the Difficulty. For my part, I shall think it sufficient, if the present Hints excite the Curiosity of Philosophers, and make them sensible how extremely defective all receiv'd Theories are, in treating of such curious and such sublime Subjects.

1. ↑ Mr. Locke divides all Arguments into demonstrative and probable. In this View, we must say, that 'tis only probable all Men must die or that the Sun will rise To-morrow. But to conform our Language more to common Use, we should divide Arguments into

Demonstrations, Proofs, and Probabilities. By Proofs meaning such Arguments from Experience as leave no room for Doubt or Opposition.

ESSAY VII.

Of the IDEA of POWER or necessary CONNEXION.

PART I.

THE great Advantage of the mathematical Sciences above the moral consists in this, that the Ideas of the former, being sensible, are always clear and determinate, the smallest Distinction betwixt them is immediately perceptible, and the same Terms are still expressive of the same Ideas, without Ambiguity or Variation. An Oval is never mistaken for a Circle, nor an Hyperbola for an Ellipsis. The Isoceles and Scalenum are distinguish'd by Boundaries more exact than Vice and Virtue, Right and Wrong. If any Term be defin'd in Geometry, the Mind readily, of itself, substitutes, on all Occasions, the Definition for the Term defin'd: Or even when no Definition is employ'd, the Object itself may be presented to the Senses, and by that Means be steadily and clearly apprehended. But the finer Sentiments of the Mind, the Operations of the Understanding, the various Agitations of the Passions, tho' really in themselves distinct, easily

escape us, when survey'd by Reflection; nor is it in our Power to recall the original Object, as often as we have occasion to contemplate it. Ambiguity, by this Means, is gradually introduc'd into our Reasonings: Similar Objects are readily taken to be the same: And the Conclusion becomes, at last, very wide of the Premises.

ONE may safely, however, affirm, that if we consider these Sciences in a proper Light, their Advantages and Disadvantages do very nearly compensate each other, and reduce both of them to a State of Equality. If the Mind with greater Facility retains the Ideas of Geometry clear and determinate, it must carry on a much longer and more intricate Chain of Reasoning, and compare Ideas much wider of each other, in order to reach the abstruser Truths of that Science. And if more Ideas are apt, without extreme Care, to fall into Obscurity and Confusion, the Inferences are always much shorter in these Disquisitions, and the intermediate Steps, that lead to the Conclusion, much fewer than in the Sciences, which treat of Quantity and Number. In reality, there is scarce a Proposition of Euclid so simple as not to consist of more Parts, than are to be found in any moral Reasoning, which runs not into Chimera and Conceit. If we can trace the Principles of the human Mind thro' a few Steps, we may be very well satisfy'd with our Progress; considering how soon Nature throws a Bar to all our Enquiries concerning Causes, and reduces us to an Acknowledgment of our Ignorance. The chief Obstacle, therefore, to our Improvement in the moral or metaphysical

Sciences is the Obscurity of the Ideas, and Ambiguity of the Terms. The principal Difficulty in the Mathematics in the Length of Inferences and Compass of Thought, requisite to the forming any Conclusion. And per+haps, our Progress in natural Philosophy is mostly retarded by the Want of proper Experiments and Phenomena, which often are discover'd by Chance, and cannot always be found, when requisite, even by the most diligent and prudent Enquiry. A moral Philosophy seems hitherto to have received less Improvements than either Geometry or Physics, we may conclude, that, if there be any Difference in this Respect amongst these Sciences, the Difficulties, which obstruct the Progress of the former, require the greatest Care and Capacity to be surmounted.

THERE are no Ideas, that occur in Metaphysics, more obscure and uncertain, than those of *Power, Force, Energy*, or *necessary Connexion*, which it is every Moment necessary for us to treat of in all our Disquisitions. We shall, therefore, endeavour, in this Essay, to fix, if possible, the precise Meaning of these Terms, and thereby remove some Part of that Obscurity, which is so much complain'd of in this Species of Philosophy.

IT seems a Proposition, which will not admit of much Dispute, that all our Ideas are nothing but Copies of our Impressions, or in other Words, that 'tis impossible for us to *think* of any Thing, which we have not antecedently *felt*, either by our external or internal Senses. I have endeavour'd

in a former Essay^[1] to explain and prove this Proposition, and have express'd my Hopes, that, by a proper Application of it, Men may be able to reach a greater Clearness and Precision in philosophical Reasonings, than what they have hitherto been ever able to attain. Complex Ideas may, perhaps, be well known by Definition, which is nothing but an Enumeration of those Parts or simple Ideas, that compose them. But when we have push'd up Definitions to the most simple Ideas, and find still some Ambiguity and Obscurity; what Resource are we then possess'd of? By what Invention can we throw Light upon these Ideas, and render them altogether precise and determinate to our intellectual View? Produce the Impressions or original Sentiments, from which the Ideas are copy'd. These Impressions are all strong and sensible. They admit not of Ambiguity and Obscurity. They are not only plac'd in a full Light themselves, but may throw Light on their correspondent Ideas, which lie in Obscurity. And by this Means, we may, perhaps, attain a new Microscope or Species of Optics, by which, in the moral Sciences, the most minute and most simple Ideas, may be so enlarg'd as to fall readily under our Apprehension, and be equally known with the grossest and most sensible Objects, that can be the Subjects of our Disquisition and Enquiry.

To be fully acquainted, therefore, with the Idea of Power or necessary Connexion, let us examine its Impression; and in order to find that with greater Certainty, let us search for all the Sources, from which it may possibly be deriv'd.

WHEN we look about us towards external Objects, and consider the Operation of Causes, we are never able, in any single Instance, to discover any Power or necessary Connexion; any Quality, which binds the Effect to the Cause, and renders the one an infallible Consequence of the other. We only find, that the one does actually, in fact, follow the other. The Impulse of one Billiard-Ball is attended with Motion in the second. This is the whole, that appears to the *outward* Senses. The Mind feels no Sentiment or *inward* Impression from this Succession of Objects: Consequently, there is nothing in any single, particular Instance of Cause and Effect, which can suggest the Idea of Power or necessary Connexion.

FROM the first Appearance of an Object, we never can conjecture what Effect will result from it. But were the Power or Energy of any Cause discoverable by the Mind, we could foresee the Effect, even without Experience, and might, at first, pronounce with Certainty concerning it, by the mere Dint of Thought and Reasoning.

IN Reality, there is no Part of Matter, that does ever, by its sensible Qualities, discover any Power or Energy, or give us ground to imagine, that it could produce any thing, or be follow'd by any other Object, which we could denominate its Effect. Solidity, Extension, Motion; these Qualities are all compleat in themselves, and never point out any other Event, which may result from them. The Scenes of the Universe are continually shifting, and one Object follows

another in an uninterrupted Succession; but the Power or Force, which actuates the whole Machine, is entirely conceal'd from us, and never discovers itself in any of the sensible Qualities of Body. We know, that, in fact, Heat is a constant Attendant of Flame; but what is the Connexion betwixt them, we have no room so much as to conjecture or imagine. 'Tis impossible, therefore, that the Idea of Power can be deriv'd from the Contemplation of Bodies, in single Instances of their Operation; because no Bodies ever discover any Power, which can be the Original of this Idea^[2].

SINCE, therefore, external Objects, as they appear to the Senses, give us no Idea of Power or necessary Connexion, by their Operations in particular Instances; let us see, if this Idea be deriv'd from Reflection on the Operations of our own Minds, and be copy'd from any internal Impression. It may be said, that we are every Moment conscious of Power in our own Minds, while we feel, that, by the simple Command of our Will, we can move the Organs of our Body, or direct the Faculties of our Minds, in their Operation. An Act of Volition produces Motion in our Limbs, or raises a new Idea in our Imagination. This Influence of the Will we know by Consciousness. Hence we acquire the Idea of Power or Energy; and are certain, that we ourselves and all other intelligent Beings are possess'd of Power. The Operations and mutual Influence of Bodies are, perhaps, sufficient to prove, that they also are possess'd of it. However this may be, the Idea of Power must

certainly be allow'd to be an Idea of Reflection, since it arises from reflecting on the Operations of our own Minds, and on the Command, which is exercis'd by Will over the Organs of the Body and Faculties of the Mind.

We shall proceed to examine this Pretension, and shall endeavour to avoid, as far as we are able, all Jargon and Confusion, in treating of such subtile and such profound Subjects.

I ASSERT, then, in the *first* Place, that the Influence of Volition over the Organs of the Body, is a Fact, which, like all other natural Operations, could be known only by Experience, and could never be foreseen from any apparent Energy or Power in the Cause, which connects it with the Effect, and renders the one a necessary Consequence of the other. The Motions of our Body follow upon the Command of our Will. This we are every Moment conscious of: But the Means, by which this is effected; the Energy, by which the Will performs so extraordinary an Operation; this we are so far from being immediately conscious of, that it must for ever escape our most diligent Search and Enquiry.

FOR *first*; Is there any Principle in all Nature more mysterious than the Union of the Soul with the Body; by which a suppos'd spiritual Substance acquires such an Influence over a material one, that the most refin'd Thought is able to actuate the grossest Body? Were we empower'd, by a secret Wish, to remove Mountains, or controul the

Planets in their Orbits; this extensive Authority over Matter would not be more extraordinary, nor more beyond the Bounds of our Comprehension. But if by Consciousness we perceiv'd any Power or Energy in the Will, we must know this Power; we must know its Connexion with the Effect; we must know the secret Union of Soul and Body, and the Nature of both these Substances; by which the one is able to operate, in so many Instances, upon the other.

Secondly, We are not able to move all the Organs of the Body with a like Authority; tho' we cannot assign any other Reason, besides Experience, for so remarkable a Difference betwixt the one and the other. Why has the Will an Influence over the Tongue and Fingers, and not over the Heart or Liver? This Question would never embarrass us, were we conscious of a Power in the former Case, and not in the latter. We should, then, perceive, independent of Experience, why the Authority of Will over the Organs of the Body is circumscrib'd within such particular Limits. Being in that Case fully acquainted with the Power or Force, by which it operates, we should also know, why its Influence reaches precisely to such Boundaries, and no farther.

A MAN, struck suddenly with a Palsy in the Leg or Arm, or who had newly lost those Members, frequently endeavours, at first, to move them, and employ them to their usual Offices. Here he is as much conscious of Power to command such Limbs, as a Man in perfect Health is to

actuate any Member, which remains in its natural State and Condition. But Consciousness never deceives. Consequently, neither in the one Case nor the other, are we ever conscious of any Power. We only learn the Influence of our Will from Experience. And Experience only teaches us, how one Event constantly follows another, without instructing us in the secret Connexion, which binds them together, and renders them inseparable.

Thirdly, We learn from Anatomy, that the immediate Object of Power in voluntary Motion, is not the Member itself, which is mov'd, but certain Muscles, and Nerves, and animal Spirits, and perhaps, something still more minute and more unknown, thro' which the Motion is successively propagated, 'ere it reach the Member itself, whose Motion is the immediate Object of Volition. Can there be a more certain Proof, that the Power, by which this whole Operation is perform'd, so far from being directly and fully known by an inward Sentiment or Consciousness, is, to the last degree, mysterious and unintelligible? Here the Mind wills a certain Event: Immediately, another Event, unknown to ourselves, and totally different from that intended, is produc'd: This Event produces another, equally unknown: Till at last, thro' a long Succession, the desir'd Event is produc'd. But if the original Power were felt, it must be known: Were it known, its Effect must also be known; since all Power is relative to its Effect. And *vice versa*, if the Effect be not known, the Power cannot be known or felt. How indeed can we be conscious of a Power to move our

Limbs, when we have no such Power; but only that to move certain animal Spirits, which, tho' they produce at last the Motion of our Limbs, yet operate in a Manner, that is altogether beyond our Comprehension?

We may, therefore, conclude from the whole, I hope, without any Temerity, tho' with Assurance; that our Idea of Power is not copy'd from any Sentiment or Consciousness of Power within ourselves, when we give rise to animal Motion, or apply our Limbs to their proper Use and Office. That their Motion follows the Command of the Will is a Matter of common Experience, like other natural Events: But the Power or Energy, by which this is effected, like that in other natural Events, is unknown and inconceivable^[3].

SHALL we then assert, that we are conscious of a Power or Energy in our own Minds, when, by an Act or Command of our Will, we raise up a new Idea, fix the Mind to a Contemplation of it, turn it on all Sides, and at last dismiss it for some other Idea, when we think, that we have survey'd it with sufficient Accuracy? I believe the same Arguments will prove, that even this Command of the Will gives us no real Idea of Force or Energy.

First, It must be allow'd, that when we know a Power, we know that very Circumstance in the Cause, by which it is enabled to produce the Effect: For these are suppos'd to be synonymous. We must, therefore, know both the Cause and Effect, and the Relation betwixt the one and the other. But

do we pretend to be acquainted with the Nature of the human Soul and the Nature of an Idea, or the Aptitude of the one to produce the other? This is a real Creation; a Production of something out of nothing: Which implies a Power so great, that it may seem, at first Sight, beyond the Reach of any Being, less than infinite. At least, it must be own'd, that such a Power is not felt, nor known, nor even conceivable by the Mind. We only feel the Event, viz. the Existence of an Idea, consequent to a Command of the Will: But the Manner, by which this Operation is persorm'd; the Power, by which it is produc'd; is entirely beyond our Comprehension.

Secondly, The Command of the Mind over itself is limited, as well as its Command over the Body; and these Limitations are not known by Reason, or any Contemplation of the Nature of the Cause and the Effect; but only by Experience and Observation, as in all other natural Events and in the Operation of external Objects. Our Authority over our Sentiments and Passions is much weaker than that over our Ideas; and even the latter Authority is circumscrib'd within very narrow Limits. Will any one pretend to assign the ultimate Reason of these Limits, or show why the Power is deficient in one Case and not in another?

Thirdly, This Self-command is very different at different Times. A Man in Health possesses more of it, than one languishing with Sickness. We are more Masters of our

Thoughts in the Morning than in the Evening: Fasting, than after a full Meal. Can we give any Reason for these Variations, except Experience? Where then is the Power, of which we pretend to be conscious? Is there not here some secret Mechanism or Structure of Parts, either in a spiritual or material Substance or both, upon which the Effect depends, and which being altogether unknown to us, renders the Power or Energy of the Will equally unknown and incomprehensible?

VOLITION is surely an Act of the Mind, with which we are sufficiently acquainted. Reflect upon it. Consider it on all Sides. Do you find any thing in it like this creative Power, by which it raises from nothing a new Idea, and by a kind of FIAT, imitates the Omnipotence of its Maker, if I may be allow'd so to speak, who call'd forth into Existence all the various Scenes of Nature? So far from being conscious of this Energy in the Will, it requires as certain Experience, as that which we are possess'd of in the Case, to convince us, that such extraordinary Effects do ever result from a simple Act of Volition.

THE Generality of Mankind never find any Difficulty in accounting for the more common and familiar Operations of Nature; such as the Descent of heavy Bodies, the Growth of Plants, the Generation of Animals, or the Nourishment of Bodies by Food; but suppose, that, in all these Cases, they perceive the very Force and Energy of the Cause, by which it is connected with its Effect, and is for ever infallible in its

Operation. They acquire, by long Habit, such a Turn of Mind, that, upon the Appearance of the Cause, they immediately expect with Assurance its usual Attendant, and hardly conceive it possible, that any other Event could result from it. 'Tis only on the Discovery of extraordinary Phænomena, such as Earthquakes, Pestilences, and Prodigies of any Kind, that they find themselves at a Loss to assign a proper Cause, and to explain the Manner, in which the Effect is produc'd by it. Tis usual for Men, in such Difficulties, to have recourse to some invisible, intelligent Principle, (*quasi Deus ex machina*) as the immediate Cause of that Event, which surprises them, and which, they think, cannot be accounted for from the common Powers of Nature. But Philosophers, who carry their Scrutiny a little farther, immediately perceive, that, even in the most familiar Events, the Energy of the Cause is as unintelligible as in the most extraordinary and unusual, and that we only learn by Experience the frequent CONJUNCTION of one Object with another, without being ever able to comprehend any thing like CONNEXION betwixt them. Here then many Philosophers think themselves oblig'd by Reason to have recourse, on all Occasions, to the same Principle, which the Vulgar never appeal to but in Cases, that appear miraculous and supernatural. They acknowledge Mind and Intelligence to be, not only the ultimate and original Cause of all Things, but the immediate and sole Cause of every Event, that appears in Nature. They pretend, that those Objects, which are commonly denominated *Causes*, are in Reality nothing but *Occasions*; and that the

true and direct Principle of every Effect is not any Power or Force in Nature, but a Volition of the supreme Being, who wills, that such particular Objects should be for ever conjoin'd with each other. Instead of saying, that one Billiard-Ball moves another, by a Force, which it has deriv'd from the Author of Nature; 'tis the Deity himself, they say, who, by a particular Volition, moves the second Ball, being determin'd to this Operation by the Impulse of the first Ball; in Consequence of those general Laws, which he has laid down to himself in the Government of the Universe. But Philosophers, advancing still in their Enquiries, discover, that, as we are totally ignorant of the Power, on which depends the mutual Operation of Bodies, we are no less ignorant of that Power, on which depends the Operation of Mind on Body, or of Body on Mind; nor are we able, either from our Senses or Consciousness, to assign the ultimate Principle, in the one Case more than in the other. The same Ignorance, therefore, reduces them to the same Conclusion. They assert, that the Deity is the immediate Cause of the Union betwixt Soul and Body, and that they are not the Organs of Sense, which, being agitated by external Objects, produce Sensations in the Mind; but that 'tis a particular Volition of our omnipotent Maker, which excites such a Sensation, in Consequence of such a Motion in the Organ. In like manner, it is not any Energy in the Will, that produces local Motion in our Members: 'Tis God himself, who is pleas'd to second our Will, in itself impotent, and to command that Motion, which we erroneously attribute to our own Power and Efficacy. Nor

do Philosophers stop at this Conclusion. They sometimes apply the same Inferences to the Mind itself, in its internal Operations. Our mental Vision or Conception of Ideas is nothing but a Revelation made to us by our Maker. When we voluntarily turn our Thoughts to any Object, and raise up its Image in the Fancy; it is not the Will, which creates that Idea: 'Tis the universal Creator of all Things, who discovers it to the Mind, and renders it present to us.

THUS, according to these Philosophers, every Thing is full of God. Not contented with the Principle, that nothing exists but by his Will, that nothing possesses any Power but by his Concession: They rob Nature, and all created Beings of every Power, in order to render their Dependance on the Deity still more sensible and immediate. They consider not, that by this Theory they diminish, instead of magnifying, the Grandeur of those Attributes, which they affect so much to celebrate. It argues surely more Power in the Deity to delegate a certain Degree of Power to his inferior Creatures than to operate every Thing by his immediate Volition. It argues more Wisdom to contrive at first the Fabric of the World with such perfect Foresight, that, of itself, and by its own proper Operation, it may serve all the Purposes of Providence, than if the great Creator were oblig'd every Moment to adjust its Parts, and animate by his Breath all the Wheels of that stupendous Machine.

BUT if we would have a more philosophical Confutation of this Theory, perhaps the two following Reflections may

suffice.

First, It seems to me, that this Theory, of the universal Energy and Operation of the supreme Being, is too bold ever to carry Conviction with it to a Man, who is sufficiently appriz'd of the Weakness of human Reason, and the narrow Limits, to which it is confin'd in all its Operations. Tho' the Chain of Arguments, that lead to it, were ever so conclusive and logical, there must arise a strong Supicion, if not an absolute Assurance, that it has led us quite beyond the Reach of our Faculties, when it establishes Conclusions so extraordinary, and so remote from common Life and Experience. We are got into Fairy-land, long ere we have reach'd the last Steps of our Theory; and there we have no Reason to trust our common Methods of Argument, or think that our usual Analogies and Probabilities have any Weight or Authority. Our Line is too short to fathom such immense Abysses. And however we may flatter ourselves, that we are guided in every Step we take by a kind of Verisimilitude and Experience; we may be assur'd, that this fancy'd Experience has no Authority, when we thus apply it to Subjects, that lie entirely out of the Sphere of Experience. But on this we shall have Occasion to touch afterwards [4].

Secondly, I cannot perceive any Force in the Arguments, on which this Theory is founded. We are ignorant, 'tis true, of the Manner, in which Bodies operate on each other: Their Force or Energy is entirely incomprehensible. But are we

not equally ignorant of the Manner or Force, by which a Mind, even the supreme Mind, operates either on itself or on Body? Whence, I beseech you, do we acquire any Idea of it? We have no Sentiment or Consciousness of this Power in ourselves: We have no Idea of the supreme Being, but what we learn from Reflection on our own Faculties. Were our Ignorance, therefore, a good Reason for our rejecting any Thing, we should be led into that Principle of refusing all Energy to the supreme Being as much as to the grossest Matter. We surely comprehend as little the Operations of the one as of the other. Is it more difficult to conceive, that Motion may arise from Impulse, than that it may arise from Volition? All we know is our profound Ignorance in both Cases^[5].

PART II.

BUT to hasten to a Conclusion of this Argument, which is already drawn out to too great a Length: We have sought, in vain, for an Idea of Power or necessary Connexion in all the Sources, from which we could suppose it to be deriv'd. It appears, that, in single Instances of the Operation of Bodies, we never can, by our outmost Scrutiny, discover any Thing but one Event following another, without being able to comprehend any Force or Power, by which the Cause operates, or any Connexion betwixt it and its suppos'd Effect. The same Difficulty occurs in contemplating the Operations of Mind on Body; where we observe the Motion of the latter to follow upon the Volition of the former; but

are not able to observe or conceive the Tye, which binds them together, or the Energy, by which the Mind produces this Effect. The Authority of the Will over our own Faculties and Ideas is not a whit more comprehensible: So that upon the whole, there appears not, thro' all Nature, any one Instance of Connexion, that is conceivable by us: All Events seem entirely loose and separate. One Event follows another; but we never can observe any Tye betwixt them: They seem *conjoin'd*, but never *connected*. And as we can have no Idea of any Thing, that never appear'd to our outward Sense or inward Sentiment, the necessary Conclusion *seems* to be, that we have no Idea of Connexion or Power at all, and that these Words are absolutely without any Meaning, when employ'd either in philosophical Reasonings, or common Life.

BUT we have still one Method of avoiding this Conclusion, and one Source, which we have not yet examin'd. When any natural Object or Event is presented, 'tis impossible for us, by any Sagacity or Penetration, to discover, or even conjecture, without Experience, what Event will result from it, or to carry our Foresight beyond those Objects, which are immediately present to the Memory and Senses. Even after one Instance or Experiment, where we have observ'd a particular Event to follow upon another, we are not entitled to form a general Rule, or foretel what will happen in like Cases; it being justly esteem'd an unpardonable Rashness and Temerity to judge of the whole Course of Nature from one single Experiment, however accurate or certain. But

when one particular Species of Events has always, in all Instances, been conjoin'd with another, we make no longer any Scruple to foretell the one upon the Appearance of the other, and to employ that Reasoning, which can alone assure us of any Matter of Fact or Existence. We then call the one Object, *Cause*; and the other, *Effect*: We suppose, that there is some Connexion betwixt them; some Power in the one, by which it infallibly produces the other, and operates with the greatest Certainty and strongest Necessity.

It appears, then, that this Idea of a necessary Connexion amongst Objects or Events arises from a Number of similar Instances of the constant Conjunction of these Events, and can never be suggested by any one of these Instances, survey'd in all possible Lights and Positions. But what is there in a Number of Instances, different from every single Instance, which is suppos'd to be exactly similar? Nothing but this, that after a Repetition of similar Instances, the Mind is carry'd by Habit, upon the Appearance of one Event, to expect its usual Attendant, and to believe, that it will exist. This Connexion, therefore, which we *feel* in the Mind, or customary Transition of the Imagination from one Object to its usual Attendant, is the only Sentiment or Impression, from which we form the Idea of Power or necessary Connexion. Nothing farther is in the Case. Contemplate the Subject on all Sides, you will never find any other Origin of this Idea. There is no other Difference betwixt one Instance, from which we never can receive the Idea of Connexion, and a Number of similar Instances, by

which it is suggested. The first Time a Man saw the Communication of Motion by Impulse, as by the Shock of two Billiard-balls, he could not pronounce that the one Effect was *connected*; but only that it was *conjoin'd*, with the other. After he has observ'd several Instances of this Nature, he then pronounces them to be *connected*. What Alteration has happen'd to give rise to this new Idea of *Connexion*? Nothing but this, that he now *feels* these Events to be *connected* in his Imagination, and can readily foretell the Existence of the one from the Appearance of the other. When, therefore, we say, that one Object is connected with another, we mean only, that they have acquir'd a Connexion in our Thoughts, and give rise to this Inference, by which they become Proofs of each other's Existence. A Conclusion, which is somewhat extraordinary; but which seems founded on sufficient Evidence. Nor will its Evidence be weaken'd by any general Diffidence of the Understanding, or sceptical Suspicion concerning every Conclusion, that is new and extraordinary. No Conclusion can be more agreeable to Scepticism than such as make Discoveries concerning the Weakness and narrow Limitations of human Reason and Capacity.

AND what stronger Instance can be produc'd of the surprizing Ignorance and Weakness of the Understanding, than the present? For surely, if there be any Relation among Objects, which it imports us to know perfectly, 'tis that of

Cause and Effect. On this are founded all our Reasonings concerning Matter of Fact or Existence. By Means of it alone we attain any Assurance concerning Objects, that are remov'd from the present Testimony of our Memory and Senses. The only immediate Utility of all Science is to teach us, how to controul and regulate future Events by their Causes. Our Thoughts and Enquiries are, therefore, every Moment employ'd concerning this Relation. And yet so imperfect are the Ideas we form concerning it, that 'tis impossible to give any just Definition of Cause, except what is drawn from something extraneous and foreign to it. Similar Objects are always conjoin'd with similar. Of this we have Experience. Suitable to this Experience, therefore, we may define a Cause to be *an Object, follow'd by another, and where all the Objects, similar to the first, are follow'd by Objects, similar to the second.* The Appearance of a Cause does always convey the Mind, by a customary Transition, to the Idea of the Effect. Of this also we have Experience. We may, therefore, suitable to this Experience, form another Definition of Cause, and call it, *an Object, follow'd by another, and whose Appearance always conveys the Thought to that other.* But tho' both these Definitions be drawn from Circumstances, foreign to the Cause, we cannot remedy this Inconvenience, or attain any more perfect Definition, which may point out that Circumstance in the Cause, which gives it a Connexion with its Effect. We have no Idea of this Connexion; nor even any Notion what it is we desire to know, when we endeavour at a Conception of it. We say, for Instance, that the Vibration of this String is

the Cause of this particular Sound. But what do we mean by that Affirmation? We either mean, *that this Vibration is follow'd by this Sound, and that all similar Vibrations have been follow'd by similar Sounds: Or, that this Vibration is follow'd by this Sound, and that upon the Appearance of the one, the Mind anticipates the Senses, and forms immediately an Idea of the other.* We may consider the Relation of Cause and Effect in either of these two Lights; but beyond these, we have no Idea of it.

To recapitulate, therefore, the Reasonings of this Essay: Every Idea is copy'd from some preceding Impression or Sentiment; and where we cannot find any Impression, we may be certain there is no Idea. In all single Instances of the Operation of Bodies or Minds, there is nothing that produces any Impression, nor consequently can suggest any Idea of Power or necessary Connexion. But when many uniform Instances appear, and the same Object is always follow'd by the same Event; we then begin to entertain the Notion of Cause and Connexion. We then *feel* a new Sentiment or Impression, *viz.* a customary Connexion in the Thought or Imagination betwixt one Object and its usual Attendant; and this Sentiment is the Original of that Idea we seek for. For as this Idea arises from a Number of similar Instances, and not from any single Instance; it must arise from that Circumstance, in which the Number of Instances differ from every individual Instance. But this customary

Connexion or Transition of the Imagination is the only Circumstance, in which they differ. In every other particular, they are alike. The first Instance we saw of Motion, communicated by the Shock of two Billiard-balls (to return to this obvious Instance) is exactly similar to any one, that may, at present, occur to us; except only, that we could not, at first, *infer* the one Event from the other; which we are enabled to do at present, after so long a Course of uniform Experience. I know not, if the Reader will readily apprehend this Reasoning. I am afraid, that, should I multiply Words about it, or throw it into a greater Variety of Lights, it would only become more obscure and intricate. In all abstract Reasonings, there is one Point of View, which, if we can happily hit, we shall go farther towards illustrating the Subject, than by all the Eloquence and copious Expression of the World. This we should endeavour to attain, and reserve the Flowers of Rhetoric for Subjects, that are more adapted to them.

1. ↑ Essay II.
2. ↑ Mr. Locke, in his Chapter of Power, says, that finding from Experience, that there are several new Productions in Matter, 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. But no Reasoning can ever give us a new, original,

simple Idea; as this Philosopher confesses. This, therefore, can never be the Original of that Idea,

3. ↑ It may be pretended, that the Resistance, which we meet with in Bodies, obliging us frequently to exert our Force, and call up all our Power; this gives us the Idea of Force and Power. 'Tis this *Nisus* or strong Endeavour, of which we are conscious, that is the original Impression, from which this Idea is copy'd. But, *first*, we attribute Power to a vast Number of Objects, where we never can suppose this Resistance or Exertion of Power to take place: To the supreme Being, who never meets with any Resistance; to the Mind in its Command over our Ideas and Limbs, in common Thinking and Motion, where the Effect follows immediately upon the Will, without any Exertion or summoning up of Force; to inanimate Matter, which is not capable of this Sentiment. *Secondly*, This Sentiment of an Endeavour to overcome Resistance has no known Connexion with any Event: What follows it, we know by Experience, but could not know *a priori*.

4. ↑ Essay XII.

5. ↑ I need not examine at length the *vis inertiae*, which is so much talk'd of in the new Philosophy, and which is ascrib'd to Matter. We find by Experience, that a Body at Rest or in Motion continues for ever in its present State, till put from it by some new Cause: And that a Body impell'd takes as much Motion from the impelling Body as it acquires itself. These are Facts.

When we call this a *vis inertiae*, we only mark these Facts, without pretending to have any Idea of the inert Power; in the same Manner as when we talk of Gravity, we mean certain Effects without comprehending that active Power. It was never the Meaning of Sir Isaac Newton to rob Matter of all Force or Energy; tho' some of his Followers have endeavour'd to establish that Theory upon his Authority. On the contrary that great Philosopher had recourse to an etherial active Matter to explain his universal Attraction; tho' he was so cautious and modest as to allow, that it was a mere Hypothesis, not to be insisted on, without more Experiments. I must confess, that there is something in the Fate of Opinions a little extraordinary. Des-Cartes insinuated that Doctrine of the universal and sole Efficacy of the Deity, without insisting on it. Malebranche and other Cartesians made it the Foundation of all their Philosophy. It had, however, no Authority in England. Locke, Clarke, and Cudworth, never so much as take notice of it, but suppose all along, that Matter has a real, tho' subordinate and deriv'd Power. By what Means has it become so prevalent among our modern Metaphysicians?

ESSAY VIII.

Of LIBERTY and NECESSITY.

PART I.

I T might reasonably be expected, that, in Questions, which have been canvass'd and disputed with great Eagerness since the first Origin of Science and Philosophy, the Meaning of all the Terms, at least, should have been agreed upon among the Disputants; and our Enquiries, in the Course of two thousand Years, been able to pass from Words to the true and real Subject of the Controversy. For how easy may it seem to give exact Definitions of the Terms employ'd in Reasoning, and make these Definitions, not the mere Sound of Words, the Object of future Scrutiny and Examination! But if we consider the Matter more narrowly, we shall be apt to draw a quite opposite Conclusion. From that Circumstance alone, that a Controversy has been long kept afoot, and remains still undecided, we may presume, that there is some Ambiguity in the Expression, and that the Disputants affix different Ideas to the Terms employ'd in the Controversy. For as the

Faculties of the Soul are suppos'd to be naturally alike in all Men; otherwise nothing could be more fruitless than to reason or dispute together; 'twere impossible, if they affix'd the same Ideas to their Terms, they could so long form different Opinions of the same Subject; especially when they communicate their Views, and each Party turn themselves on all Sides, in Search of Arguments, which may give them the Victory over their Antagonists. 'Tis true; if they attempt the Discussion of Questions, that lie entirely beyond the Reach of human Capacity, such as those concerning the Origin of Worlds, or the Oeconomy of the intellectual System or Region of Spirits, they may long beat the Air in their fruitless Contests, and never arrive at any determinate Conclusion. But if the Question regard any Subject of common Life and Experience; nothing, one would think, could preserve the Dispute so long undecided, but some ambiguous Expressions, which keep the Antagonists still at a Distance, and hinder them from grappling with each other.

THIS has been the Case in the long-disputed Question concerning Liberty and Necessity; and to so remarkable a Degree, that, if I be not much mistaken, we shall find all Mankind, both learned and ignorant, to have been always of the same Opinion with regard to that Subject, and that a few intelligible Definitions would immediately have put an end to the whole Controversy. I own, that this Dispute has been so much canvass'd on all hands, and has led Philosophers into such a Labyrinth of obscure Sophistry, that 'tis no

Wonder, if a sensible and polite Reader indulge his Ease so far as to turn a deaf Ear to the Proposal of such a Question, from which he can expect neither Instruction nor Entertainment. But the State of the Argument here proposed may, perhaps, serve to renew his Attention, as it has more Novelty, promises, at least, some Decision of the Controversy, and will not much disturb his Ease, by any intricate or obscure Reasoning.

I HOPE, therefore, to make appear, that all Men have ever agreed in the Doctrines both of Necessity, and of Liberty, according to any reasonable Sense, that can be put on these Expressions; and that the whole Controversy has hitherto turn'd merely upon Words. We shall begin with examining the Doctrine of Necessity.

'Tis universally allow'd, that Matter, in all its Operations, is actuated by a necessary Force, and that every Effect is so precisely determin'd by the Nature and Energy of its Cause, that no other Effect, in such particular Circumstances, could possibly have resulted from the Operation of that Cause. The Degree and Direction of every Motion is, by the Laws of Nature, prescrib'd with such Exactness, that a living Creature may as soon arise from the Shock of two Bodies, as Motion in any other Degree or Direction, than what is actually produc'd by it. Would we, therefore, form a just and precise Idea of *Necessity*, we must consider, whence that Idea arises, when we apply it to the Operation of Bodies.

It seems evident, that, if all the Scenes of Nature were shifted continually in such a Manner, that no two Events bore any Resemblance to each other, but every Object was entirely new, without any Similitude to whatever had been seen before, we should never, in that Case, have attain'd the least Idea of Necessity, or of a Connexion amongst these Objects. We might say, upon such a Supposition, that one Object or Event has follow'd another; not that one was produc'd by the other. The Relation of Cause and Effect must be utterly unknown to Mankind. Inference and Reasoning concerning the Operations of Nature would, from that Moment, be at an End; and the Memory and Senses remain the only Canals, by which the Knowledge of any real Existence could possibly have access to the Mind. Our Idea, therefore, of Necessity and Causation arises entirely from that Uniformity, observable in the Operations of Nature; where similar Objects are constantly conjoin'd together, and the Mind is determin'd by Custom to infer the one from the Appearance of the other. These two Circumstances form the whole of that Necessity, which we ascribe to Matter. Beyond the constant *Conjunction* of similar Objects, and the consequent *Inference* from one to the other, we have no Notion of any Necessity or Connexion.

If it appear, therefore, that all Mankind have ever allow'd, without any Doubt or Hesitation, that these two Circumstances, take place in the voluntary Actions of Men, and in the Operations of the Mind; it must follow, that all

Mankind have ever agreed in the Doctrine of Necessity, and that they have hitherto disputed, merely for Want of understanding each other.

As to the first Circumstance, the constant and regular Conjunction of similar Events; we may possibly satisfy ourselves by the following Considerations. It is universally acknowledg'd, that there is a great Uniformity amongst the Actions of Men, in all Nations and Ages, and that human Nature remains still the same, in its Principles and Operations. The same Motives produce always the same Actions: The same Events follow from the same Causes. Ambition, Avarice, Self-love, Vanity, Friendship, Generosity, public Spirit; these Passions, mix'd in various Degrees, and distributed thro' Society, have been, from the Beginning of the World, and still are, the Sources of all the Actions and Enterprizes, that have ever been observ'd amongst Mankind. Would you know the Sentiments, Inclinations, and Course of Life of the *Greeks* and *Romans*? Study well the Temper and Actions of the *French* and *English*. You cannot be much mistaken in transferring to the former *most* of the Observations you have made with regard to the latter. Mankind are so much the same, in all Times and Places, that History informs us of nothing new or strange in this particular. Its chief Use is only to discover the constant and universal Principles of human Nature, by shewing Men in all Varieties of Circumstances and Situations, and furnishing us with Materials, from which we may form our Observations, and become acquainted with

the regular Springs of human Action and Behaviour. These Records of Wars, Intrigues, Factions, and Revolutions are so many Collections of Experiments, by which the Politician or moral Philosopher fixes the Principles of his Science; in the same Manner as the Physician or natural Philosopher becomes acquainted with the Nature of Plants, Minerals, and other external Objects, by the Experiments, which he forms concerning them. Nor are the Earth, Water, and other Elements, examin'd by Aristotle, and Hypocrates, more like those, which at present lie under our Observation, than the Men, describ'd by Polybius and Tacitus, are to those who now govern the World.

SHOULD a Traveller, returning from a far Country, bring us an Account of Men, entirely different from any we were ever acquainted with; Men, who were entirely divested of Avarice, Ambition, or Revenge; who knew no Pleasure but Friendship, Generosity, and public Spirit; we should immediately, from these Circumstances, detect the Falshood, and prove him a Liar, with the same Certainty as if he had stuff'd his Narration with Stories of Centaurs and Dragons, Miracles and Prodigies. And if we would explode any Forgery in History, we cannot make use of a more convincing Argument, than to prove, that the Actions, ascrib'd to any Person, are directly contrary to the Course of Nature, and that no human Motives, in such Circumstances, could ever induce him to such a Conduct. The Veracity of Quintus Curtius is as suspicious, when he describes the supernatural Courage of *Alexander*, by which he was

hurry'd on singly to attack Multitudes, as when he describes his supernatural Force and Activity, by which he was able to resist them. So readily and universally do we acknowledge a Uniformity in human Motives and Actions as well as in the Operations of Body.

HENCE likewise the Benefit of that Experience, acquir'd by a long Life and a Variety of Business and Company, in order to instruct us in the Principles of human Nature, and regulate our future Conduct, as well as Speculation. By Means of this Guide, we mount up to the Knowledge of Mens Inclinations and Motives, from their Actions, Expressions, and even Gestures; and again, descend to the Interpretation of their Actions from the Knowledge of their Motives and Inclinations. The general Observations, treasur'd up by a Course of Practice and Experience, give us the Clue of human Nature, and teach us to unravel all its Labyrinths and Intricacies. Pretexts and Appearances no longer deceive us. Public Declarations pass for the specious Colouring of a Cause: And tho' Virtue and Honour be allow'd their proper Weight and Authority, that perfect Disinterestedness, so often pretended, is never expected in Multitudes and Parties; seldom in their Leaders; and scarcely even in Individuals of any Rank or Station. But were there no Uniformity in human Actions, and were every Experiment we could form of this Kind irregular and anomalous, 'twere impossible to collect any general Observations concerning Mankind; and no Experience, however accurately digested by Reflection, would ever

serve to any Purpose. Why is the antient Husbandman more skilful in his Calling than the young Beginner, but because there is a certain Uniformity in the Operation of the Sun, Rain, and Earth, towards the Production of Vegetables; and Experience teaches the old Practitioner the Rules, by which this Operation is govern'd and directed?

WE must not, however, expect, that this Uniformity of human Actions should be carry'd such a Length, as that all Men, in the same Circumstances, should always act precisely in the same Manner, without any Allowance for the Diversity of Characters, Prejudices, and Opinions. Such a Uniformity, in every Particular, is found in no Part of Nature. On the contrary, from observing the Variety of Conduct and Behaviour in different Men, we are enabled to form a greater Variety of Rules and Maxims, which still suppose a Degree of Uniformity and Regularity.

ARE the Manners of Men different in different Ages and Countries? We learn thence the great Force of Custom and Education, which mold the human Mind from its Infancy, and form it into a fix'd and establish'd Character. Is the Behaviour and Conduct of the one Sex very unlike that of the other? 'Tis from thence we become acquainted with the different Characters, which Nature has impress'd upon the Sexes, and which she preserves with Constancy and Regularity. Are the Actions of the same Person much diversify'd in the different Periods of his Life, from Infancy to old Age? This affords Room for many general

Observations concerning the gradual Change of our Sentiments and Inclinations, and the different Maxims, which prevail in the different Ages of human Creatures. Even the Characters which are peculiar to each Individual, have a Constancy and Uniformity in their Influence, otherwise our Acquaintance with the Persons, and our Observations of their Conduct could never teach us their Dispositions, nor serve to direct our Behaviour with regard to them.

I GRANT it possible to find some Actions, which seem to have no regular or uniform Connexion with any known Motives, and are Exceptions to all the Measures of Conduct, which have ever been establish'd for the Government of Men. But if we would willingly know, what Judgment should be form'd of such irregular and extraordinary Actions; we may consider the Sentiments that are commonly entertain'd with regard to those irregular Events, which appear in the Course of Nature, and the Operations of external Objects. All Causes are not conjoin'd to their usual Effects, with like Constancy and Uniformity. An Artificer, who handles only dead Matter, may be disappointed of his Scope and Aim as well as the Politician, who directs the Conduct of sensible and intelligent Agents.

THE Vulgar, who take Things according to their first Appearance, attribute the Uncertainty of Events to such an Uncertainty in the Causes as makes them often fail of their usual Influence; tho' they meet with no Obstacle nor

Impediment in their Operation. But Philosophers, observing, that almost in every Part of Nature there is contain'd a vast Variety of Springs and Principles, which are hid, by reason of their Minuteness or Remoteness, find, that 'tis at least possible the Contrariety of Events may not proceed from any Contingency in the Cause, but from the secret Operation of contrary Causes. This Possibility is converted into Certainty by farther Observation, when they remark, that, upon an exact Scrutiny, a Contrariety of Effects always betrays a Contrariety of Causes, and proceeds from their mutual Hindrance and Opposition. A Peasant can give no better Reason for the stopping of any Clock or Watch than to say it commonly does not go right: But an Artizan easily perceives, that the same Force in the Spring or Pendulum has always the same Influence on the Wheels; but fails of its usual Effect, perhaps by Reason of a Grain of Dust, which puts a stop to the whole Movement. From the Observation of several parallel Instances, Philosophers form a Maxim, that the Connexion betwixt all Causes and Effects is equally necessary, and that its seeming Uncertainty in some Instances proceeds from the secret Opposition of contrary Causes.

THUS for Instance, in the human Body, when the usual Symptoms of Health or Sickness disappoint our Expectations; when Medicines operate not with their wonted Powers; when irregular Events follow from any particular Causes; the Philosopher and Physician are not surpriz'd at the Matter, nor are ever tempted to deny, in

general, the Necessity and Uniformity of those Principles, by which the animal Oeconomy is conducted. They know, that a human Body is a mighty complicated Machine: That many secret Powers lurk in it, which are altogether beyond our Comprehension: That to us it must often appear very uncertain in its Operations: And that therefore the irregular Events, which outwardly discover themselves, can be no Proof, that the Laws of Nature are not observ'd with the greatest Strictness and Regularity in its internal Operations and Government.

THE Philosopher, if he be consistent, must apply the same Reasonings to the Actions and Volitions of intelligent Agents. The most irregular and unexpected Resolutions of Men may frequently be accounted for by those who know every particular Circumstance of their Character and Situation. A Person of an obliging Disposition gives a peevish Answer: But he has the Tooth-ake, or has not din'd. A stupid Fellow discovers an uncommon Alacrity in his Carriage: But he has met with a sudden Piece of Good-fortune. Or even when an Action, as sometimes happens, cannot be particularly accounted for, either by the Person himself or by others; we know, in general, that the Characters of Men are, to a certain Degree, inconstant and irregular. This is, in a Manner, the constant Character of human Nature; tho' it be applicable, in a more particular Manner, to some Persons, who have no fix'd Rule for their Conduct, but proceed in a continu'd Course of Caprice and Inconstancy. The internal Principles and Motives may

operate in a uniform Manner, notwithstanding these seeming Irregularities; in the same Manner as the Winds, Rain, Clouds, and other Variations of the Weather are suppos'd to be govern'd by steady Principles; tho' not easily discoverable by human Sagacity and Enquiry.

THUS it appears, not only that the Conjunction betwixt Motives and voluntary Actions is as regular and uniform, as that betwixt the Cause and Effect in any Part of Nature; but also that this regular Conjunction has been universally acknowledg'd amongst Mankind, and has never been the Subject of Dispute, either in Philosophy or common Life. Now as it is from past Experience, that we draw all Inferences concerning the future, and as we conclude, that Objects will always be conjoin'd together, which we find always to have been conjoin'd; it may seem superfluous to prove, that this experienc'd Uniformity in human Actions is the Source of all the *Inferences* we form concerning them. But in order to throw the Argument into a greater Variety of Lights, we shall also insist, tho' briefly, on this latter Topic.

THE mutual Dependance of Men is so great, in all Societies, that scarce any human Action is entirely compleat in itself, or is perform'd without some Reference to the Actions of others, which are requisite to make it answer fully the Intention of the Actor. The poorest Artificer, who labours alone, expects at least the Protection of the Magistrate, to ensure the Enjoyment of the Fruits of his Labour. He also expects, that, when he carries his Goods to Market, and

offers them at a reasonable Price, he shall find Buyers; and shall be able, by the Money he acquires, to engage others to supply him with those Commodities, which are requisite for his Subsistence. In Proportion as Mens Dealings are more extensive, and their Intercourse with others more complicated, they always comprehend, in their Schemes of Life, a greater Variety of voluntary Actions, which they expect, from their proper Motives, to co-operate with their own. In all these Conclusions, they take their Measures from past Experience, in the same Manner as in their Reasonings concerning external Objects; and firmly believe, that Men, as well as all the Elements, are to continue, in their Operations, the same, which they have ever found them. A Manufacturer reckons upon the Labour of his Servants, for the Execution of any Work, as much as upon the Tools he employs, and would be equally surpriz'd, in the one Case, were his Expectations disappointed, as in the other. In short, this experimental Inference and Reasoning concerning the Actions of others enters so much into human Life, that no Man, while awake, is ever a Moment without employing it. Have we not Reason, therefore, to affirm, that all Mankind have always agreed in the Doctrine of Necessity, according to the foregoing Definition and Explication of it?

NOR have Philosophers ever entertain'd a different Opinion from the People in this Particular. For not to mention, that almost every Action of their Life supposes it; there are even few of the speculative Parts of Learning, to which it is not

essential. What would become of *History*, had we not a Dependance on the Veracity of the Historian, according to the Experience we have had of Mankind? How could *Politics* be a Science, if Laws and Forms of Government had not a uniform and regular Influence upon Society? Where would be the Foundation of *Morals*, if particular Characters had no certain nor determinate Power to produce particular Sentiments, and if these Sentiments had no constant Operation on Actions? And with what Pretext could we employ our *Criticism* upon any Poet or polite Author, if we could not pronounce the Conduct and Sentiments of his Actors, either natural or unnatural, to such Characters, and in such Circumstances? It seems almost impossible, therefore, to engage, either in Science or Action of any Kind, without acknowledging the Doctrine of Necessity, and this *Inference* from Motives to voluntary Actions; from Characters to Conduct.

AND indeed, when we consider how aptly *natural* and *moral* Evidence link together, and form only one Chain of Argument betwixt them, we shall make no Scruple to allow, that they are of the same Nature, and deriv'd from the same Principles. A Prisoner, who has neither Money nor Interest, discovers the Impossibility of his Escape, as well from the Obstinacy of the Goaler, as from the Walls and Bars, with which he is surrounded; and in all Attempts for his Freedom, chuses rather to work upon the Stone and Iron of the one, than upon the inflexible Nature of the other. The same Prisoner, when conducted to the Scaffold, foresees his

Death as certainly from the Constancy and Fidelity of his Guards as from the Operation of the Ax or Wheel. His Mind runs along a certain Train of Ideas: The Refusal of the Soldiers to consent to his Escape; the Action of the Executioner; the Separation of the Head and Body; Bleeding, convulsive Motions, and Death. Here is a connected Chain of natural Causes and voluntary Actions; but the Mind feels no Difference betwixt them, in passing from one Link to another: nor is less certain of the future Event than if it were connected with the Objects present to the Memory or Senses, by a Train of Causes, cemented together by what we are pleas'd to call a *physical* Necessity. The same experienc'd Union has the fame Effect on the Mind, whether the united Objects be Motives, Volitions, and Actions; or Figure and Motion. We may change the Names of Things; but their Nature and their Operation on the Understanding never change.

I HAVE frequently consider'd, what could possibly be the Reason, why all Mankind, tho' they have ever, without Hesitation, acknowledged the Doctrine of Necessity, in their whole Practice and Reasoning, have yet discover'd such a Reluctance to acknowledge it in Words, and have rather shewn a Propensity, in all Ages, to profess the contrary Opinion. The Matter, I think, may be accounted for, after the following Manner. If we examine the Operations of Bodies and the Production of Effects from their Causes, we shall find, that all our Faculties can never carry us farther in our Knowledge of this Relation, than barely to observe, that

particular Objects are *constantly conjoin'd* together, and that the Mind is carry'd, by a *customary Transition*, from the Appearance of the one to the Belief of the other. But tho' this Conclusion concerning human Ignorance be the Result of the strictest Scrutiny and Examination of this Subject, Men still entertain a strong Propensity to believe, that they penetrate farther into the Powers of Nature, and perceive something like a necessary Connexion betwixt the Cause and the Effect. When again they turn their Reflections towards the Operations of their own Minds, and *feel* no such Connexion of the Motive and the Action; they are apt, from thence, to suppose, that there is a Difference betwixt the Effects, resulting from material and brute Force, and those which arise from Thought and Intelligence. But being once convinc'd, that we know nothing farther of Causation of any Kind, than merely the *constant Conjunction* of Objects, and the consequent *Inference* of the Mind from one to another, and finding, that these two Circumstances are universally acknowledged to have place in voluntary Actions; we may thence be more easily led to own the same Necessity, common to all Causes. And tho' this Reasoning may contradict the Systems of many Philosophers, in ascribing Necessity to the Determinations of the Will, we shall find, upon Reflection, that they dissent from it in Words only, not in their real Sentiments. Necessity, according to the Sense in which it is here taken, has never yet been rejected, nor can ever, I think, be rejected, by any Philosopher. It may only, perhaps, be pretended, that the Mind can perceive, in the Operations of Matter, some

farther Connexion betwixt the Cause and Effect; and a Connexion, which has not Place in the voluntary Actions of intelligent Beings. Now whether it be so or not, can only appear upon Examination, and it is incumbent on these Philosophers to make good their Assertion, by defining or describing that Necessity, and pointing it out to us, in the Operations of material Causes.

It would seem, indeed, that Men begin at the wrong End of this Question concerning Liberty and Necessity, when they enter upon it by examining the Faculties of the Soul, the Influence of the Understanding, and the Operations of the Will. Let them first discuss a more simple Question, *viz.* the Operations of Body and of brute unintelligent Matter; and try if they can there form any Idea of Causation and Necessity, except that of a constant Conjunction of Objects, and subsequent Inference of the Mind from one to another. If these Circumstances form, in reality, the whole of that Necessity, which we can conceive in Matter, and if these Circumstances be also universally acknowledg'd to take place in the Operations of the Mind, the Dispute is at an End; or, at least, must be own'd to be thenceforward merely verbal. But as long as we will rashly suppose, that we have some farther Idea of Necessity and Causation in the Operations of external Objects; at the same time, that we can find nothing farther, in the voluntary Actions of the Mind; there is no Possibility of bringing the Dispute to any determinate Issue, while we proceed upon so erroneous a Supposition. The only Method of undeceiving us, is, to

mount up higher; to examine the narrow Extent of our Knowledge, when apply'd to material Causes; and to convince ourselves, that all we know of them, is, the constant Conjunction and Inference above-mention'd. We may, perhaps, find, that 'tis with Difficulty we are induc'd to fix such narrow Limits to human Understanding: But we can afterwards find no Difficulty, when we come to apply this Doctrine to the Actions of the Will. For as 'tis evident, that these have a regular and constant Conjunction with Motives and Circumstances and Characters, and as we always draw Inferences from the one to the other, we must be oblig'd to acknowledge, in Words, that Necessity, which we have already avow'd, in every Deliberation and Reflection of our Lives, and in every Step of our Conduct and Behaviour^[1]. BUT to proceed in this reconciling Project with regard to the Doctrine of Liberty and Necessity, the most contentious Question, of Metaphysics, the most contentious Science; it will not require many Words to prove, that all Mankind have ever agreed in the Doctrine of Liberty as well as in that of Necessity, and that the whole Dispute, in this respect also, has been hitherto merely verbal. For what is meant by Liberty, when apply'd to voluntary Actions? We cannot surely mean, that Actions have so little Connexion with Motives, Inclinations, and Circumstances, that the one does not follow, with a certain Degree of Uniformity, from the other, and that the one affords no Inference, from which we can conclude the Existence of the other. For these are plain and acknowledged Matters of Fact. By Liberty, then, we can

only mean, *a Power of acting or not acting, according to the Determinations of the Will*; that is, if we chuse to remain at rest, we may; if we chuse to move, we also may. Now this hypothetical Liberty is universally allow'd to belong to every Body, who is not a Prisoner, and in Chains. Here then is no Subject of Dispute.

WHATEVER Definition we may give of Liberty, we should be careful to observe two requisite Circumstances; *first*, that it be consistent with plain Matter of Fact; *secondly*, that it be consistent with itself. If we observe these Circumstances, and render our Definition intelligible, I am persuaded that all Mankind will be found of one Opinion with regard to it.

'Tis universally allow'd, that nothing exists without a Cause of its Existence, and that Chance, when strictly examin'd, is a mere negative Word, and means not any real Power, which has, any where, a Being in Nature. But 'tis pretended that some Causes are necessary, and some are not necessary. Here then is the admirable Advantage of Definitions. Let any one *define* a Cause, without comprehending, as a Part of the Definition, a *necessary Connexion* with its Effect; and let him shew distinctly the Origin of the Idea, express'd by the Definition; and I shall frankly give up the whole Controversy. But if the foregoing Explication of the Matter be receiv'd, this must be absolutely impracticable. Had not Objects a regular and constant Conjunction with each other, we should never have entertain'd any Notion of Cause and Effect; and this constant Conjunction produces that

Inference of the Understanding, which is the only Connexion, that we can have any Comprehension of. Whoever attempts a Definition of Cause, exclusive of these Circumstances, will be oblig'd, either to employ unintelligible Terms, or such as are synonimous to the Term which he endeavours to define^[2]. And if the Definition above mentioned, be admitted; Liberty, when oppos'd to Necessity, not to Constraint, is the same Thing with Chance; which is universally allow'd to have no Existence.

PART II.

THERE is no Method of Reasoning more common, and yet none more blameable, than in philosophical Debates, to endeavour the Refutation of any Hypothesis, by a Pretext of its dangerous Consequences to Religion and Morality. When any Opinion leads into Absurdities, 'tis certainly false; but 'tis not certain an Opinion is false, because 'tis of dangerous Consequence. Such Topics, therefore, ought entirely to be forborn, as serving nothing to the Discovery of Truth, but only to make the Person of an Antagonist odious. This I observe in general, without pretending to draw any Advantage from it. I submit frankly to an Examination of this Kind, and shall venture to affirm, that the Doctrines, both of Necessity and Liberty, as above explain'd, are not only consistent with Morality and

Religion, but are absolutely essential to them. And first, of Necessity.

NECESSITY may be defin'd two Ways, conformable to the two Definitions of *Cause*, of which it makes an essential Part. It consists either in the constant Union and Conjunction of like Objects, or in the Inference of the Understanding from one Object to another. Now Necessity, in both these Senses, (which, indeed, are, at the Bottom, the same) has universally, tho' tacitly, in the Schools, in the Pulpit, and in common Life, been allow'd to belong to the Will of Man; and no one has ever pretended to deny, that we can draw Inferences concerning human Actions, and that those Inferences are founded on the experienc'd Union of like Actions, with like Motives, Inclinations, and Circumstances. The only Particular, in which any one can differ, is, that either, perhaps, he will refuse to give the Name of Necessity to this Property of human Actions: But as long as the Meaning is understood, I hope the Word can do no Harm: Or that he will maintain it possible to discover something farther in the Operations of Matter. But this, it must be acknowledg'd, can be of no Consequence to Morality or Religion, whatever it may be to natural Philosophy or Metaphysics. We may be mistaken in asserting, that there is no Idea of any other Necessity or Connexion in the Actions of Body: But surely we here ascribe nothing to the Actions of the Mind, but what every one does, and must readily allow of. We change no Circumstance in the receiv'd orthodox System with regard

to the Will, but only in that with regard to material Objects and Causes. Nothing therefore can be more innocent, at least, than this Doctrine. All Laws being founded on Rewards and Punishments, 'tis suppos'd as a fundamental Principle, that these Motives have a regular and uniform Influence on the Mind, and both produce the good and prevent the evil Actions. We may give to this Influence, what Name we please; but as 'tis usually conjoin'd with the Action, it must be esteem'd a *Cause*, and be look'd upon as an Instance of that Necessity, which we would establish.

THE only proper Object of Hatred or Vengeance, is a Person, or Creature, endow'd with Thought and Consciousness; and when any criminal or injurious Actions excite that Passion, 'tis only by their Relation to the Person, or Connexion with him. Actions are, by their very Nature, temporary and perishing; and where they proceed not from some *Cause* in the Characters and Disposition of the Person, who perform'd them, they can neither redound to his Honour, if good, nor Infamy, if evil. The Actions themselves may be blameable; they may be contrary to all the Rules of Morality and Religion: But the Person is not responsible for them; and as they proceeded from nothing in him, that is durable and constant, and leave nothing of that Nature behind them, 'tis impossible he can, upon their Account, become the Object of Punishment or Vengeance. According to the Principle therefore, which denies Necessity, and consequently Causes, a Man is as pure and untainted, after having committed the most horrid Crimes,

as at the first Moment of his Birth, nor is his Character any way concern'd in his Actions; since they are not deriv'd from it, and the Wickedness of the one can never be us'd as a Proof of the Depravity of the other.

MEN are not blam'd for such Actions as they perform ignorantly and casually, whatever may be the Consequences. Why? but because the Principles of these Actions are only momentary, and terminate in them alone. Men are less blam'd for such evil Actions as they perform hastily and unpremeditately, than from such as proceed from Thought and Deliberation. For what Reason? but because a hasty Temper, tho' a constant Cause or Principle in the Mind, operates only by Intervals, and infects not the whole Character. Again, Repentance wipes off every Crime, if attended with a Reformation of Life and Manners. How is this to be accounted for? but by asserting, that Actions render a Person criminal, merely as they are Proofs of criminal Passions or Principles in the Mind; and when, by any Alteration of these Principles, they cease to be just Proofs, they likewise cease to be criminal. But except upon the Doctrine of Necessity, they never were just Proofs, and consequently never were criminal.

IT will be equally easy to prove, and from the same Arguments, that *Liberty*, according to that Definition above-mentioned, in which all Men agree, is also essential to Morality, and that no human Actions, where it is wanting, is susceptible of any moral Qualities, or can be the Object

either of Approbation or Dislike. For as Actions are the Objects of our moral Sentiments, so far only as they are Indications or Proofs of the internal Character, Passions, and Affections; 'tis impossible they can give rise either to Praise or Blame, where they proceed not from these Principles, but are deriv'd altogether from external Force and Violence.

I PRETEND not to have obviated or remov'd all Objections to this Theory, with regard to Necessity and Liberty. I can foresee other Objections, deriv'd from Topics, which have not here been treated of. It may be said, for Instance, that if voluntary Actions be subjected to the same Laws of Necessity with the Operations of Matter, there is a continu'd Chain of necessary Causes, pre-ordain'd and pre-determin'd, reaching from the original Cause of all, to every single Volition of every human Creature. No Contingency any where in the Universe; no Indifference; no Liberty. While we act, we are, at the same time, acted upon. The ultimate Author of all our Volitions is the Creator of the World, who first bestow'd Motion on this immense Machine, and plac'd all Beings in that particular Position, whence every subsequent Event, by an inevitable Necessity, must result. Human Actions, therefore, can either have no Turpitude at all, as proceeding from so good a Cause; or if they can have any moral Turpitude, they must involve our Creator in the same Guilt, while he is acknowledged to be their ultimate Cause and Author. For as a Man, who fired a Mine, is answerable for all the Consequences, whether the Train he

employ'd be long or short; so wherever a continu'd Chain of necessary Causes are fix'd, that Being, either finite or infinite, who produces the first, is likewise the Author of all the rest, and must both bear the Blame, and acquire the Praise, which belongs to them. Our clearest and most unalterable Ideas of Morality establish this Rule, upon unquestionable Reasons, when we examine the Consequences of any human Action; and these Reasons must still have greater Force, when apply'd to the Volitions and Intentions of a Being, infinitely wise and powerful. Ignorance or Impotence may be pleaded for so limited a Creature as Man; but those Imperfections have no Place in our Creator. He foresaw, he ordain'd, he intended all those Actions of Men, which we so rashly pronounce criminal. And we must conclude, therefore, either that they are not criminal, or that the Deity, not Man, is responsible for them. But as either of these Positions is absurd and impious, it follows, that the Doctrine, from which they are deduc'd, cannot possibly be true, as being liable to all the same Objections. An absurd Consequence, if necessary, proves the original Doctrine to be absurd; in the same Manner, that criminal Actions render criminal the original Cause, if the Connexion betwixt them be necessary and inevitable.

THIS Objection consists of two Parts, which we shall examine separately; *First*, that if human Actions can be trac'd up, by a necessary Chain, to the Deity, they can never be criminal; on account of the infinite Goodness and Perfection of that Being, from whom they are deriv'd, and

who can intend nothing but what is altogether good and right. Or *Secondly*, if they be criminal, we must retract those Attributes of Goodness and Perfection, which we ascribe to the Deity, and must acknowledge him to be the ultimate Author of Guilt and moral Turpitude in all his Creatures.

THE Answer to the first Objection seems obvious and convincing. There are many Philosophers, who, after an exact Scrutiny of all the Phaenomena of Nature, conclude, that the WHOLE, consider'd as one System, is, in every Period of its Existence, order'd with perfect Benevolence and Goodness; and that the utmost possible Happiness will, in the End, result to every created Being, without any Mixture of positive or absolute Ill and Misery. Every physical Ill, say they, makes an essential Part of this benevolent System, and could not possibly be remov'd, even by the Deity himself, consider'd as a wise Agent, without giving Entrance to greater Ill, or excluding greater Good, which will result from it. From this Theory, some Philosophers, and the antient Stoicks among the rest, deriv'd a Topic of Consolation, under all Afflictions, while they taught their Pupils, that those Ills, they labour'd under, were, in reality, Goods to the Universe; and that to an enlarg'd View, which could comprehend the whole System of Nature, every Event became an Object of Joy and Exultation. But tho' this Topic be specious and sublime, it was soon found in Practice weak and ineffectual. You would surely more irritate, than appease a Man, lying under

the racking Pains of the Gout, by preaching up to him the Rectitude of those general Laws, which produc'd the malignant Humours in his Body, and led them, thro' the proper Canals, to the Nerves and Sinews, where they now excite such acute Torments. These enlarg'd Views may, for a Moment, please the Imagination of a speculative Man, who is plac'd in Ease and Security; but neither can they dwell with Constancy on his Mind, even tho' undisturb'd by the Emotions of Pain or Passion; much less can they maintain their Ground, when attack'd by such powerful Antagonists. The Affections take a narrower and more natural Survey of their Object; and by an Oeconomy, more suitable to the Infirmity of human Minds, regard alone the Objects around us, and are actuated by such Events as appear good or ill to the private System. The Case is the same with *moral* as with *physical* Ill; nor can it reasonably be suppos'd, that those remote Considerations, which are found of so little Efficacy with regard to the one, will have a more powerful Influence with regard to the other. The Mind of Man is so form'd by Nature, that, upon the Appearance of certain Characters, Dispositions, and Actions, it immediately feels the Sentiment of Approbation or Blame; nor are there any Feelings or Emotions more essential to its Frame and Constitution. The Characters, which engage its Approbation, are chiefly such as contribute to the Peace and Security of human Society; as the Characters, which excite Blame, are chiefly such as tend to its Detriment and Disturbance: Whence we may reasonably presume, that the moral Sentiments arise, either

mediately or immediately, from a Reflection on these opposite Interests. What tho' philosophical Meditations establish a different Opinion or Conjecture, that every Thing is right with regard to the WHOLE, and that the Qualities, which disturb Society, are, in the main, as beneficial, and are as suitable to the primary Intention of Nature, as those which more directly promote its Happiness and Welfare? Are such remote and uncertain Speculations able to counterbalance the Sentiments, which arise from the natural and immediate View of the Objects? A Man, who is robb'd of a considerable Sum; does he find his Vexation for the Loss a whit diminish'd by these sublime Reflections? Why then should his moral Resentment against the Crime be suppos'd incompatible with them? Or why should not the Acknowledgment of a real Distinction betwixt Vice and Virtue be reconcileable to all speculative Systems of Philosophy, as well as that of a real Distinction betwixt personal Beauty and Deformity? Both these Distinctions are founded on the natural Sentiments of the human Mind: And these Sentiments are not to be controul'd or alter'd by any philosophical Theory or Speculation whatsoever.

THE second Objection admits not of so easy and satisfactory an Answer; nor is it possible to explain distinctly, how the Deity can be the mediate Cause of all the Actions of Men, without being the Author of Sin and moral Turpitude. These are Mysteries, which mere natural and unassisted Reason is very unfit to handle; and whatever System it embraces, it must find itself involv'd in inextricable Difficulties, and

even Contradictions, at every Step it takes with regard to such Subjects. To reconcile the Indifference and Contingency of human Actions with Prescience; or to defend absolute Decrees, and yet free the Deity from being the Author of Sin, has been found hitherto to exceed all the Skill of Philosophy. Happy, if she be thence sensible of her Temerity when she pries into these sublime Mysteries; and leaving a Scene so full of Obscurities and Perplexities, return, with suitable Modesty, to her true and proper Province, the Examination of common Life; where she will find Difficulties enow to employ her Enquiries, without launching into so boundless an Ocean of Doubts, Uncertainties and Contradictions!

1. ¹ The Prevalence of the Doctrine of Liberty may be accounted for, from another Cause, viz. a false Sensation or seeming perience which we have, or may have of Liberty or Indifference, in many of our Actions. The Necessity of any Action, whether of Matter or of Mind, is not, properly speaking, a Quality in the Agent, but in any thinking or intelligent Being, who may consider the Action; and it consists chiefly in the Determination of his Thought to infer the Existence of that Action from some preceding Objects, as Liberty, when oppos'd to Necessity, is nothing but the Want of that Determination, and a certain Looseness or Indifference, which we feel, in passing or not passing, from the Idea of one Object to that of any succeeding one. Now we may observe, that, tho' in

reflecting on human Actions we seldom feel such a Looseness or Indifference, but are commonly able to infer them with considerable Certainty from their Motives, and from the Dispositions of the Agent; yet it frequently happens, that, in *performing* the Actions themselves, we are sensible of something like it: And as all resembling Objects are readily taken for each other, this has been employ'd as a demonstrative and even an intuitive Proof of human Liberty. We feel, that our Actions are subject to our Will, on most Occasions; and imagine we feel, that the Will itself is subject to nothing, because, when by a Denial of it we are provok'd to try, we feel that it moves easily every Way, and produces an Image of itself, (or a Velleity, as it is call'd in the Schools) even on that Side, on which it did not settle. This Image, or faint Motion, we persuade ourselves, could, at that Time, have been compleated into the Thing itself; because, should that be a deny'd, we find, upon a second Trial, that, at present, it can. We consider not, that the fantastical Desire of showing Liberty is here the Motive of our Actions. And it seems certain, that however we may imagine we feel a Liberty within ourselves, 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.

2. ↑ Thus if a Cause be defin'd, *that which produces any thing*; 'tis easy to observe, that *producing* is synonymous to *causing*. In like manner, if a Cause be defin'd, *that by which any thing exists*; this is liable to the same Objection. For what is meant by these Words, *by which*? Had it been said, that a Cause is *that* after which *any thing constantly exists*; we should have understood the Terms. For this is, indeed, all we know of the Matter. And this Constancy forms the very Essence of Necessity, nor have we any other Idea of it.

ESSAY IX.

Of the REASON of ANIMALS.

ALL our Reasonings concerning Matter of Fact are founded on a Species of ANALOGY, which leads us to expect from any Cause the same Events, which we have observ'd to result from similar Causes. Where the Causes are entirely similar, the Analogy is perfect, and the Inference, drawn from it, is regarded as certain and conclusive; nor does any Man ever entertain a Doubt, where he sees a Piece of Iron, that it will have Weight and Cohesion of Parts; as in all other Instances, which have ever fallen under his Observation. But where the Objects have not so exact a Similarity, the Analogy is less perfect, and the Inference is less conclusive; tho' still it has some Force, in Proportion to the Degrees of Similarity and Resemblance. The Anatomical Observations, form'd upon one Animal, are, by this Species of Reasoning, extended to all Animals; and 'tis certain, that when the Circulation of the Blood, for Instance, is prov'd clearly to have place in one Creature, as a Frog or Fish, it forms a strong

Presumption, that the same Principle has place in all of them. These analogical Observations may be carry'd farther, even to this Science, of which we are now treating; and any Theory, by which we explain the Operations of the Understanding or the Origin and Connexion of the Passions, in Man, will acquire additional Authority, if we find, that the same Theory is requisite to explain the same Phænomena, in all other Animals. We shall make Trial of this, with regard to the Hypothesis, by which, in the foregoing Essays, we have endeavour'd to account for all experimental Reasonings; and 'tis hop'd, that this new Point of View will serve to confirm all our former Observations.

First. It seems evident, that Animals, as well as Men, learn many Things from Experience, and infer, that the same Events will always follow from the same Causes. By this Principle, they become acquainted with the more obvious Properties of external Objects, and gradually, from their Birth, treasure up a Knowledge of the Nature of Fire, Water, Earth, Stones, Heights, Depths, &c. and of the Effects that result from their Operation. The Ignorance and Inexperience of the Young, is here plainly distinguishable from the Cunning and Sagacity of the Old, who have learnt, by long Observation, to avoid what hurt them, and to pursue what gave Ease or Pleasure. A Horse, that has been accustom'd to the Field, becomes acquainted with the proper Height, which he can leap, and will never attempt what exceeds his Force and Ability. An old Greyhound will trust the more fatiguing Part of the Chace to the younger,

and will place himself so as to meet the Hare in her Doubles; nor are the Conjectures, which he forms on this Occasion founded on any Thing but his Observation and Experience.

THIS is still more evident from the Effects of Discipline and Education on all Animals, who, by the proper Application of Rewards and Punishments, may be taught any Course of Action, the most contrary to their natural Instincts and Propensities. Is it not Experience, which renders a Dog apprehensive of Pain, when you menace him, or lift up the Whip to beat him? Is it not even Experience, which makes him answer to his Name, and infer, from such an arbitrary Sound, that you mean him, rather than any of his Fellows, and intend to call him, when you pronounce it in a certain Manner, and with a certain Tone and Accent?

In all these Cases, we may observe, that the Animal infers some Fact beyond what immediately strikes his Senses; and that this Inference is altogether founded on past Experience, while the Creature expects from the present Object the same Events, which it has always found in its Observation to result from similar Objects.

Secondly. 'Tis impossible, that this Inference of the Animal can be founded on any Process of Argument or Reasoning, by which he concludes, that like Events must follow like

Objects, and that the Course of Nature will always be regular in its Operations. For if there be in reality any Arguments of this Nature, they surely lie too abstruse for the Observation of such imperfect Understandings; since it may well employ the utmost Care and Attention of a philosophic Genius to discover and observe them. Animals, therefore, are not guided in these Inferences by Reasoning: Neither are Children: Neither are the Generality of Mankind, in their ordinary Actions and Conclusions: Neither are Philosophers themselves, who, in all the active Parts of Life, are, in the main, the same with the Vulgar, and are govern'd by the same Maxims. Nature must have provided some other Principle, of more ready, and more general Use and Application; nor can an Operation of such immense Consequence in Life, as that of inferring Effects from Causes, be trusted to the uncertain Process of Reasoning and Argumentation. Were this doubtful with regard to Men, it seems to admit of no Question with regard to the Brute-Creation; and the Conclusion being once firmly establish'd in one, we have a strong Presumption, from all the Rules of Analogy, that it ought to be universally admitted, without any Exception or Reserve. 'Tis Custom alone, which engages Animals, from every Object, that strikes their Senses, to infer its usual Attendant, and carries their Imagination, from the Appearance of the one, to conceive the other, in that strong and lively Manner, which we denominate *Belief*. No other Explication can be given of this Operation, in all the higher, as well as lower Classes of

sensitive Beings, that fall under our Notice and Observation.

BUT tho' Animals learn many Parts of their Knowledge from Observation, there are also many Parts of it, which they derive from the original Hand of Nature, which must exceed the Share of Capacity they possess on ordinary Occasions, and in which they improve, little or nothing, by the longest Practice and Experience. These we denominate INSTINCTS, and are so apt to admire, as something very extraordinary, and inexplicable by all the Disquisitions of human Understanding. But our Wonder will, perhaps, cease or diminish; when we consider, that the experimental Reasoning itself, which we possess in common with Beasts, and on which the whole Conduct of Life depends, is nothing but a Species of Instinct or mechanical Power, that acts in us unknown to ourselves, and in its chief Operations; is not directed by any such Relations or Comparisons of Ideas, as are the proper Objects of our intellectual Faculties. Tho' the Instinct be different, yet still 'tis an Instinct, which teaches a Man to avoid the Fire; as much as that, which teaches a Bird, with such Exactness, the Art of Incubation, and the whole Oeconomy and Order of its Nursery.

ESSAY X.

Of MIRACLES.

PART I.

HERE is in [Dr. Tillotson's](#) Writings an Argument against the *real Presence*, which is as concise and elegant, and strong as any Argument can possibly be suppos'd against a Doctrine, that is so little worthy of a serious Refutation. 'Tis acknowledg'd on all hands, says that learned Prelate, that the Authority, either of the Scripture or of Tradition, is founded merely on the Testimony of the Apostles, who were Eye-witnesses to those Miracles of our Saviour, by which he prov'd his divine Mission. Our Evidence, then, for the Truth of the *Christian Religion* is less than the Evidence for the Truth of our Senses; because, even in the first Authors of our Religion, it was no greater; and 'tis evident it must diminish in passing from them to their Disciples; not can any one be so certain of the Truth of their Testimony as of the immediate Objects of his Senses. But a weaker Evidence can never destroy a stronger; und therefore, were the Doctrine of the real Presence ever so

clearly reveal'd in Scripture, 'twere directly contrary to the Rules of just Reasoning to give our Assent to it. It contradicts Sense, tho' both the Scripture and Tradition, on which it is suppos'd to be built, carry not such Evidence with them as Sense; when they are consider'd merely as external Evidences, and are not brought home to every one's Breast, by the immediate Operation of the Holy Spirit.

NOTHING is so convenient as a decisive Argument of this Kind, which must at least *silence* the most arrogant Bigotry and Superstition, and free one from their impertinent Sollicitations. I flatter myself, that I have discover'd an Argument of a like Nature, which, if just, will, with the Wise and Learned, be an everlasting Check to all Kinds of superstitious Delusion, and consequently, will be useful as long as the World endures. For so long, I presume, will the Accounts of Miracles and Prodigies be found in all prophane History.

THO' Experience be our only Guide in reasoning concerning Matters of Fact; it must be acknowledg'd, that this Guide is not altogether infallible, but in some Cases is apt to lead us into Errors and Mistakes. One, who, in our Climate, should expect better Weather in any Week of *June* than in one of *December*, would reason justly and conformable to Experience; but 'tis certain, that he may happen, in the Event, to find himself mistaken. However, we may observe, that, in such a Case, he would have no Cause to complain of Experience; because it commonly informs us beforehand of

the Uncertainty, by that Contrariety of Events, which we may learn from a diligent Observation. All Effects follow not with a like Certainty from their suppos'd Causes. Some Events are found, in all Countries and all Ages, to have been constantly conjoin'd together: Others are found to have been more variable, and sometimes to disappoint our Expectations; so that in our Reasonings concerning Matter of Fact, there are all imaginable Degrees of Assurance, from the highest Certainty to the lowest Species of moral Evidence.

A wise Man, therefore, proportions his Belief to the Evidence. In such Conclusions as are founded on an infallible Experience, he expects the Event with the last Degree of Assurance, and regards his past Experience as a full *Proof* of the future Existence of that Event. In other Cases, he proceeds with more Caution: He weighs the opposite Experiments: He considers which Side is supported by the greatest Number of Experiments: To that Side he inclines, with Doubt and Hesitation; and when at last he fixes his Judgment, the Evidence exceeds not what we properly call *Probability*. All Probability, then, supposes an Opposition of Experiments and Observations; where the one Side is found to over-balance the other, and to produce a Degree of Evidence, proportion'd to the Superiority. A hundred Instances or Experiments on one Side, and fifty on another, afford a very doubtful Expectation of any Event; tho' a hundred uniform Experiments, with only one contradictory one, does reasonably beget a very strong

Degree of Assurance. In all Cases, we must balance the opposite Experiments, where they are opposite, and deduct the lesser Number from the greater, in order to know the exact Force of the superior Evidence.

To apply these Principles to a particular Instance; we may observe, that there is no Species of Reasoning more common, more useful, and even necessary to human Life, than that deriv'd from the Testimony of Men, and the Reports of Eye-witnesses and Spectators. This Species of Reasoning, perhaps, one may deny to be founded on the Relation of Cause and Effect. I shall not dispute about a Word. 'Twill be sufficient to observe, that our Assurance in any Argument of this Kind is deriv'd from no other Principle than our Observation of the Veracity of human Testimony, and of the usual Conformity of Facts to the Reports of Witnesses. It being a general Maxim, that no Objects have any discoverable Connexion together, and that all the Inferences we can draw from one to another are founded merely on our Experience of their constant and regular Conjunction; 'tis evident we ought not to make an Exception to this Maxim in Favour of human Testimony, whose Connexion with any Events seems, in itself, as little necessary as any other. Did not Mens Imagination naturally follow their Memory; had they not commonly an Inclination to Truth and a Sentiment of Probity; were they not sensible to Shame, when detected in a Falshood: Were not these, I say, discover'd by *Experience* to be Qualities, inherent in human Nature, we should never repose the least

Confidence in human Testimony. A Man delirious, or noted for Falshood and Villany, has no Manner of Weight or Authority with us.

AND as the Evidence, deriv'd from Witnesses and human Testimony, is founded on past Experience, so it varies with the Experience, and is regarded either as a *Proof* or a *Probability*, according as the Conjunction betwixt any particular Kind of Report and any Kind of Objects has been found to be constant or variable. There are a Number of Circumstances to be taken into Consideration in all Judgments of this Kind; and our ultimate Standard, by which we determine all Disputes, that may arise concerning them, is always deriv'd from Experience and Observation. Where this Experience is not intirely uniform on any Side, 'tis attended with an unavoidable Contrariety in our Judgments, and with the same Opposition and mutual Destruction of Arguments as in every other Kind of Evidence. We frequently hesitate concerning the Reports of others. We balance the opposite Circumstances, that cause any Doubt or Uncertainty; and when we discover a Superiority on any Side, we incline to it; but still with a Diminution of Assurance, in proportion to the Force of its Antagonist.

THIS Contrariety of Evidence, in the present Case, may be deriv'd from several different Causes; from the Opposition of contrary Testimony; from the Character or Number of the Witnesses; from the Manner of their delivering their

Testimony; or from the Union of all these Circumstances. We entertain a Suspicion concerning any Matter of Fact, when the Witnesses contradict each other; when they are but few, or of a suspicious Character; when they have an Interest in what they affirm; when they deliver their Testimony with Doubt and Hesitation, or on the contrary, with too violent Asseverations. There are many other Pariculars of the same Kind, which may diminish or destroy the Force of any Argument, deriv'd from human Testimony.

SUPPOSE, for Instance, that the Fact, which the Testimony endeavours to establish, partakes of the Extraordinary and the Marvellous; in that Case, the Evidence, resulting from the Testimony, receives a Diminution, greater or less, in proportion as the Fact is more or less unusual. The Reason, why we place any Credit in Witnesses and Historians is not from any *Connexion* we perceive *a priori* betwixt Testimony and Reality, but because we are accustom'd to find a Conformity betwixt them. But when the Fact attested is such a one as has seldom fallen under our Observation, here is a Contest of two opposite Experiences; of which the one destroys the other as far as its Force goes, and the Superior can only operate on the Mind by the Force, which remains. The very same Principle of Experience, which gives us a certain Degree of Assurance in the Testimony of Witnesses, gives us also, in this Case, another Degree of Assurance against the Fact, which they endeavour to establish; from which Contradiction there necessarily arises

a Counterpoize, and mutual Destruction of Belief and Authority.

BUT in order to increase the Probability against the Testimony of Witnesses, let us suppose, that the Fact, which they affirm, instead of being only marvellous, is really miraculous; and suppose also, that the Testimony, consider'd apart, and in itself, amounts to an entire Proof; in that Case there is Proof against Proof, of which the strongest must prevail, but still with a Diminution of its Force, in proportion to that of its Antagonist.

A MIRACLE is a Violation of the Laws of Nature; and as a firm and inalterable Experience has establish'd these Laws, the Proof against a Miracle, from the very Nature of the Fact, is as entire as any Argument from Experience can possibly be imagin'd, Why is it more than probable, that all Men must die; that Lead cannot, of itself, remain suspended in the Air; that Fire consumes Wood, and is extinguish'd by Water; unless it be that these Events are found agreeable to the Laws of Nature, and there is requir'd a Violation of these Laws, or in other Words, a Miracle, to prevent them? Nothing is esteem'd a Miracle if it ever happen in the common Course of Nature. 'Tis no Miracle that a Man in seeming good Health should die of a sudden; because such a Kind of Death, tho' more unusual than any other, has yet been frequently observ'd to happen. But 'tis a Miracle, that a dead Man should come to Life; because that has never been observ'd, in any Age or Country. There must, therefore, be

an uniform Experience against every miraculous Event, otherwise the Event would not merit that Appellation. And as an uniform Experience amounts to a Proof, there is here a direct and full *Proof*, from the Nature of the Fact, against the Existence of any Miracle; nor can such a Proof be destroy'd, or the Miracle render'd credible, but by an opposite Proof, that is superior^[1].

THE plain Consequence is (and 'tis a general Maxim worthy of our Attention) "That no Testimony is sufficient to establish a Miracle, unless the Testimony be of such a Kind, that its Falshood would be more miraculous, than the Fact, which it endeavours to establish: And even in that Case, there is a mutual Destruction of Arguments, and the Superior only gives us an Assurance suitable to that Degree of Force, which remains, after deducting the Inferior." When any one tells me, that he saw a dead Man restor'd to Life, I immediately consider with myself, whether it be more probable, that this Person should either deceive or be deceiv'd, or that the Fact he relates should really have happen'd. I weigh the one Miracle against the other, and according to the Superiority, which I discover, I pronounce my Decision, and always reject the greater Miracle. If the Flashood of his Testimony would be more miraculous, than the Event, which he relates; then, and not till then, can he pretend to command my Belief or Opinion.

PART II.

In the foregoing Reasoning we have suppos'd, that the Testimony, upon which a Miracle is founded, may possibly amount to an entire Proof, and that the Falshood of that Testimony would be a kind of Prodigy. But 'tis easy to shew, that we have been a great deal too liberal in our Concessions, and that there never was a miraculous Event, *in any History*, establish'd on so full an Evidence.

FOR first, there is not to be found, in all History, any Miracle attested by a sufficient Number of Men, of such unquestion'd Good-sense, Education, and Learning as to secure us against all Delusion in themselves; of such undoubted Integrity, as to place them beyond all Suspicion of any Design to deceive others; of such Credit and Reputation in the Eyes of Mankind as to have a great deal to lose in case of being detected in any Falshood; and at the same time attesting Facts, perform'd in such a public Manner, and in so celebrated a Part of the World, as to render the Detection unavoidable: All which Circumstances are requisite to give us a full Assurance in the Testimony of Men.

SECONDLY. We may observe in human Nature a Principle, which, if strictly examin'd, will be found to diminish extremely the Assurance we might have, from human Testimony, in any Kind of Prodigy. The Maxim, by which we commonly conduct ourselves in our Reasonings, is, that the Objects, of which we have no Experience, resemble those, of which we have; that what we have found to be

most usual is always most probable; and that where there is any Opposition of Arguments we ought to give the Preference to such of them as are founded on the greatest Number of past Observations. But tho' in proceeding by this Rule, we readily reject any Fact, that is unusual and incredible in an ordinary Degree; yet in advancing farther, the Mind observes not always the same Rule; but when any Thing is affirm'd utterly absurd and miraculous, it rather the more readily admits such a Fact, upon account of that very Circumstance, which ought to destroy all its Authority. The Passion of *Surprize* and *Wonder*, arising from Miracles, being an agreeable Emotion, gives a sensible Tendency towards the Belief of those Events, from which it is deriv'd. And this goes so far, that even those who cannot enjoy this Pleasure immediately, nor can believe those miraculous Events, of which they are inform'd, yet love to partake of the Satisfaction at Second-hand, or by Rebound, and place a Pride and Delight in exciting the Admiration of others.

WITH what Greediness are the miraculous Accounts of Travellers receiv'd, their Descriptions of Sea and Land-Monsters, their Relations of wonderful Adventures, strange Men, and uncouth Manners? But if the Spirit of Religion join itself to the Love of Wonder, there is an End of common Sense; and human Testimony, in these Circumstances, loses all Pretensions to Authority. A Religionist may be an Enthusiast, and imagine he sees what has no Reality: He may know his Narration to be false, and yet persevere in it, with the best Intentions in the World, for

the sake of promoting so holy a Cause: Or even where this Delusion has no Place, Vanity, excited by so strong a Temptation, operates on him more powerfully than on the rest of Mankind in any other Circumstances; and Self-Interest with equal Force. His Auditors may not have, and commonly have not sufficient Judgment to canvass his Evidence: What Judgment they have, they renounce by Principle, in these sublime and mysterious Subjects: Or if they were ever so willing to employ it, Passion and a heated Imagination disturb the Regularity of its Operations. Their Credulity increases his Impudence: And his Impudence over-powers their Credulity.

ELOQUENCE, when in its highest Pitch, leaves little room for Reason or Reflection; but addressing itself entirely to the Fancy or the Affections, captivates the willing Hearers, and subdues their Understanding. Happily, this Pitch it seldom attains. But what a Cicero or a Demosthenes could scarcely operate over a *Roman* or *Athenian* Audience, every *Capuchin*, every itinerant or stationary Teacher can perform over the Generality of Mankind, and in a higher Degree, by touching such gross and vulgar Passions^[2].

THIRDLY. It forms a very strong Presumption against all supernatural and miraculous Relations, that they are always found chiefly to abound amongst ignorant and barbarous Nations; or if a civiliz'd People has ever given Admission to any of them, that People will be found to have receiv'd them from ignorant and barbarous Ancestors, who transmitted

them with that inviolable Sanction and Authority, which always attends antient and receiv'd Opinions. When we peruse the first Histories of all Nations, we are apt to imagine ourselves transported into some new World, where the whole Frame of Nature is disjointed, and every Element performs its Operations in a different Manner, from what it does at present. Battles, Revolutions, Pestilences, Famines, and Deaths are never the Effects of those natural Causes, which we experience. Prodigies, Omens, Oracles, Judgments quite obscure and over-shadow the few natural Events, that are intermingled with them. But as these grow thinner every Page, in Proportion as we advance nearer the enlighten'd Ages of Science and Knowledge, we soon learn, that there is nothing mysterious or supernatural in the Case, but that all proceeds from the usual Propensity of Mankind towards the Marvellous and Extraordinary, and that tho' this Inclination may at Intervals receive a Check from Sense and Learning, it can never be thoroughly extirpated from human Nature.

'Tis strange, a judicious Reader is apt to say, upon the Perusal of these wonderful Historians, *that such prodigious Events never happen in our Days*. But 'tis nothing strange, I hope, that Men should lye in all Ages. You must surely have seen Instances enow of that Frailty. You have yourself heard many such prodigious Relations started, which being treated with Scorn by all the Wise and Judicious, have at last been abandon'd, even by the Vulgar. Be assur'd, that those renown'd Lyes, which have spread and flourish'd to

such a monstrous Height, arose from like Beginnings; but being sown on a more proper Soil, shot up at last into Prodigies almost equal to those, which they relate.

'Twas a wise Policy in that cunning Impostor, *Alexander*, who, tho' now forgotten, was once so famous, to lay the first Scene of his Impostures in *Paphlagonia*, where, as Lucian tells us, the People were extremely ignorant and stupid, and ready to swallow even the grossest Delusion. People at a Distance, who are weak enough to think the Matter at all worth Enquiry, have no Opportunity of receiving better Information. The Stories come magnify'd to them by a hundred Circumstances. Fools are industrious to propagate the Delusion; while the Wise and Learned are contented, in general, to deride its Absurdity, without informing themselves of the particular Facts, by which it may be distinctly refuted. And thus the Impostor above-mentioned was enabled to proceed, from his ignorant *Paphlagonians*, to the inlisting of Votaries, even among the *Grecian* Philosophers, and Men of the most eminent Rank and Distinction in *Rome*. Nay could engage the Attention of that sage Emperor, *Marcus Aurelius*; so far as to make him trust the Success of a military Expedition to his delusive Prophecies.

THE Advantages are so great of starting an Imposture amongst an ignorant People, that even tho', the Delusion should be too gross to impose on the Generality of them (*which, tho' seldom, is sometimes the Case*) it has a much

better Chance of succeeding in remote Countries, than if the first Scene had been laid in a City renown'd for Arts and Knowledge. The most ignorant and barbarous of these Barbarians carry the Report abroad. None of their Countrymen have large enough Correspondence or sufficient Credit and Authority to contradict and beat down the Delusion. Men's Inclination to the Marvellous has full Opportunity to display itself. And thus a Story shall pass for certain at a thousand Miles Distance, which is universally exploded in the Place where it was first started. But had *Alexander* fix'd his Residence at *Athens*, the Philosophers of that renown'd Mart of Learning, had immediately spread, thro' the whole *Roman Empire*, their Sense of the Matter, which, being supported by so great Authority, and display'd by all the Force of Reason and Eloquence, had entirely open'd the Eyes of Mankind. 'Tis true; *Lucian* passing by chance thro' *Paphlagonia* had an Opportunity of performing this good Office. But, tho' much to be wish'd, it does not always happen, that every *Alexander* meets with a *Lucian*, ready to expose and detect his Impostures^[3].

I MAY add as a fourth Reason, which diminishes the Authority of Prodigies, that there is no Testimony for any, even those which have not been expressly detected, that is not oppos'd by an infinite Number of Witnesses; so that not only the Miracle destroys the Credit of the Testimony, but even the Testimony destroys itself. To make this the better understood, let us consider, that, in Matters of Religion, whatever is different is contrary, and that 'tis impossible the

Religions of antient *Rome*, of *Turkey*, of *Siam*, and of *China* should all of them be establish'd on any solid Foundation. Every Miracle, therefore, pretended to have been wrought in any of these Religions (and all of them abound in Miracles) as its direct Scope is to establish the particular System, to which it is attributed; so it has the same Force, tho' more indirectly, to overthrow every other System. In destroying a Rival-System, it likewise destroys the Credit of those Miracles, on which that System was establish'd; so that all the Prodigies of different Religions are to be regarded as contrary Facts, and the Evidences of these Prodigies, whether weak or strong, as opposite to each other. According to this Method of Reasoning, when we believe any Miracle of *Mahomet* or any of his Successors, we have for our Warrant the Testimony of a few barbarous *Arabians*: and on the other side, we are to regard the Authority of *Titus Livius*, *Plutarch*, *Tacitus*, and in short of all the Authors and Witnesses, *Grecian*, *Chinese*, and *Roman Catholic*, who have related any Miracles in their particular Religion; I say, we are to regard their Testimony in the same Light as if they had mention'd that *Mahometan* Miracle, and had in express Terms contradicted it, with the same Certainty as they have for the Miracles they relate. This Argument may appear over-subtile and refin'd; but is not in Reality different from the Reasoning of a Judge, who supposes, that the Credit of two Witnesses, maintaining a Crime against any one, is destroy'd by the Testimony of two others, who affirm him to have been two hundred Leagues

distant, at the same Instant when the Crime is said to have been committed.

ONE of the best attested Miracles in all prophane History is that which *Tacitus* reports of *Vespasian*, who cur'd a blind Man in *Alexandria*, by Means of his Spittle, and a lame Man by the mere Touch of his Foot; in Obedience to a Vision of the God, *Serapis*, who had enjoin'd them to have recourse to the Emperor, for these miraculous and extraordinary Cures, The Story may be seen in that fine Historian^[4]; where every Circumstance seems to add Weight to the Testimony, and might be display'd at large with all the Force of Argument and Eloquence, if any one were now concern'd to enforce the Evidence of that exploded and idolatrous Superstition. The Gravity, Solidity, Age, and Probity of so great an Emperor, who, thro' the whole Coarse of his Life, convers'd in a familiar Way with his Friends and Courtiers, and never affected those extraordinary Airs of Divinity, assum'd by *Alexander* and *Demetrius*. The Historian, a contemporary Writer, noted for Candour and Veracity, and withal, the greatest and most penetrating Genius, perhaps, of all Antiquity; and so free from any Tendency to Superstition and Credulity, that he even lies under the contrary Imputation, of Atheism and Prophaneness: The Persons, from whose Testimony he related the Miracle, of establish'd Character for Judgment and Veracity, as we may well suppose; Eye-witnesses of the Fact, and confirming their Verdict, after the *Flavian* Family were despoil'd of the Empire, and could no longer give any

Reward, as the Price of a Lye. *Utrumque, qui interfuere, nunc quoque memorant, postquam nullum mendacis pretium.* To which if we add the public Nature of the Fact, as related, it will appear, that no Evidence can well be suppos'd stronger for so gross and so palpable a Falshood.

THERE is also a very memorable Story related by *Cardinal de Retz*, and which may well deserve our Consideration. When that intriguing Politician fled into *Spain*, to avoid the Persecution of his Enemies, he pass'd thro' *Saragossa*, the Capital of *Arragon*, where he was shewn, in the Cathedral Church, a Man, who had serv'd twenty Years as a Door-keeper of the Church, and was well known to every Body in Town, that had ever paid their Devotions at that Cathedral. He had been seen, for so long a Time, wanting a Leg; but recover'd that Limb by the rubbing of holy Oil upon the Stump; and when the Cardinal examin'd it, he found it to be a true natural Leg, like the other. This Miracle was vouch'd by all the Canons of the Church; and the whole Company in Town was appealed to for a Confirmation of the Fact; whom the Cardinal found, by their zealous Devotion, to be thorough Believers of the Miracle. Here the Relater was also contemporary to the suppos'd Prodigy, of an incredulous and libertine Character as well as of great Genius, the Miracle of so *singular* a Nature as could scarce admit of a Counterfeit, and the Witnesses very numerous, and all of them, in a Manner, Spectators of the Fact, to which they gave their Testimony. And what adds mightily to the Force of the Evidence, and may double our Surprize

on this Occasion, is, that the Cardinal himself, who relates the Story, seems not to give any Credit to it, and consequently cannot be suspected of any Concurrence in the holy Fraud. He consider'd justly, that it was not requisite, in order to reject a Fact of this Nature, to be able accurately to disprove the Testimony, and to trace its Falshood, thro' all the Circumstances of Knavery and Credulity, which produc'd it. He knew, that as this was commonly altogether impossible, at any small Distance of Time and Place; so was it extremely difficult, even where one was immediately present, by Reason of the Bigotry, Ignorance, Cunning, and Roguery of a great Part of Mankind. He therefore concluded, like a just Reasoner, that such an Evidence carry'd Falshood upon the very Face of it, and that a Miracle, supported by any human Testimony, was more properly a Subject of Derision than of Argument.

THERE surely never was so great a Number of Miracles ascrib'd to one Person, as those, which were lately said to have been wrought in *France* upon the Tomb of *Abbé Paris*, the famous *Jansenist*, with whose Sanctity the People were so long deluded. The curing of the Sick, giving Hearing to the Deaf, and Sight to the Blind were every where talk'd of, as the usual Effects of that holy Sepulchre. But what is more extraordinary; many of the Miracles were immediately prov'd, upon the Spot, before Judges of unquestion'd Integrity, attested by Witnesses of Credit and Distinction, in a learned Age, and on the most eminent Theatre, that is now in the World. Nor is this all: A Relation

of them was publish'd, and dispers'd every where; nor were the *Jesuits*, tho' a learned Body, supported by the civil Magistrate, and determin'd Enemies to those Opinions, in whose Favour the Miracles were said to have been wrought, ever able distinctly to refute or detect them. Where shall we find such a Number of Circumstances, agreeing to the Corroboration of one Fact? And what have we to oppose to such a Cloud of Witnesses, but the absolute Impossibility or miraculous Nature of the Events, which they relate? And this surely, in the Eyes of all reasonable People, will alone be regarded as a sufficient Refutation.

Is the Consequence just; because some human Testimony has the utmost Force and Authority in some Cases, when it relates the Battles of *Philippi* or *Pharsalia*, for Instance; that therefore all Kinds of Testimony must, in all Cases, have equal Force and Authority? Suppose the *Cæsarean* and *Pompeian* Factions had, each of them, challeng'd the Victory in these Battles, and the Historians of each Party had uniformly ascrib'd the Advantage to their own Side; how could Mankind, at this Distance, have been able to determine betwixt them? The Contrariety is equally strong betwixt the Miracles related by Herodotus or Plutarch, and those related by *Mariana*, Bede, or any monkish Historian.

THE Wise lend a very academic Faith to every Report, which favours the Passion of the Reporter, whether it magnifies his Country, his Family, or himself, or in any other Way strikes in with his natural Inclinations and

Propensities. But what greater Temptation than to appear a Missionary, a Prophet, an Ambassador from Heaven? Who would not encounter many Dangers and Difficulties, to attain so sublime a Character? Or if, by the Help of Vanity and a heated Imagination, a Man has first made a Convert of himself, and enter'd seriously into the Delusion; who ever scruples to make use of pious Frauds, in support of so holy and meritorious a Cause?

THE smallest Spark may here kindle into the greatest Flame; because the Materials are always prepar'd for it. The *avidum genus auricularum*, swallow greedily, without Examination, whatever sooths Superstition, and promotes Wonder.

How many Stories of this Nature have, in all Ages, been detected and exploded in their Infancy? How many more have been celebrated for a Time, and have afterwards sunk into Neglect and Oblivion? Where such Reports, therefore, fly about, the Solution of the Phænomenon is obvious; and we judge in Conformity to regular Experience and Observation, when we account for it by the known and natural Principles of Credulity and Delusion. And shall we, rather than have Recourse to so natural a Solution, allow of a miraculous Violation of the most known and most establish'd Laws of Nature?

I NEED not mention the Difficulty of detecting a Falshood in any private or even public History, at the Time and Place, where it is said to happen; much more where the Scene is

remov'd to ever so small a Distance. Even a Court of Judicature, with all the Authority, Accuracy, and Judgment, which they can employ, find themselves often at a loss to distinguish betwixt Truth and Falshood in the most recent Actions. But the Matter never comes to any Issue, if trusted to the common Method of Altercation and Debate and flying Rumours; especially when Men's Passions have taken party on either Side.

IN the Infancy of new Religions, the Wise and Learned commonly esteem the Matter too inconsiderable to deserve their Attention or Regard: And when afterwards they would willingly detect the Cheat, in order to undeceive the deluded Multitude, the Season is now gone, and the Records and Witnesses, who might clear up the Matter, have perish'd beyond Recovery.

No Means of Detection remain, but those which must be drawn from the very Testimony itself of the Reporters: And these, tho' always sufficient with the Judicious and Knowing, are commonly too fine to fall under the Comprehension of the Vulgar.

UPON the whole, then, it appears, that no Testimony for any Kind of Miracle can ever possibly amount to a Probability, much less to a Proof; and that even supposing it amounted to a Proof, 'twould be oppos'd by another Proof, deriv'd from the very Nature of the Fact, which it would endeavour to establish. 'Tis Experience only, which gives Authority to

human Testimony; and 'tis the same Experience, which assures us of the Laws of Nature. When, therefore, these two Kinds of Experience are contrary, we have nothing to do but subtract the one from the other, and embrace an Opinion, either on the one Side or the other, with that Assurance, which arises from the Remainder. But according to the Principle here explain'd, this Subtraction, with regard to all popular Religions, amounts to an entire Annihilation; and therefore we may establish it as a Maxim, that no human Testimony can have such Force as to prove a Miracle, and make it a just Foundation for any such System of Religion^[5].

I AM the better pleas'd with this Method of Reasoning, as I think it may serve to confound those dangerous Friends or disguis'd Enemies to the *Christian Religion*, who have undertaken to defend it by the Principles of human Reason. Our most holy Religion is founded on *Faith*, not on Reason; and 'tis a sure Method of exposing it to put it to such a Trial as it is, by no Means, fitted to endure. To make this more evident, let us examine those Miracles, related in Scripture; and not to lose ourselves in too wide a Field, let us confine ourselves to such as we find in the *Pentateuch*, which we shall examine, as these pretended Christians would have us, not as the Word or Testimony of God himself, but as the Production of a mere human Writer and Historian. Here then we are first to consider a Book, presented to us by a barbarous and ignorant People, wrote in an Age when they were still more barbarous, and in all Probability long after

the Facts it relates; corroborated by no concurring Testimony, and resembling those fabulous Accounts, which every Nation gives of its Origin. Upon reading this Book, we find it full of Prodigies and Miracles. It gives an Account of a State of the World and of human Nature entirely different from the present: Of our Fall from that State: Of the Age of Man, extended to near a thousand Years: Of the Destruction of the World by a Deluge: Of the arbitrary Choice of one People, as the Favourites of Heaven; and that People, the Countrymen of the Author: Of their Deliverance from Bondage by Prodigies the most astonishing imaginable: I desire any one to lay his Hand upon his Heart, and after serious Consideration declare, whether he thinks, that the Falshood of such a Book, supported by such a Testimony, would be more extraordinary and miraculous than all the Miracles it relates; which is, however, necessary to make it be receiv'd, according to the Measures of Probability above establish'd.

WHAT we have said of Miracles may be apply'd, without any Variation, to Prophecies; and indeed, all Prophecies are real Miracles, and as such only, can be admitted as Proofs of any Revelation. If it did not exceed the Capacity of human Nature to foretell future Events, 'twould be absurd to employ any Prophecy as a Proof of a divine Mission or Authority from Heaven. So that, upon the whole, we may conclude, that the *Christian Religion*, not only was at first attended with Miracles, but even at this Day cannot be believ'd by any reasonable Person without one. Mere

Reason is insufficient to convince us of its Veracity: And whoever is mov'd by *Faith* to assent to it, is conscious of a continued Miracle in his own Person, which subverts all the Principles of his Understanding, and gives him a Determination to believe what is most contrary to Custom and Experience.

1. ↑ Sometimes an Event may not, *in itself*, seem to be contrary to the Laws of Nature, and yet, if it were real, it might, by reason of some Circumstances, be denominated a Miracle, because, *in Fact*, it is contrary to these Laws. Thus if a Person, claiming a divine Authority, should command a sick Person to be well, a healthful Man to fall down dead, the Clouds to pour Rain, the Winds to blow, in short, should order many natural Events, which immediately follow upon his Command; these might justly be esteem'd Miracles, because they are really, in this Case, contrary to the Laws of Nature. For if any Suspicion remain, that the Event and Command concurr'd by Accident, there is no Miracle and no Transgression of the Laws of Nature. If this Suspicion be remov'd, there is evidently a Miracle, and a Transgression of these Laws; because nothing can be more contrary to Nature than that the Voice or Command of a Man should have such an Influence. A Miracle may be accurately defin'd, *a Transgression of a Law of Nature by a particular*

Volition of the Deity, or by the Interposal of some invisible Agent. A Miracle may either be discoverable by Men or not. This alters not its Nature and Essence. The raising of a House or Ship into the Air is a visible Miracle. The raising of a Feather, when the Wind wants ever so little of a Force requisite for that Purpose, is as real a Miracle, tho' not so sensible with regard to us.

2. ↑ The many Instances of forg'd Miracles, and Prophecies and supernatural Events, which, in all Ages, have either been detected by contrary Evidence, or which detect themselves by their Absurdity, mark sufficiently the strong Propensity of Mankind to the Extraordinary and the Marvellous, and ought reasonably to beget a Suspicion against all Relations of this Kind. This is our natural Way of thinking even with regard to the most common and most credible Events. For Instance: There is no Kind of Report, which rises so easily, and spreads so quickly, especially in Country-places and Provincial Towns, as those concerning Marriages; insomuch as two young Persons of equal Condition never see each other twice, but the whole Neighbourhood immediately join them together. The Pleasure of telling a Piece of News so interesting, of propagating it, and of being the first Reporters of it, spreads the Intelligence. And this is so well known, that no Man of Sense gives attention to these Reports, till he finds them confirm'd by some greater Evidence. Do not the same Passions, and others

still stronger, incline the Generality of Mankind to the believing and reporting, with the greatest Vehemence and Assurance, all religious Miracles?

3. ↑ It may here, perhaps, be objected, that I proceed rashly, and form my Notions of *Alexander* merely from the Account, given of him by *Lucian*, a profess'd Enemy. It were indeed to be wish'd, that some of the Accounts publish'd by his Followers and Accomplices had remain'd. The Opposition and Contrast betwixt the Character and Conduct of the same Man, as drawn by a Friend or an Enemy is as strong, even in common Life, much more in these religious Matters, as that betwixt any two Men in the World, betwixt *Alexander* and St. *Paul*, for Instance. See a Letter to *Gilbert West* Esq; on the Conversion and Apostleship of St. *Paul*.
4. ↑ Hist. Lib. 4. Cap. 8.
5. ↑ I beg the Limitation here made may be remark'd, when I say, that a Miracle can never be prov'd, so as to be the Foundation of a System of Religion. For I own, that otherwise, there may possibly be Miracles, or Violations of the usual Course of Nature, of such a Kind as to admit of Proof from human Testimony; tho', perhaps, it will be impossible to find any such in all the Records of History. Thus suppose, all Authors, in all Languages, agree, that from the first of *January* 1600, there was a total Darkness over the whole Earth for eight Days: Suppose that the Tradition of this extraordinary Event, is still strong and lively among the People: That all Travellers, who return from

foreign Countries, bring us Accounts of the same Tradition, without the least Variation or Contradiction; 'tis evident, that our present Philosophers, instead of doubting of that Fact, ought to receive it for certain, and ought to search for the Causes, whence it might be deriv'd.

But suppose, that all the Historians, who treat of *England*, should agree, that on the first of *January* 1600, Queen *Elizabeth* died; that both before and after her Death she was seen by her Physicians and the whole Court, as is usual with Persons of her Rank; that her Successor was acknowledg'd and proclaim'd by the Parliament; and that, after having been interr'd a Month, she again appear'd, took Possession of the Throne, and govern'd *England* for three Years: I must confess I should be surpriz'd at the Concurrence of so many odd Circumstances, but should not have the least Inclination to believe so miraculous an Event. I should not doubt of her pretended Death, and of those other public Circumstances, that follow'd it: I should only assert it to have been pretended, and that it neither was, nor possibly could be real. You would in vain object to me the Difficulty, and almost Impossibility of deceiving the World in an Affair of such Consequence; the Wisdom and Integrity of that renown'd Queen; with the little or no Advantage she could reap from so poor an Artifice: All this might astonish me; but I would still reply, that the Knavery and Folly of Men are such common Phænomena, that I should rather believe the

most extraordinary Events to arise from their Concurrence than admit so single a Violation of the Laws of Nature.

But should this Miracle be ascrib'd to any new System of Religion; Men, in all Ages, have been so much impos'd on by ridiculous Stories of that Kind; that this very Circumstance would be a full Proof of a Cheat, and sufficient, with all Men of Sense, not only to make them reject the Fact, but even reject it without farther Examination. Tho' the Being, to whom the Miracle is ascrib'd, be, in this Case, Almighty, it does not, upon that Account, become a whit more probable; since 'tis impossible for us to know the Attributes or Actions of such a Being, otherwise than from the Experience, which we have, of his Productions, in the usual Course of Nature. This still reduces us to past Observation, and obliges us to compare the Instances of the Violations of Truth in the Testimony of Men with those of the Violation of the Laws of Nature by Miracles, in order to judge which of them is most likely and probable. As the Violations of Truth are more common in the Testimony concerning religious Miracles than in that concerning any other Matter of Fact; this must diminish very much the Authority of the former Testimony, and make us form a general Resolution never to lend any Attention to it, with whatever specious Pretext it may be cover'd.

ESSAY XI.

Of the PRACTICAL CONSEQUENCES of NATURAL RELIGION.

I WAS lately engag'd in Conversation with a Friend, who loves sceptical Paradoxes; where, tho' he advanc'd many Principles, which I can by no means approve of, yet as they seem to be curious, and bear some relation to the Chain of Reasoning carry'd on thro' these Essays, I shall here copy them from my Memory as accurately as I can, in order to submit them to the Judgment of the Reader.

OUR Conversation began with my admiring the singular good Fortune of Philosophy, which, as it requires entire Liberty, above all other Privileges, and flourishes chiefly from the free Opposition of Sentiments and Argumentation, receiv'd its first Birth in an Age and Country of Freedom and Toleration, and was never cramp'd, even in its most extravagant Principles, by any Creeds, Confessions, or penal Statutes. For except the Banishment of *Protagoras*, and the Death of *Socrates*, which last Event proceeded

partly from other Motives, there are scarce any Instances to be met with, in antient History, of this bigotted Jealousy and Persecution, with which the present Age is so much infested. Epicurus liv'd at *Athens* to an advanc'd Age, in Peace and Tranquility: *Epicureans*^[1] were even admitted to receive the sacerdotal Character, and to officiate at the Altar, in the most sacred Rites of their Religion: And the public Encouragement^[2] of Pensions and Salaries was afforded equally, by the wisest of all the *Roman Emperors*^[3], to the Professors of every Sect of Philosophy. How requisite such kind of Treatment was to Philosophy, in its first Origin, will easily be conceiv'd, if we reflect, that even at present, when it may be suppos'd more hardy and robust, it bears with much Difficulty the Inclemency of the Seasons, and those harsh Winds of Calumny and Persecution, which blow upon it.

You admire, says my Friend, as the singular Good-Fortune of Philosophy, what seems to result from the natural Course of things, and to be unavoidable in every Age and Nation. This pertinacious Bigotry, of which you complain, as so fatal to Philosophy, is really her Offspring, who after allying with Superstition, separates himself intirely from the Interest of his Parent, and becomes her most inveterate Enemy and Persecutor. Speculative Dogmas and Principles of Religion, the present Occasions of such furious Dispute, could not possibly be conceiv'd or admitted in the early Ages of the World; when Mankind, being wholly illiterate, form'd an Idea of Religion, more suitable to their weak

Apprehension, and compos'd their sacred Tenets chiefly of such Tales and Stories as were the Objects of traditional Belief, more than of Argument or Disputation. After the first Alarm, therefore, was over, which arose from the new Paradoxes and Principles of the Philosophers; they seem, ever after, during the Ages of Antiquity, to have liv'd in great Harmony with the establish'd Superstitions, and to have made a fair Partition of Mankind betwixt them; the former claiming all the Learned and the Wise, and latter possessing all the Vulgar and Illiterate.

IT seems then, says I, that you leave Politics entirely out of the Question; and never suppose, that a wise Magistrate can justly be jealous of certain Tenets of Philosophy, such as those of *Epicurus*, which denying a divine Existence, and consequently a Providence and a future State, seem to loosen, in a great Measure, the Ties of Morality, and may be suppos'd, for that Reason, pernicious to the Peace of civil Society.

I KNOW, reply'd he, that in Fact these Persecutions never, in any Age, proceeded from calm Reason, or any Experience of the pernicious Consequences of Philosophy; but arose entirely from Passion and Prejudice. But what if I should advance farther, and assert, that if *Epicurus* had been accus'd before the People, by any of the *Sycophants* or Informers of those Days, he could easily have defended his Cause, and prov'd his Principles of Philosophy to be as

salutary as those of his Adversaries, who endeavour'd, with such Zeal, to subject him to the public Hatred and Jealousy?

I WISH, says I, you would try your Eloquence upon so extraordinary a Topic, and make a Speech for *Epicurus*, which might satisfy, not the Mob of *Athens*, if you will allow that antient and polite City to have contain'd any Mob, but the more philosophical Part of his Audience, such as might be suppos'd capable of comprehending his Arguments.

THE Matter would not be difficult, upon such Conditions, reply'd he: And if you please, I shall suppose myself *Epicurus* for a Moment, and make you stand for the *Athenian* People, and shall give you such an Harangue as will fill all the Urn with white Beans, and leave not a black one to gratify the Malice of my Adversaries.

VERY well: Pray proceed upon these Suppositions.

I COME hither, O ye *Athenians*, to justify in your Assembly what I maintained in my School, and find myself impeach'd by furious Antagonists, instead of reasoning with calm and dispassionate Enquirers. Your Deliberations, which of right should be directed to Questions of public Good and the Interest of the Commonwealth, are diverted to the Disquisitions of speculative Philosophy; and these magnificent, but, perhaps, fruitless Enquiries, take place of your more familiar but more useful Occupations. But so far

as in me lies, I will prevent this Abuse. We shall not here dispute concerning the Origin and Government of Worlds. We shall only enquire how far such Questions concern the public Interest. And if I can persuade you, that they are entirely indifferent to the Peace of Society and Security of Government, I hope you will presently send us back to our Schools, there to examine at leisure the Question the most sublime, but, at the same time, the most speculative, of all Philosophy.

YOUR religious Philosophers, not satisfy'd with the Tradition of your Forefathers, and Doctrines of your Priests (in which I willingly acquiesce) indulge a rash Curiosity, in trying how far they can establish Religion upon the Principles of Reason; and they thereby *excite*, instead of satisfying the Doubts, which naturally arise from a diligent and scrutinous Enquiry. They paint, in the most magnificent Colours, the Order, Beauty, and wise Arrangement of the Universe; and then ask, if such a glorious Display of Intelligence and Wisdom could proceed from the fortuitous Concourse of Atoms, or if Chance could produce what the highest Genius can never sufficiently admire. I shall not examine the Justness of this Argument. I shall allow it to be as solid as my Antagonists and Accusers can desire. 'Tis sufficient, if I can prove, from this very Reasoning, that the Question is entirely speculative, and that when, in my philosophical Disquisitions, I deny a Providence and a future State, I undermine not the Foundations of Society and Government, but advance Principles, which they themselves, upon their

own Topics, if they argue consistently, must allow to be solid and satisfactory.

You then, who are my Accusers, have acknowledged, that the chief or sole Argument for a divine Existence (which I never question'd) is deriv'd from the Order of Nature; where there appears such Marks of Intelligence and Design, that you think it extravagant to assign for its Cause, either Chance, or the blind and unguided Force of Matter. You allow, that this is an Argument, drawn from Effects to Causes. You infer, from the Order of the Work, that there must have been Project and Forethought in the Workman. If you cannot make out this Point, you allow, that your Conclusion fails; and you pretend not to establish the Conclusion in a greater Latitude than the Phænomena of Nature will justify. These are your Concessions. I desire you to mark the Consequences.

WHEN we infer any particular Cause from an Effect, we must proportion the one to the other, and can never be allow'd to ascribe to the Cause any Qualities, but what are exactly sufficient to produce the Effect. A Body of ten Ounces rais'd in any Scale may serve as a Proof, that the counter-ballancing Weight exceeds ten Ounces; but can never afford a Reason, that it exceeds a hundred. If the Cause, assign'd for any Effect, be not sufficient to produce it, we must either reject that Cause, or add to it such Qualities as will give it a just Proportion to the Effect. But if we ascribe to it farther Qualities, or affirm it capable of

producing other Effects, we can only indulge the Licence of Conjecture, and arbitrarily suppose the Existence of Qualities and Energies, without Reason or Authority.

THE same Rule holds, whether the Cause assign'd be brute unconscious Matter or a rational intelligent Being. If the Cause be known only by the Effect, we never ought to assign to it any Qualities, beyond what are precisely requisite to produce the Effect; nor can we, by any Rules of just Reasoning, return back from the Cause, and infer other Effects from it, beyond those by which alone it is known to us. No one, merely from the Sight of one of Zeuxis's Pictures, could know, whether he was also a Statuary or Architect, and was an Artist no less skilful in Stone and Marble than in Colours. The Talents and Taste display'd in the particular Work before us; these we may safely conclude the Workman was possess'd of. The Cause must be proportion'd to the Effect: And if we exactly and precisely proportion it, we shall never find in it any Qualities, that point farther, or afford an Inference concerning any other Design or Performance. Such Qualities must be somewhat beyond what is merely requisite to produce the Effect, which we examine.

ALLOWING, therefore, the Gods to be the Authors of the Existence or Order of the Universe; it follows, that they possess that precise Degree of Power, Intelligence, and Benevolence, which appear in their Workmanship; but nothing farther can ever be prov'd, except we call in the

Assistance of Exaggeration and Flattery to supply the Defects of Argument and Reasoning. So far as the Traces of any Attributes, at present, appear, so far may we conclude these Attributes to exist. The Supposition of farther Attributes is mere Hypothesis; much more, the Supposition, that, in distant Periods of Place and Time, there has been, or will be a more magnificent Display of these Attributes, and a Scheme or Order of Administration more suitable to such imaginary Virtues. We can never be allow'd to mount up from the Universe, the Effect, to *Jupiter*, the Cause; and then descend downwards, to infer any new Effect from that Cause; as if the present Effects alone were not entirely worthy of the glorious Attributes we ascribe to that Deity. The Knowledge of the Cause being deriv'd solely from the Effect, they must be exactly adjusted to each other, and the one can never point towards any thing farther, or be the Foundation of any new Inference and Conclusion.

You find certain Phænomena in Nature. You seek a Cause or Author. You imagine you have found him. You afterwards become so enamour'd of this Offspring of your Brain, that you imagine it impossible but he must produce something greater and more perfect than the present Scene of Things, which is so full of Ill and Disorder. You forget, that this superlative Intelligence and Benevolence is entirely imaginary, or at least, without any Foundation in Reason, and that you have no ground to ascribe to him any Qualities, but what you see he has actually exerted and display'd in his Productions. Let your Gods, therefore, O

Philosophers, be suited to the present Appearances of Nature: And presume not to alter these Appearances by arbitrary Suppositions, in order to suit them to the Attributes, which you so fondly ascribe to your Deities.

WHEN Priests and Poets, supported by your Authority, O *Athenians*, talk of a Golden or a Silver Age, which preceded the present Scene of Vice and Misery, I hear them with Attention and with Reverence. But when Philosophers, who pretend to neglect Authority, and to cultivate Reason, hold the same Discourse, I own, I pay them not the same obsequious Submission and pious Deference. I ask; Who carry'd them into the celestial Regions, who admitted them into the Councils of the Gods, who open'd to them the Book of Fate, that they thus rashly affirm their Deities have executed, or will execute, any Purpose, beyond what has actually appear'd? If they tell me, that they have mounted on the Steps or Scale of Reason, and by drawing Inferences from Effects to Causes, I still insist, that they have aided the Scale of Reason by the Wings of Imagination; otherwise they could not thus change their Manner of Inference, and argue from Causes to Effects; presuming, that a more perfect Production than the present World would be more suitable to such perfect Beings as the Gods, and forgetting, that they have no Reason to ascribe to these celestial Beings any Perfection or any Attribute, but what can be found in the present World.

HENCE all the fruitless Industry to account for the ill Appearances of Nature, and save the Honour of the Gods; while we must acknowledge the Reality of that Evil and Disorder, with which the World so much abounds. The obstinate and intractable Qualities of Matter, we are told, or the Observance of general Laws, or some such Reason is the sole Cause, which controul'd the Power and Benevolence of *Jupiter*, and oblig'd him to create Mankind and every sensible Creature so imperfect and so unhappy. These Attributes, then, are, it seems, beforehand, taken for granted, in their greatest Latitude. And upon that Supposition, I own, that such Conjectures may, perhaps, be admitted as plausible Solutions of the Phænomena. But still I ask; Why take these Attributes for granted, or why ascribe to the Cause any Qualities but what actually appear in the Effect? Why torture your Brain to justify the Course of Nature upon Suppositions, which, for aught you know, may be entirely imaginary, and of which there are to be found no Traces in the Course of Nature?

THE religious Hypothesis, therefore, must be consider'd only as a particular Method of accounting for the visible Phænomena of the Universe: But no just Reasoner will ever presume to infer from it any single Fact, and alter or add to these Phænomena, in any single Particular. If you think, that the Appearances of Things prove such Causes, 'tis allowable for you to draw an Inference concerning their Existence. In such complicated and sublime Subjects, every one should be indulged in the Liberty of Conjecture and

Argument. But here you ought to rest. If you come backward, and arguing from your infer'd Causes, conclude, that any other Fact has existed, or will exist, in the Course of Nature, which may serve for a fuller Display of particular Attributes; I must admonish you, that you have departed from the Method of Reasoning, attach'd to the present Subject, and must certainly have added something to the Attributes of the Cause, beyond what appears in the Effect; otherwise you could never, with tolerable Sense or Propriety, add any thing to the Effect, which might render it more worthy of the Cause.

WHERE, then, is the Odiousness of that Doctrine, which I teach in my School, or rather, which I examine in my Gardens? Or what do you find in this whole Question, wherein the Security of good Morals, or the Peace and Order of Society is in the least concern'd?

I DENY a Providence, you say, and supreme Governor of the World, who guides the Course of Events, and punishes the Vicious with Infamy, and Disappointment, and rewards the Virtuous with Honour and Success, in all their Undertakings. But surely, I deny not the Course itself of Events, which lies open to every one's Enquiry and Examination. I acknowledge, that, in the present Order of Things, Virtue is attended with more Peace of Mind than Vice; and meets with a more favourable Reception from the World. I am sensible, that, according to the past Experience of Mankind, Friendship is the chief Joy of human Life, and

Moderation the only Source of Tranquillity and Happiness. I never balance betwixt the virtuous and the vicious Course of Life; but am sensible, that, to a well-dispos'd Mind, every Advantage is on the Side of the former: And what can you say more, allowing all your Suppositions and Reasonings? You indeed tell me, that this Disposition of Things proceeds from Intelligence and Design. But whatever it proceeds from, the Disposition itself, on which depends our Happiness or Misery, and consequently our Conduct and Deportment in Life, is still the same. 'Tis still open for me, as well as you, to regulate my Behaviour, by my past Experience of Events. And if you affirm, that, while a divine Providence is allow'd, and a supreme distributive Justice in the Universe, I ought to expect some more particular Favour of the Good, and Punishment of the Bad, beyond the ordinary Course of Events; I here find the same Fallacy, which I have before endeavour'd to detect. You persist in imagining, that, if we grant that divine Existence, for which you so earnestly contend, you may safely infer Consequences from it, and add something to the experienc'd Order of Nature, by arguing from the Attributes, which you ascribe to your Gods. You seem not to remember, that all your Reasonings on this Subject can only be drawn from Effects to Causes; and that every Argument, deduc'd from Causes to Effects, must of Necessity be a gross Sophysm; since it is impossible for you to know any thing of the Cause, but what you have antecedently, not infer'd, but discover'd to the full, in the Effect.

BUT what must a Philosopher judge of those vain Reasoners, who, instead of regarding the present Life and the present Scene of Things, as the sole Object of their Contemplation, so far reverse the whole Course of Nature, as to render it merely a Passage to something farther; a Porch, which leads to a greater, and vastly different Building; a Prologue, which serves merely to introduce the Piece, and give it more Grace and Propriety? Whence, do you think, can such Philosophers derive their Idea of the Gods? From their own Conceit and Imagination surely. For if they deriv'd it from the present Phænomena, it would never point to any thing farther, but must be exactly adjusted to them. That the Divinity may *possibly* possess Attributes, which we have never seen exerted; may be govern'd by Principles of Action, which we cannot discover to be satisfy'd: All this will freely be allow'd. But still this is mere *Possibility* and *Hypothesis*. We never can have Reason to *infer* any Attributes, or any Principles of Action in him, but so far as we know them to have been exerted and satisfy'd.

Are there any Marks of a distributive Justice in the World? If you answer in the Affirmative, I conclude, that, since Justice here exerts itself, it is satisfy'd. If you reply in the Negative, I conclude, that you have then no Reason to ascribe Justice to the Gods. If you hold a Medium betwixt Affirmation and Negation, by saying, that the Justice of the Gods, at present, exerts itself in Part, but not in its full Extent; I answer, that you have no Reason to give it any

particular Extent, but only so far as you see it, *at present*, exert itself.

THUS I bring the Dispute, O *Athenians*, to a short Issue with my Antagonists. The Course of Nature lies open to my Contemplation as well as theirs. The experienc'd Train of Events is the great Standard, by which we all regulate our Conduct. Nothing else can be appeal'd to, in the Field, or in the Senate. Nothing else ought ever to be heard of, in the School, or in the Closet. In vain, would our limited Understandings break thro' these Bounds, which are too narrow for our fond Imagination. While we argue from the Course of Nature, and infer a particular intelligent Cause, which first bestow'd, and still preserves Order in the Universe, we embrace a Principle, which is both uncertain and useless. 'Tis uncertain; because the Subject lies entirely beyond the Reach of human Experience. 'Tis useless; because our Knowledge of this Cause being deriv'd entirely from the Course of Nature, we can never, according to any Rules of just Reasoning, return back from the Cause with any new Inferences, or making Additions to the common and experienc'd Course of Nature, establish any new Principles of Conduct and Behaviour.

I OBSERVE, (says I, finding he had finish'd his Harangue) that you neglect not the Artifice of the Demagogues of old; and as you was pleas'd to make me stand for the People, you insinuate yourself into my Favour, by embracing those Principles, to which, you know, I have always express'd a

particular Attachment. But allowing you to make Experience (as indeed I think you ought) the only Standard of your Judgment concerning this, and all other Questions of Fact; I doubt not but it may be possible, from the very same Experience you appeal to, to refute this Reasoning, which you have put into the Mouth of *Epicurus*. If you saw, for Instance, a half-finish'd Building, surrounded with Heaps of Bricks and Stones and Mortar, and all the Instruments of Masonry; could you not *infer* from the Effect, that it was a Work of Design and Contrivance? And could you not return again, from this infer'd Cause, to infer new Additions to the Effect, and conclude, that the Building would soon be finish'd, and receive all the farther Improvements, which Art could bestow upon it? If you saw, upon the Sea-shore, the Print of one human Foot, you would conclude, that a Man had pass'd that Way, and that he had also left the Traces of the other Foot, tho' effac'd by the rolling of the Sands or Inundation of the Waters. Why then do you refuse to admit the same Method of Reasoning with regard to the Order of Nature? Consider the World and the present Life only as an imperfect Building, from which you can infer a superior Intelligence; and arguing from that superior Intelligence, which can leave nothing imperfect; why may you not infer a more finish'd Scheme or Plan, which will receive its Completion in some distant Period of Space or Time? Are not these Methods of Reasoning exactly parallel? And under what Pretext, can you embrace the one, while you reject the other?

THE infinite Difference of the Subjects, reply'd he, is a sufficient Foundation for this Difference in my Arguments and Conclusions. In Works of *human* Art and Contrivance, 'tis allowable to advance from the Effect, to the Cause, and returning back from the Cause, form new Inferences concerning the Effect, and examine the Alterations, which it has probably undergone, or may still undergo. But what is the Foundation of this Method of Reasoning? Plainly this; that Man is a Being, whom we know by Experience, whose Motives and Designs we are acquainted with, and whose Projects and Inclinations have a certain Connexion and Coherence, according to the Laws, which Nature has establish'd for the Government of such a Creature. When, therefore, we find, that any Work has proceeded from the Skill and Industry of Man; as we are otherwise acquainted with the Nature of the Animal; we can draw a hundred Inferences concerning what may be expected from him; and these Inferences will all be founded on Experience and Observation. But did we know Man only from the single Work or Production, which we examine, 'twere impossible for us to argue in this Manner; because our Knowledge of all the Qualities, which we ascribe to him, being in that Case deriv'd from the Production, 'tis impossible they could point to any thing farther, or be the Foundation of any new Inferences. The Print of a Foot in the Sand can only prove, when consider'd alone, that there was some Pigure adapted to it, by which it was produc'd: But the Print of a human Foot proves likewise, from our other Experience, that there was probably another Foot, which also left its Impression,

tho' essac'd by Time or other Accidents. Here we mount from the Effect to the Cause; and descending again from the Cause, infer Alterations in the Effect; but this is not a Continuation of the same simple Chain of Reasoning. We comprehend in this Case a hundred other Experiences and Observations, concerning the *usual* Figure and Members of that Species of Animal, without which this Method of Argument must be consider'd as altogether fallacious and sophistical.

THE Case is not the same with our Reasonings from the Works of Nature. The Deity is known to us only by his Productions, and is a single Being in the Universe, not comprehended under any Species or Genus, from whose experienc'd Attributes or Qualities, we can by Analogy, infer any Attribute or Quality in him. As the Universe shows Wisdom and Goodness, we infer Wisdom and Goodness: As it shows a particular Degree of these Perfections, we infer a particular Degree of them, precisely adapted to the Effect we examine. But farther Attributes or farther Degrees of the same Attributes, we can never be authoriz'd to infer or suppose, by any Rules of just Reasoning. Now without some such Licence of Supposition, 'tis impossible for us to argue from the Cause, or infer any Alteration in the Effect, beyond what has immediately fallen under our Observation. Greater Good produc'd by this Being must still prove a greater Degree of Goodness: More impartial Distribution of Rewards and Punishments must proceed from a superior Regard to

Justice and Equity. Every suppos'd Addition to the Works of Nature makes an Addition to the Attributes of the Author of Nature; and consequently, being altogether unsupported by any Reason or Argument, can never be admitted but as mere Conjecture and Hypothesis.

In general, it may, I think, be establish'd as a Maxim, that where any Cause is known only by its particular Effects, it must be impossible to infer any new Effects from that Cause; since the Qualities, which are requisite to produce these new Effects, along with the former, must either be different, or superior, or of more extensive Operation, than those which simply produc'd the Effect, whence alone the Cause is suppos'd to be known to us^[4]. We can never, therefore, have any Reason to suppose the Existence of these Qualities.

THE great Source of our Mistake in this Subject, and of the unbounded Licence of Conjecture, which we indulge, is, that we tacitly consider ourselves, as in the Place of the supreme Being, and conclude, that he will, on every Occasion, observe the same Conduct, which we ourselves, in his Situation, would have embrac'd as reasonable and eligible. But besides, that the ordinary Course of Nature may convince us, that almost every Thing is regulated by Principles and Maxims very different from ours; besides this, I say, it must evidently appear contrary to all Rules of Analogy to reason from the Intentions and Projects of Men to those of a Being so different, and so much superior. In

human Nature, there is a certain experienc'd Consistency and Coherence of Designs and Inclinations; so that when, from any Facts, we have discover'd one Aim or Intention of any Man, it may often be reasonable, from Experience, to infer another, and draw a long Chain of Conclusions concerning his past or future Conduct. But this Method of Reasoning never can take place with regard to a Being, so remote and incomprehensible, who bears less Analogy to any other Being in the Universe than the Sun to a waxen Taper, and who discovers himself only by some faint Traces or Outlines, beyond which we have no Authority to ascribe to him any Attribute or Perfection. What we imagine to be a superior Perfection may really be a Defect. Or were it ever so much a Perfection, the ascribing it to the supreme Being, where it appears not to have been really exerted, to the full, in his Works, savours more of Flattery and Panegyric, than of just Reasoning and sound Philosophy. All the Philosophy, therefore, in the World, and all the Religion, which is nothing but a Species of Philosophy, will never be able to carry us beyond the usual Course of Experience, or give us different Measures of Conduct and Behaviour, from those which are furnish'd by Reflections on common Life. No new Fact can ever be infer'd from the religious Hypothesis; no Event foreseen or foretold; no Reward or Punishment expected or dreaded, beyond what is already known by Practice and Observation. So that my Apology for *Epicurus* will still appear solid and satisfactory; nor have the political Interests of Society any Connexion with

the philosophical Disputes concerning Metaphysics and Religion.

THERE is still one Circumstance, reply'd I, which you seem to have overlook'd. Tho' I should allow your Premises, I must still deny your Conclusion. You conclude, that religious Doctrines and Reasonings can have no Influence on Life, because they *ought* to have no Influence; never considering, that Men reason not in the same Manner you do, but draw many Consequences from the Belief of a divine Existence, and suppose, that the Deity will inflict Punishments on Vice, and bestow Rewards on Virtue, beyond what appears in the ordinary Course of Nature. Whether this Reasoning of theirs be just or not, is no Matter. Its Influence on their Life and Conduct must still be the same. And those, who attempt to disabuse them of such Prejudices, may, for aught I know, be good Reasoners, but I cannot allow them to be good Citizens and Politicians; since they free Men from one Restraint upon their Passions, and make the Infringement of the Laws of Equity and Society, in one Respect, more easy and secure.

AFTER all, I may, perhaps, agree to your general Conclusion in favour of Liberty, tho' upon different Premises from those, on which you endeavour to found it. I think the State ought to tolerate every Principle of Philosophy; nor is there an Instance of any Government's suffering in its political Interests by such Indulgence. There is no Enthusiasm among Philosophers; their Doctrines are not very alluring to

the People; and no Restraint can be put upon their Reasonings, but what must be of dangerous Consequence to the Sciences, and even to the State, by paving the Way for Persecution and Oppression in Points, wherein the Generality of Mankind are more deeply interested and concern'd.

BUT there occurs to me, (continu'd I) with regard to your main Topic a Difficulty, which I shall just propose to you, without insisting on it, lest it lead into Reasonings of too nice and delicate a Nature. In a Word, I much doubt, whether it be possible for a Cause to be known only by its Effect (as you have all along suppos'd) or to be of so singular and particular a Nature as to have no Parallel and no Similarity with any other Cause or Object, that has ever fallen under our Observation. 'Tis only when two *Species* of Objects are found to be constantly conjoin'd, that we can infer the one from the other; and were an Effect presented, which was entirely singular, and could not be comprehended under any known *Species*; I do not see, that we could form any Conjecture or Inference at all concerning its Cause. If Experience and Observation and Analogy be, indeed, the only Guides we can reasonably follow in Inferences of this Nature; both the Effect and Cause must bear a Similarity and Resemblance to other Effects and Causes, which we know, and which we have found, in many Instances, to be conjoin'd with each other. I leave it to your own Reflections to prosecute the Consequences of this Principle. I shall just observe, that as

the Antagonists of *Epicurus* always suppose the Universe, an Effect quite singular and unparallel'd, to be the Proof of a Deity, a Cause no less singular and unparallel'd; your Reasonings, upon that Supposition, seem, at least, to merit our Attention. There is, I own, some Difficulty, how we can ever return from the Cause to the Effect, and reasoning from our Ideas of the former, infer any Alteration on, or Addition to, the latter.

1. ↑ Luciani συμπ: ἥ, λκπιθαι

2. ↑ Id. ευνουκος

3. ↑ Id. & Dio.

4. ↑ To say that the new Effects proceed only from a Continuation of the same Energy, which is already known from the first Effects, will not remove the Difficulty. For even granting this to be the Case, (which can seldom be suppos'd) the very Continuation and Exertion of a like Energy (for 'tis impossible it can be absolutely the same) I say, this Exertion of a like Energy in a different Period of Space and Time is a very arbitrary Supposition, and what there cannot possibly be any Traces of in the Effects, from which all our Knowledge of the Cause is originally deriv'd. Let the *infer'd* Cause be exactly proportion'd (as it should be) to the known Effect; and 'tis impossible it can possess any Qualities, from which new or different Effects can be *infer'd*.

ESSAY XII.

Of the ACADEMICAL or SCEPTICAL PHILOSOPHY.

PART I.

HERE is not a greater Number of philosophical Reasonings, display'd upon any Subject, than those to prove the Existence of a Deity, and refute the Fallacies of *Atheists*; and yet the most religious Philosophers still dispute whether any Man can be so blinded as to be a speculative Atheist. How shall we reconcile these Contradictions? The Knight-Errants, who wander'd about to clear the World of Dragons and Giants, never entertain'd the least Doubt concerning the Existence of these Monsters.

THE *Sceptic* is another Enemy of Religion, who naturally provokes the Indignation of all Divines and graver Philosophers; tho' 'tis certain no one ever met with any such absurd Creature, or convers'd with a Man, who had no Opinion or Principle concerning any Subject, either of Action or Speculation. This begets a very natural Question; What is meant by a *Sceptic*? And how far it is possible to

push these philosophical Principles of Doubt and Uncertainty?

THERE is a Species of Scepticism, *antecedent* to all Study and Philosophy, which is much inculcated by Des Cartes and others, as a sovereign Preservative against Error and precipitate Judgment. It recommends an universal Doubt, not only of all our former Opinions and Principles, but also of our very Faculties; of whose Veracity, say they, we must assure ourselves, by a Chain of Reasoning, deduc'd from some original Principle, which cannot possibly be fallacious or deceitful. But neither is there any such original Principle, which has a Prerogative above others, that are self-evident and convincing: Or if there were, could we advance a Step beyond it, but by the Use of those very Faculties, of which we are suppos'd to be already diffident. The *Cartesian* Doubt, therefore, were it ever possible, to be attain'd by any human Creature (as it plainly is not) would be altogether incurable; and no Reasoning could ever bring us to a State of Assurance and Conviction upon any Subject.

It must, however, be confess'd, that this Species of Scepticism, when more moderate, may be understood in a very reasonable Sense, and is a necessary Preparative to the Study of Philosophy, by preserving a proper Impartiality in our Judgments, and weaning our Minds from all those Prejudices, which we may have imbib'd from Education or rash Opinion. To begin with clear and self-evident Principles, to advance by timorous and sure Steps, to review

frequently our Conclusions, and examine accurately all their Consequences; tho' by this Means we shall make both a slow and a short Progress in our Systems; is the only Method, by which we can ever hope to reach Truth, and attain a proper Stability and Certainty in our Determinations.

THERE is another Species of Scepticism, consequent to Science and Enquiry; where Men are suppos'd to have discover'd, either the absolute Fallaciousness of their Mental Faculties, or their Unfitness to reach any fix'd Determination in all those curious Subjects of Speculation, about which they are commonly employ'd. Even our very Senses are brought into Dispute by this Species of Philosophers; and the Maxims of common Life are subjected to the same Doubt as the most profound Principles or Conclusions of Metaphysics and Theology. As these paradoxical Tenets (if they may be call'd so) are to be met with in some Philosophers, and the Refutation of them in several, they naturally excite our Curiosity, and make us enquire into the Arguments, on which they may be founded.

I NEED not insist upon the more trite Topics, employ'd by the Sceptics in all Ages, against the Evidence of *Sense*; such as those deriv'd from the Imperfection and Fallaciousness of our Organs, on numberless Occasions; the crooked Appearance of an Oar in Water; the various Aspects of Objects, according to their different Distances; the double Images, that arise from the pressing one Eye with the

Finger; with many other Appearances of a like Nature. These sceptical Topics, indeed, are only sufficient to prove, that the Senses alone are not implicitly to be depended on; but that we must correct their Evidence by Reason, and by Considerations, deriv'd from the Nature of the Medium, the Distance of the Object, and the Disposition of the Organ, in order to render them, within their Sphere, the proper *Criteria* of Truth and Falshood. There are other more profound Arguments against the Senses, which admit not of so easy a Solution.

It seems evident, that Men are carry'd, by a natural Instinct or Prepossession, to repose Faith in their Senses; and that, without any Reasoning, or even almost before the Use of Reason, we always suppose an external Universe, which depends not on our Perception, but would exist, tho' we and every sensible Creature were absent or annihilated. Even the Animal Creation are govern'd by a like Opinion, and preserve this Belief of external Objects, in all their Thoughts, Designs, and Actions.

It seems also evident, that when Men follow this blind and powerful Instinct of Nature, they always suppose the very Images, presented by the Senses, to be the external Objects, and never entertain any Suspicion, that the one are nothing but Representations of the other. This very Table, which we see white, and which we feel hard, is believ'd to exist, independent of our Perception, and to be something external to our Mind, which perceives it. Our Presence bestows not

Being on it: Our Absence annihilates it not. It preserves its Existence, uniform and entire, independent of the Situation of intelligent Beings, who perceive or contemplate it.

BUT this universal and primary Opinion of all Men is soon destroy'd by the slightest Philosophy, which teaches us, that nothing can ever be present to the Mind but an Image or Perception, and that the Senses are only the Inlets, thro' which these Images are receiv'd, without being ever able to produce any immediate Intercourse betwixt the Mind and the Object. The Table we see seems to diminish as we remove farther from it: But the real Table, which exists, independent of us, suffers no Alteration: It was, therefore, nothing but its Image, which was present to the Mind. These are the obvious Dictates of Reason; and no Man, who reflects, ever doubted, that the Existences, which we consider, when we say, *this House and that Tree*, are nothing but Perceptions in the Mind, and fleeting Copies or Representations of other Existences, which remain uniform and independent.

SO far, then, are we necessitated by Reasoning to depart from, or contradict the primary Instincts of Nature, and embrace a new System with regard to the Evidence of our Senses. But here Philosophy finds itself extremely embarrass'd, when it would justify this new System, and obviate the Cavils and Objections of the Sceptics. It can no longer plead the infallible and irresistible Instinct of Nature: For that led us to a quite different System, which is

acknowledg'd fallible and even erroneous. And to justify this pretended philosophical System, by a Chain of clear and convincing Argument, or even any Appearance of Argument, exceeds the Power of all human Capacity.

By what Argument can it be prov'd, that the Perceptions of the Mind must be caus'd by external Objects, entirely different from, tho' resembling them (if that be possible) and could not arise either from the Energy of the Mind itself, or from the Suggestion of some invisible and unknown Spirit, or from some other Cause still more unknown to us? 'Tis acknowledg'd, that, in fact, many of these Perceptions arise not from any thing external, as in Dreams, Madness, and other Diseases. And nothing can be more inexplicable than the Manner, in which Body should so operate upon Mind as ever to convey an Image of itself to a Substance suppos'd of so different, and even contrary a Nature.

'Tis a Question of Fact, whether the Perceptions of the Senses be produc'd by external Objects, resembling them: How shall this Question be determin'd? By Experience surely, as all other Questions of a like Nature. But here Experience is, and must be entirely silent. The Mind has never any thing present to it but the Perceptions, and cannot possibly reach any Experience of their Connexion with Objects. The Supposition of such a Connexion is, therefore, without any Foundation in Reasoning.

To have recourse to the Veracity of the supreme Being, in order to prove the Veracity of our Senses, is surely making a very unexpected Circuit. If his Veracity were at all concern'd in this Matter, our Senses would be entirely infallible; because it is not possible he can ever deceive. Not to mention, that if the external World be once call'd in doubt, we shall be at a loss to find Arguments, by which we may prove the Existence of that Being or any of his Attributes.

This therefore is a Topic, in which the profounder and more philosophical Sceptics will always triumph, when they endeavour to introduce an universal Doubt into all Subjects of human Knowledge and Enquiry. Do you follow the Instincts and Propensities of Nature, may they say, in assenting to the Veracity of Sense? But these lead you to believe, that the very Perception or sensible Image is the external Object. Do you disclaim this, in order to embrace a more rational Principle, that the Perceptions are only Representations of something external? You here depart from your natural Propensities and more obvious Sentiments; and yet are not able to satisfy your Reason, which can never find any convincing Argument from Experience to prove, that the Perceptions are connected with any external Objects.

THERE is another Sceptical Topic of a like Nature, deriv'd from the most profound Philosophy; which might merit our Attention were it requisite to dive so deep, in order to

discover Arguments and Reasonings, that can serve so little any serious Purpose or Intention. 'Tis universally allow'd by modern Enquirers, that all the sensible Qualities of Objects, such as hard, soft, hot, cold, white, black, &c. are merely secondary, and exist not in the Objects themselves, but are Perceptions in the Mind, without any external Archetype or Model, which they represent. If this be allow'd, with regard to secondary Qualities, it must also follow with regard to the suppos'd primary Qualities of Extension and Solidity; nor can the latter be any more entitled to that Denomination than the former. The Idea of Extension is entirely acquir'd from the Senses of Sight and Feeling; and if all the Qualities, perceiv'd by the Senses, be in the Mind, not in the Object, the same Conclusion must reach the Idea of Extension, which is wholly dependent on the sensible Ideas or the Ideas of secondary Qualities. Nothing can save us from this Conclusion, but the asserting, that the Ideas of those primary Qualities are attain'd by *Abstraction*; which, if we examine accurately, we shall find to be unintelligible, and even absurd. An Extension, that is neither tangible nor visible, cannot possibly be conceiv'd: and a tangible or visible Extension, which is neither hard nor soft, black nor white, is equally beyond the Reach of human Conception. Let any Man try to conceive a Triangle in general, which is neither *Isoceles*, nor *Scalenum*, nor has any particular Length nor Proportion of Sides; and he will soon perceive the Absurdity of all the scholastic Notions with regard to Abstraction and general Ideas^[1].

THUS the first philosophical Objection to the Evidence of Sense or to the Opinion of external Existence consists in this, that such an Opinion, if rested on natural Instinct, is contrary to Reason, and if refer'd to Reason, is contrary to natural Instinct, and at the same time, carries no rational Evidence with it, to convince an impartial Enquirer. The second Objection goes farther, and represents this Opinion as contrary to Reason; at least, if it be a Principle of Reason, that all sensible Qualities are in the Mind, not in the Object.

PART II.

IT may seem a very extravagant Attempt of the Sceptics to destroy *Reason* by Argument and Ratiocination; yet this is the grand Scope of all their Enquiries and Disputes. They endeavour to find Objections, both to our abstract Reasonings, and to those which regard Matter of Fact and Existence.

THE chief Objection against all *abstract* Reasonings is deriv'd from the Nature of Space and Time, which, in common Life and to a careless View, seem very clear and intelligible, but when they pass thro' the Scrutiny of the profound Sciences (and they are the chief Object of these Sciences) afford Principles and Notions full of Absurdity and Contradiction. No priestly *Dogmas*, invented on

purpose to tame and subdue the rebellious Reason of Mankind, ever shock'd common Sense more than the Doctrine of the infinite Divisibility of Extension, with all its Consequences; as they are pompously display'd by all Geometricians and Metaphysicians, with a kind of Triumph and Exultation. A real Quantity, infinitely less than any finite Quantity, containing Quantities, infinitely less than itself, and so on, *in infinitum*; this is an Edifice so bold and prodigious, that it is too weighty for any pretended Demonstration to support, because it shocks the clearest and most natural Principles of human Reason^[2]. But what renders the Matter more extraordinary, is, that these absurd Opinions are supported by a Chain of Reason, the clearest and most natural; nor does it seem possible for us to allow the Premises, without admitting the Consequences. Nothing can be more convincing and satisfactory than all the Conclusions concerning the Properties of Circles and Triangles; and yet, when these are once receiv'd, how can we deny, that the Angle of Contact betwixt a Circle and its Tangent is infinitely less than any rectilineal Angle, that as you may encrease the Diameter of the Circle *in infinitum*, this Angle of Contact becomes still less, even *in infinitum*, and that the Angle of Contact betwixt other Curves and their Tangents may be infinitely less than those betwixt any Circle and its Tangent, and so on, *in infinitum*? The Demonstration of these Principles seems as unexceptionable as that which proves the three Angles of a Triangle to be equal to two right ones; tho' the latter Opinion be natural and easy, and the former big with

Contradiction and Absurdity. Reason here seems to be thrown into a kind of Amazement and Suspence, which, without the Suggestions of any Sceptic, gives her a Diffidence of herself, and of the Ground she treads on. She sees a full Light, which illuminates certain Places; but that Light borders upon the most profound Darkness. And betwixt these she is so dazzled and confounded, that she scarce can pronounce with Certainty and Assurance concerning any one Object.

THE Absurdity of these bold Determinations of the abstract Sciences becomes, if possible, still more palpable with regard to Time than Extension. An infinite Number of real Parts of Time, passing in Succession, and exhausted one after another, is so evident a Contradiction, that no Man, one should think, whose Judgment is not corrupted, instead of being improv'd, by the Sciences, would ever be able to admit of it.

YET still Reason must remain restless and unquiet, even with regard to that Scepticism, to which she is led by these Absurdities and Contradictions. How any clear, distinct Idea can contain Circumstances, contradictory to itself, or to any other clear, distinct Idea, is absolutely incomprehensible; and is, perhaps, as absurd as any Proposition, which can be form'd. So that nothing can be more sceptical, or more full of Doubt and Hesitation, than this Scepticism itself, which arises from some of the absurd Conclusions of Geometry or the Science of Quantity^[3].

THE sceptical Objections to *moral* Evidence or to the Reasonings concerning Matter of Fact are either *popular* or *philosophical*. The popular Objections are deriv'd from the natural Weakness of human Understanding; the contradictory Opinions, which have been entertain'd in different Ages and Nations; the Variations of our Judgment in Sickness and Health, Youth and Old-age, Prosperity and Adversity; the perpetual Contradiction of each particular Man's Opinions and Sentiments; with many other Topics of that Kind. 'Tis needless to insist farther on this Head. These Objections are but weak. For as in common Life, we reason every Moment concerning Fact and Existence, and cannot possibly subsist, without continually employing this Species of Argument, any popular Objections, deriv'd from thence, must be insufficient to destroy that Evidence. The great Subverter of *Pyrrhonism* or the excessive Principles of Scepticism, is Action, and Employment, and the Occupations of common Life. They may flourish and triumph in the Schools; where it is, indeed, difficult, if not impossible to refute them. But as soon as they leave the Shade, and by the Presence of the real Objects, which actuate our Passions and Sentiments, are put in Opposition to the more powerful Principles of our Nature, they vanish, like Smoak, and leave the most determin'd Sceptic in the same Condition as other Mortals.

THE Sceptic, therefore, had better keep in his proper Sphere, and display those *philosophical* Objections, which arise from more profound Researches. Here he seems to have

ample Matter of Triumph; while he justly insists, that all our Evidence for any Matter of Fact, which lies beyond the Testimony of Sense or Memory, is deriv'd entirely from the Relation of Cause and Effect; that we have no other Idea of this Relation than that of two Objects, which have been frequently *conjoin'd* together; that we have no Arguments to convince us, that Objects, which have, in our Experience, been frequently conjoin'd, will likewise, in other Instances, be conjoin'd in the same Manner; and that nothing leads us to this Inference but Custom or a certain Instinct of our Nature, which 'tis indeed difficult to resist; but which, like other Instincts, may also be fallacious and deceitful. While the Sceptic insists upon these Topics, he shows his Force, or rather, indeed, his own and our Weakness; and seems, for the Time, at least, to destroy all Assurance and Conviction. These Arguments might be display'd at a greater Length, if any durable Good or Benefit to Society could ever be expected to result from them.

FOR here is the chief and most confounding Objection to *excessive Scepticism*, that no durable Good can ever result from it; while it remains in its full Force and Vigour. We need only ask such a Sceptic, *What his Meaning is? And what he proposes by all these curious Researches?* He is immediately at a stand, and knows not what to answer. A *Copernican* or *Ptolemaic*, who supports, each his different System of Astronomy, may hope to produce a Conviction, which will remain, constant and durable, with his Audience. A *Stoic* or *Epicurean* displays Principles, which may not

only be durable, but which have a mighty Effect on Conduct and Behaviour. But a *Pyrrhonian* cannot propose, that his Philosophy will have any constant Influence on the Mind: Or if it had, that its Influence would be beneficial to Society. On the contrary, he must acknowledge, if he will acknowledge any thing, that all human Life must immediately perish, were his Principles universally and steadily to prevail. All Discourse, all Action must immediately cease; and Men remain in a total Lethargy, till the Necessities of Nature, unsatisfy'd, put an end to their miserable Existence. 'Tis true; so fatal an Event is very little to be dreaded. Nature is always too strong for Principle. And tho' a *Pyrrhonian* may throw himself or others into a momentary Amazement and Confusion by his profound Reasonings; the first and most trivial Event in Life will immediately put to flight all his Doubts and Scruples, and leave him the same, in every Point of Action and Speculation, with the Philosophers of every other Sect, or with those who never concern'd themselves with any philosophical Researches. When he awakes from his Dream, he will be the first to join in the Laugh against himself, and to confess, that all his Objections are mere Amusements, and can have no other Tendency than to show us the whimsical Condition of Mankind, who must act and reason and believe; tho' they are not able, by their most diligent Enquiry, to satisfy themselves concerning the Foundation of these Operations, or to remove the Objections that may be rais'd against them.

PART III.

THERE is, indeed, a more *mitigated* Scepticism or *academical* Philosophy, which may be both durable and useful, and which may, in Part, be the Result of this *Pyrrhonism*, or *excessive* Scepticism, when its undistinguish'd Doubts are, in some measure, corrected by common Sense and Reflection. The greatest Part of Mankind are naturally apt to be affirmative and dogmatical in their Opinions; and while they see Objects only on one Side, and have no Idea of any counterbalancing Arguments, they throw themselves precipitately into the Principles, which they are inclin'd to; nor have they any Indulgence for those who entertain opposite Sentiments. To hesitate or balance perplexes their Understanding, checks their Passion, and suspends their Actions. They are, therefore, impatient till they get out of a State of Mind, which to them is so uneasy; and they think they can never remove themselves far enough from it, by the Violence of their Affirmations and Obstinacy of their Belief. But could such dogmatical Reasoners become sensible of the strange Infirmities of human Understanding, even in its most perfect State, and when most exact and cautious in its Determinations; such a Reflection would naturally inspire them with more Modesty and Reserve, and diminish their fond Opinion of themselves, and their Prejudice against Antagonists. The Illiterate may reflect on the Disposition of

the Learned, who, amidst all the Advantages of Study and Reflection, are commonly still modest and reserv'd in their Determinations: And if any of the Learned are inclin'd, from their natural Temper, to Haughtiness and Obstinacy, a small Tincture of *Pyrrhonism* may abate their Pride, by showing them, that the few Advantages, which they may have attain'd over their Fellows, are but inconsiderable, if compar'd with the universal Perplexity and Confusion, which is inherent in human Nature. In general, there is a Degree of Doubt, and Caution, and Modesty, which, in all kinds of Scrutiny and Decision, ought for ever to accompany a just Reasoner.

ANOTHER Species of *mitigated Scepticism*, which may be of Advantage to Mankind, and which may be the natural Result of the *Pyrrhonian* Doubts and Scruples, is the Limitation of our Enquiries to such Subjects as are best adapted to the narrow Capacity of human Understanding. The *Imagination* of Man is naturally sublime, delighted with whatever is remote and extraordinary, and running, without Controul, into the most distant Parts of Space and Time, to avoid the Objects, which Custom has render'd too familiar to it. A correct *Judgment* observes a contrary Method; and avoiding all distant and high Enquiries, confines itself to common Life, and to such Subjects as fall under daily Practice and Experience; leaving the more sublime Topics to the Embellishment of Poets and Orators, or the Arts of Priests and Politicians. To bring us to so salutary a Determination, nothing can be more serviceable,

than to be once thoroughly convinc'd of the Force of the *Pyrrhonian* Doubt, and of the Impossibility of any Thing, but the strong Power of natural Instinct, to free us from it. Those, who have a Propensity to Philosophy, will still continue their Researches; because they reflect, that, beside the immediate Pleasure, attending such an Occupation, philosophical Decisions are nothing but the Reflections of common Life, methodiz'd and corrected. But they will never be tempted to go beyond common Life, so long as they consider the Imperfection of those Faculties they employ, their narrow Reach, and their inaccurate Operations. While we cannot give a satisfactory Reason, why we believe, after a thousand Experiments, that a Stone will fall, or Fire burn; can we ever satisfy ourselves concerning any Determinations we may form with regard to the Origin of Worlds, and the Situation of Nature, from, and to Eternity?

THIS narrow Limitation, indeed, of our Enquiries, is, in every Respect, so reasonable, that it suffices to make the slightest Examination of the natural Powers of the human Mind, and compare them to their Objects, in order to recommend it to us. We shall then find what are the proper Subjects of Science and Enquiry.

IT seems to me, that the only Object of the abstract Sciences or of Demonstration is Quantity and Number, and that all Attempts to extend this more perfect Species of Knowledge beyond these Bounds are mere Sophistry and Illusion. As

the component Parts of Quantity and Number are entirely similar, their Relations become intricate and involv'd; and nothing can be more curious, as well as useful, than to trace, by a Variety of Mediums, their Equality or Inequality, thro' their different Appearances. But as all other Ideas are clearly distinct and different from each other, we can never advance farther, by all our Scrutiny, than to observe this Diversity, and, by an obvious Reflection, pronounce one Thing not to be another. Or if there be any Difficulty in these Decisions, it proceeds entirely from the undetermin'd Meaning of Words, which is corrected by juster Definitions. That *the Square of the Hypotenuse is equal to the Squares of the other two Sides*, cannot be known, let the Terms be ever so exactly defin'd, without a Train of Reasoning and Enquiry. But to convince us of the Truth of this Proposition, *that where there is no Property, there can be no Injustice*, 'tis only necessary to define the Terms, and explain Injustice to be a Violation of Property. This Proposition is, indeed, nothing but a more imperfect Definition. 'Tis the same Case with all those pretended syllogistical Reasonings, which may be found in every other Branch of Learning, except the Sciences of Quantity and Number; and these may safely, I think, be pronounc'd the only proper Objects of Knowledge and Demonstration.

ALL other Enquiries of Men regard only Matter of Fact and Existence; and these are evidently incapable of Demonstration. Whatever *is* may *not be*. No Negation of a Fact can involve a Contradiction. The Non-existence of any

Being, without Exception, is as clear and distinct an Idea as its Existence. The Proposition, which affirms it not to be, is no less conceivable and intelligible, than that which affirms it to be. The Case is different with the Sciences, properly so call'd. Every false Proposition is there confus'd and unintelligible. That the Cube Root of 64 is equal to the half of 10, is a false Proposition, and can never be distinctly conceiv'd. But that *Cæsar*, or the Angel *Gabriel*, or any Being never existed, may be a false Proposition, but still is perfectly conceivable, and implies no Contradiction.

THE Existence, therefore, of any Being can only be prov'd by Arguments from its Cause or its Effect; and these Arguments are founded entirely on Experience. If we reason *a priori*, any Thing may appear able to produce any Thing. The Falling of a Peeble may, for aught we know, extinguish the Sun; or the Wish of a Man controul the Planets in their Orbits. 'Tis only Experience, that teaches us the Nature and Bounds of Cause and Effect, and enables us to infer the Existence of one Object from that of another^[4]. Such is the Foundation of moral Reasoning, which forms the greatest Part of human Knowledge, and is the Source of all human Action and Behaviour.

MORAL Reasonings are either concerning particular or general Facts. All Deliberations in Life regard the former; as also all Disquisitions in History, Chronology, Geography, and Astronomy.

THE Sciences, which treat of general Facts, are Politics, natural Philosophy, Physic, Chymistry, &c. where the Qualities, Causes, and Effects of a whole Species of Objects are enquired into.

DIVINITY or Theology, as it proves the Existence of a Deity, and the Immortality of Souls, is compos'd partly of Reasonings concerning particular, and partly concerning general Facts. It has a Foundation in *Reason*, so far as it is supported by Experience. But its best and most solid Foundation is *Faith* and divine Revelation.

MORALS and Criticism are not so properly Objects of the Understanding as of Taste and Sentiment. Beauty, whether moral or natural, is felt, more properly than perceiv'd. Or if we reason concerning it, and endeavour to fix its Standard, we regard a new Fact, viz. the general Taste of Mankind, or some such Fact, which may be the Object of Reasoning and Enquiry.

WHEN we run over Libraries, persuaded of these Principles, what Havoc must we make? If we take in hand any Volume; of Divinity or School Metaphysics, for Instance; let us ask, *Does it contain any abstract Reasonings concerning Quantity or Number? No. Does it contain any experimental Reasonings concerning Matters of Fact or Existence? No.* Commit it then to the Flames: For it can contain nothing but Sophistry and Illusion.

FINIS.

1. ↑ This Argument is drawn from Dr. *Berkeley*; and indeed most of the Writings of that ingenious Author form the best Lessons of Scepticism, which are to be found either among the antient or modern Philolophers, *Bayle* not excepted. He professes, however, in his Title-Page, and undoubtedly, with great Truth, to have compos'd his Book against the Sceptics as well as against the Atheists and Free-Thinkers. But that all his Arguments, tho' otherwise intended, are, in reality, merely sceptical, appears evidently from this, *that they admit of no Answer and produce no Conviction*. Their only Effect is to cause that momentary Amazement and Irresolution and Confusion, which is the Result of Scepticism.
2. ↑ Whatever Disputes there may be about mathematical Points, we must allow, that there are physical Points; that is, Parts of Extension, which cannot be divided or lessen'd, either by the Eye or Imagination. These Images, then, which are present to the Fancy or Senses, are absolutely indivisible, and consequently must be allow'd by Mathematicians to be infinitely less than any real Part of Extension; and yet nothing appears more certain to Reason, than that an infinite

Number of them composes an infinite Extension. How much more an infinite Number of those infinitely small Parts of Extension, which are still suppos'd infinitely divisible?

3. 1 It seems to me not impossible to avoid these Absurdities and Contradictions, if it be admitted, that there is no such Thing as abstract or general Ideas, properly speaking; but that all general Ideas are, in Reality, particular ones, attach'd to a general Term, which recalls, upon Occasion, other particular ones, that resemble, in certain Circumstances, the Idea, present to the Mind. Thus when the Term, Horse, is pronounc'd, we immediately figure to ourselves the Idea of a black or a white Animal of a particular Size or Figure: But as that Term is also us'd to be apply'd to Animals of other Figures and Sizes, these Ideas, tho' not actually present to the Imagination, are easily recall'd, and our Reasoning and Conclusion proceed in the same Way, as if they were actually present. If this be admitted (as seems reasonable) it follows that all the Ideas of Quantity, upon which Mathematicians reason, are nothing but particular, and such as are suggested by the Senses and Imagination, and consequently, cannot be infinitely divisible. In general, we may pronounce, that the Ideas of *greater*, *less*, or *equal*, which are the chief Objects of Geometry, are far from being so exact or determinate as to be the Foundation of such extraordinary Inferences. Ask a Mathematician what he means, when he pronounces

two Quantities to be equal, and he must say, that the Idea of *Equality* is one of those, which cannot be defin'd, and that 'tis sufficient to place two equal Quantities before any one, in order to suggest it. Now this is an Appeal to the general Appearances of Objects to the Imagination or Senses, and consequently can never afford Conclusions so directly contrary to these Faculties. 'Tis sufficient to have dropt this Hint at present, without prosecuting it any farther. It certainly concerns all Lovers of Science not to expose themselves to the Ridicule and Contempt of the Ignorant by their absurd Conclusions; and this seems the readiest Solution of these Difficulties.

4. 1 That impious Maxim of the antient Philosophy, *Ex nihilo, nihil fit*, by which the Creation of Matter was excluded, ceases to be a Maxim, according to this Philosophy. Not only the Will of the supreme Being may create Matter; but, for aught we can know *a priori*, the Will of any other Being might create it, or any other Cause, that the most whimsical Imagination can assign.

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