

Nature (excerpted)

nature, natural, and the group of words derived from them, or allied to them in etymology, have at all times filled a great place in the thoughts and taken a strong hold on the feelings of mankind. That they should have done so is not surprising, when we consider what the words, in their primitive and most obvious signification, represent; but it is unfortunate that a set of terms which play so great a part in moral and metaphysical speculation, should have acquired many meanings different from the primary one, yet sufficiently allied to it to admit of confusion. The words have thus become entangled in so many foreign associations, mostly of a very powerful and tenacious character, that they have come to excite, and to be the symbols of, feelings which their original meaning will by no means justify; and which have made them one of the most copious sources of false taste, false philosophy, false morality, and even bad law.

The most important application of the Socratic Elenchus, as exhibited and improved by Plato, consists in dissecting large abstractions of this description; fixing down to a precise definition the meaning which as popularly used they merely shadow forth, and questioning and testing the common maxims and opinions in which they bear a part. It is to be regretted that among the instructive specimens of this kind of investigation which Plato has left, and to which subsequent times have been so much indebted for whatever intellectual clearness they have attained, he has not enriched posterity with a dialogue *περί φύσεως*. If the idea denoted by the word had been subjected to his searching analysis, and the popular commonplaces in which it figures had been submitted to the ordeal of his powerful dialectics, his successors probably would not have rushed, as they speedily did, into modes of thinking and reasoning of which the fallacious use of that word formed the corner stone; a kind of fallacy from which he was himself singularly free.

περί φύσεως
(On Nature)

According to the Platonic method which is still the best type of such investigations, the first thing to be done with so vague a term is to ascertain precisely what it means. It is also a rule of the same method, that the meaning of an abstraction is best sought for in the concrete—of an universal in the particular. Adopting this course with the word Nature, the first question must be, what is meant by the “nature” of a particular object? as of fire, of water, or of some individual plant or animal? Evidently the *ensemble* or aggregate of its powers or properties: the modes in which it acts on other things (counting among those things the senses of the observer) and the modes in which other things act upon it; to which, in the case of a sentient being, must be added, its own capacities of feeling, or being conscious. The Nature of the thing means all this; means its entire capacity of exhibiting phenomena. And since the phenomena which a thing exhibits, however much they vary in different circumstances, are always the same in the same circumstances, they admit of being described in general forms of words, which are called the *laws* of the thing’s nature. Thus it is a law of the nature of water that under the mean pressure of the atmosphere at the level of the sea, it boils at 212° Fahrenheit.

As the nature of any given thing is the aggregate of its powers and properties, so Nature in the abstract is the aggregate of the powers and properties of all things. Nature means the sum of all phenomena, together with the causes which produce them; including not only all that happens, but all that is capable of happening; the unused capabilities of causes being as much a part of the idea of Nature, as those which take effect. Since all phenomena which have been sufficiently examined are found to take place with regularity, each having certain fixed conditions, positive and negative, on the occurrence of which it invariably happens; mankind have been able to ascertain, either by direct observation or by reasoning processes grounded on it, the conditions of the occurrence of many phenomena; and the progress of science mainly consists in ascertaining those conditions. When discovered they can be expressed in general propositions, which are called laws of the particular phenomenon, and also, more generally, Laws of Nature. Thus, the truth that all material objects tend towards one another with a force directly as their masses and inversely as the square of their distance, is a law of Nature. The proposition that air and food are necessary to animal life, if it be as we have good reason to believe, true without exception, is also a law of nature, though the phenomenon of which it is the law is special, and not, like gravitation, universal.

Nature, then, in this its simplest acceptation, is a collective name for all facts, actual and possible: or (to speak more accurately) a name for the mode, partly known to us and partly unknown, in which all things take place. For the word suggests, not so much the multitudinous detail of the phenomena, as the conception which might be formed of their manner of existence as a mental whole, by a mind possessing a complete knowledge of them: to which conception it is the aim of science to raise itself, by successive steps of generalization from experience.

Such, then, is a correct definition of the word Nature. But this definition corresponds only to one of the senses of that ambiguous term. It is evidently inapplicable to some of the modes in which the word is familiarly employed. For example, it entirely conflicts with the common form of speech by which Nature is opposed to Art, and natural to artificial. For in the sense of the word Nature which has just been defined, and which is the true scientific sense, Art is as much Nature as anything else; and everything which is artificial is natural—Art has no independent powers of its own: Art is but the employment of the powers of Nature for an end. Phenomena produced by human agency, no less than those which as far as we are concerned are spontaneous, depend on the properties of the elementary forces, or of the elementary substances and their compounds. The united powers of the whole human race could not create a new property of matter in general, or of any one of its species. We can only take advantage for our purposes of the properties which we find. A ship floats by the same laws of specific gravity and equilibrium, as a tree uprooted by the wind and blown into the water. The corn which men raise for food, grows and produces its grain by the same laws of vegetation by which the wild rose and the mountain strawberry bring forth their flowers and fruit. A house stands and holds together by the natural properties, the weight and cohesion of the materials which compose it: a steam engine works by the natural expansive force of steam, exerting a pressure upon one part of a system of arrangements, which pressure, by the mechanical properties of the lever, is transferred from that to another part where it raises the weight or removes

the obstacle brought into connexion with it. In these and all other artificial operations the office of man is, as has often been remarked, a very limited one; it consists in moving things into certain places. We move objects, and by doing this, bring some things into contact which were separate, or separate others which were in contact: and by this simple change of place, natural forces previously dormant are called into action, and produce the desired effect. Even the volition which designs, the intelligence which contrives, and the muscular force which executes these movements, are themselves powers of Nature.

It thus appears that we must recognize at least two principal meanings in the word Nature. In one sense, it means all the powers existing in either the outer or the inner world and everything which takes place by means of those powers. In another sense, it means, not everything which happens, but only what takes place without the agency, or without the voluntary and intentional agency, of man. This distinction is far from exhausting the ambiguities of the word; but it is the key to most of those on which important consequences depend.

Such, then, being the two principal senses of the word Nature; in which of these is it taken, or is it taken in either, when the word and its derivatives are used to convey ideas of commendation, approval, and even moral obligation?

It has conveyed such ideas in all ages. *Naturam sequi* was the fundamental principle of morals in many of the most admired schools of philosophy. Among the ancients, especially in the declining period of ancient intellect and thought, it was the test to which all ethical doctrines were brought. The Stoics and the Epicureans, however irreconcilable in the rest of their systems, agreed in holding themselves bound to prove that their respective maxims of conduct were the dictates of nature. Under their influence the Roman jurists, when attempting to systematize jurisprudence, placed in the front of their exposition a certain *Jus Naturale*, “quod natura”, as Justinian declares in the *Institutes*, “omnia animalia docuit”:^[*] and as the modern systematic writers not only on law but on moral philosophy, have generally taken the Roman jurists for their models, treatises on the so-called Law of Nature have abounded; and references to this Law as a supreme rule and ultimate standard have pervaded literature. The writers on International Law have done more than any others to give currency to this style of ethical speculation; inasmuch as having no positive law to write about, and yet being anxious to invest the most approved opinions respecting international morality with as much as they could of the authority of law, they endeavoured to find such an authority in Nature’s imaginary code. The Christian theology during the period of its greatest ascendancy, opposed some, though not a complete, hindrance to the modes of thought which erected Nature into the criterion of morals, inasmuch as, according to the creed of most denominations of Christians (though assuredly not of Christ) man is by nature wicked. But this very doctrine, by the reaction which it provoked, has made the deistical moralists almost unanimous in proclaiming the divinity of Nature, and setting up its fancied dictates as an authoritative rule of action. A reference to that supposed standard is the predominant ingredient in the vein of thought and feeling which was opened by Rousseau, and which has infiltrated itself most widely into the modern mind, not excepting that portion of it which calls itself Christian. The doctrines of Christianity have in every

age been largely accommodated to the philosophy which happened to be prevalent, and the Christianity of our day has borrowed a considerable part of its colour and flavour from sentimental deism. At the present time it cannot be said that Nature, or any other standard, is applied as it was wont to be, to deduce rules of action with juridical precision, and with an attempt to make its application co-extensive with all human agency. The people of this generation do not commonly apply principles with any such studious exactness, nor own such binding allegiance to any standard, but live in a kind of confusion of many standards; a condition not propitious to the formation of steady moral convictions, but convenient enough to those whose moral opinions sit lightly on them, since it gives them a much wider range of arguments for defending the doctrine of the moment. But though perhaps no one could now be found who like the institutional writers of former times, adopts the so-called Law of Nature as the foundation of ethics, and endeavours consistently to reason from it, the word and its cognates must still be counted among those which carry great weight in moral argumentation. That any mode of thinking, feeling, or acting, is “according to nature” is usually accepted as a strong argument for its goodness. If it can be said with any plausibility that “nature enjoins” anything, the propriety of obeying the injunction is by most people considered to be made out: and conversely, the imputation of being contrary to nature, is thought to bar the door against any pretension on the part of the thing so designated, to be tolerated or excused; and the word unnatural has not ceased to be one of the most vituperative epithets in the language. Those who deal in these expressions, may avoid making themselves responsible for any fundamental theorem respecting the standard of moral obligation, but they do not the less imply such a theorem, and one which must be the same in substance with that on which the more logical thinkers of a more laborious age grounded their systematic treatises on Natural Law.

Is it necessary to recognize in these forms of speech, another distinct meaning of the word Nature? Or can they be connected, by any rational bond of union, with either of the two meanings already treated of? At first it may seem that we have no option but to admit another ambiguity in the term. All inquiries are either into what is, or into what ought to be: science and history belonging to the first division, art, morals and politics to the second. But the two senses of the word Nature first pointed out, agree in referring only to what is. In the first meaning, Nature is a collective name for everything which is. In the second, it is a name for everything which is of itself, without voluntary human intervention. But the employment of the word Nature as a term of ethics seems to disclose a third meaning, in which Nature does not stand for what is, but for what ought to be; or for the rule or standard of what ought to be. A little consideration, however, will show that this is not a case of ambiguity; there is not here a third sense of the word. Those who set up Nature as a standard of action do not intend a merely verbal proposition; they do not mean that the standard, whatever it be, should be *called* Nature; they think they are giving some information as to what the standard of action really is. Those who say that we ought to act according to Nature do not mean the mere identical proposition that we ought to do what we ought to do. They think that the word Nature affords some external criterion of what we should do; and if they lay down as a rule for what ought to be, a word which in its proper signification denotes what is, they do so because they have a notion, either

clearly or confusedly, that what is, constitutes the rule and standard of what ought to be.

The examination of this notion, is the object of the present Essay. It is proposed to inquire into the truth of the doctrines which make Nature a test of right and wrong, good and evil, or which in any mode or degree attach merit or approval to following, imitating, or obeying Nature. To this inquiry the foregoing discussion respecting the meaning of terms, was an indispensable introduction. Language is as it were the atmosphere of philosophical investigation, which must be made transparent before anything can be seen through it in the true figure and position. In the present case it is necessary to guard against a further ambiguity, which though abundantly obvious, has sometimes misled even sagacious minds, and of which it is well to take distinct note before proceeding further. No word is more commonly associated with the word Nature, than Law; and this last word has distinctly two meanings, in one of which it denotes some definite portion of what is, in the other, of what ought to be. We speak of the law of gravitation, the three laws of motion, the law of definite proportions in chemical combination, the vital laws of organized beings. All these are portions of what is. We also speak of the criminal law, the civil law, the law of honour, the law of veracity, the law of justice; all of which are portions of what ought to be, or of somebody's suppositions, feelings, or commands respecting what ought to be. The first kind of laws, such as the laws of motion, and of gravitation, are neither more nor less than the observed uniformities in the occurrence of phenomena: partly uniformities of antecedence and sequence, partly of concomitance. These are what, in science, and even in ordinary parlance, are meant by laws of nature. Laws in the other sense are the laws of the land, the law of nations, or moral laws; among which, as already noticed, is dragged in, by jurists and publicists, something which they think proper to call the Law of Nature. Of the liability of these two meanings of the word to be confounded there can be no better example than the first chapter of Montesquieu;^[*] where he remarks, that the material world has its laws, the inferior animals have their laws, and man has his laws; and calls attention to the much greater strictness with which the first two sets of laws are observed, than the last; as if it were an inconsistency, and a paradox, that things always are what they are, but men not always what they ought to be. A similar confusion of ideas pervades the writings of Mr. George Combe, from whence it has overflowed into a large region of popular literature, and we are now continually reading injunctions to obey the physical laws of the universe, as being obligatory in the same sense and manner as the moral. The conception which the ethical use of the word Nature implies, of a close relation if not absolute identity between what is and what ought to be, certainly derives part of its hold on the mind from the custom of designating what is, by the expression "laws of nature," while the same word Law is also used, and even more familiarly and emphatically, to express what ought to be.

When it is asserted, or implied, that Nature, or the laws of Nature, should be conformed to, is the Nature which is meant, Nature in the first sense of the term, meaning all which is—the powers and properties of all things? But in this signification, there is no need of a recommendation to act according to nature, since it is what nobody can possibly help doing, and equally whether he acts well or ill. There is no mode of acting which is not conformable to Nature in this sense of the term, and

all modes of acting are so in exactly the same degree. Every action is the exertion of some natural power, and its effects of all sorts are so many phenomena of nature, produced by the powers and properties of some of the objects of nature, in exact obedience to some law or laws of nature. When I voluntarily use my organs to take in food, the act, and its consequences, take place according to laws of nature: if instead of food I swallow poison, the case is exactly the same. To bid people conform to the laws of nature when they have no power but what the laws of nature give them—when it is a physical impossibility for them to do the smallest thing otherwise than through some law of nature, is an absurdity. The thing they need to be told is, what particular law of nature they should make use of in a particular case. When, for example, a person is crossing a river by a narrow bridge to which there is no parapet, he will do well to regulate his proceedings by the laws of equilibrium in moving bodies, instead of conforming only to the law of gravitation, and falling into the river.

Yet, idle as it is to exhort people to do what they cannot avoid doing, and absurd as it is to prescribe as a rule of right conduct what agrees exactly as well with wrong; nevertheless a rational rule of conduct *may* be constructed out of the relation which it ought to bear to the laws of nature in this widest acceptance of the term. Man necessarily obeys the laws of nature, or in other words the properties of things, but he does not necessarily *guide* himself by them. Though all conduct is in conformity to laws of nature, all conduct is not grounded on knowledge of them, and intelligently directed to the attainment of purposes by means of them. Though we cannot emancipate ourselves from the laws of nature as a whole, we can escape from any particular law of nature, if we are able to withdraw ourselves from the circumstances in which it acts. Though we can do nothing except through laws of nature, we can use one law to counteract another. According to Bacon's maxim, we can obey nature in such a manner as to command it.^[*] Every alteration of circumstances alters more or less the laws of nature under which we act; and by every choice which we make either of ends or of means, we place ourselves to a greater or less extent under one set of laws of nature instead of another. If, therefore, the useless precept to follow nature were changed into a precept to study nature; to know and take heed of the properties of the things we have to deal with, so far as these properties are capable of forwarding or obstructing any given purpose; we should have arrived at the first principle of all intelligent action, or rather at the definition of intelligent action itself. And a confused notion of this true principle, is, I doubt not, in the minds of many of those who set up the unmeaning doctrine which superficially resembles it. They perceive that the essential difference between wise and foolish conduct consists in attending, or not attending, to the particular laws of nature on which some important result depends. And they think, that a person who attends to a law of nature in order to shape his conduct by it, may be said to obey it, while a person who practically disregards it, and acts as if no such law existed, may be said to disobey it: the circumstance being overlooked, that what is thus called disobedience to a law of nature is obedience to some other or perhaps to the very law itself. For example, a person who goes into a powder magazine either not knowing, or carelessly omitting to think of, the explosive force of gunpowder, is likely to do some act which will cause him to be blown to atoms in obedience to the very law which he has disregarded.

But however much of its authority the “*Naturam sequi*” doctrine may owe to its being confounded with the rational precept “*Naturam observare*,” its favourers and promoters unquestionably intend much more by it than that precept. To acquire knowledge of the properties of things, and make use of the knowledge for guidance, is a rule of prudence, for the adaptation of means to ends; for giving effect to our wishes and intentions whatever they may be. But the maxim of obedience to Nature, or conformity to Nature, is held up not as a simply prudential but as an ethical maxim; and by those who talk of *jus naturæ*, even as a law, fit to be administered by tribunals and enforced by sanctions. Right action, must mean something more and other than merely intelligent action: yet no precept beyond this last, can be connected with the word Nature in the wider and more philosophical of its acceptations. We must try it therefore in the other sense, that in which Nature stands distinguished from Art, and denotes, not the whole course of the phenomena which come under our observation, but only their spontaneous course.

Let us then consider whether we can attach any meaning to the supposed practical maxim of following Nature, in this second sense of the word, in which Nature stands for that which takes place without human intervention. In Nature as thus understood, is the spontaneous course of things when left to themselves, the rule to be followed in endeavouring to adapt things to our use? But it is evident at once that the maxim, taken in this sense, is not merely, as it is in the other sense, superfluous and unmeaning, but palpably absurd and self-contradictory. For while human action cannot help conforming to Nature in the one meaning of the term, the very aim and object of action is to alter and improve Nature in the other meaning. If the natural course of things were perfectly right and satisfactory, to act at all would be a gratuitous meddling, which as it could not make things better, must make them worse. Or if action at all could be justified, it would only be when in direct obedience to instincts, since these might perhaps be accounted part of the spontaneous order of Nature; but to do anything with forethought and purpose, would be a violation of that perfect order. If the artificial is not better than the natural, to what end are all the arts of life? To dig, to plough, to build, to wear clothes, are direct infringements of the injunction to follow nature.

Accordingly it would be said by every one, even of those most under the influence of the feelings which prompt the injunction, that to apply it to such cases as those just spoken of, would be to push it too far. Everybody professes to approve and admire many great triumphs of Art over Nature: the junction by bridges of shores which Nature had made separate, the draining of Nature’s marshes, the excavation of her wells, the dragging to light of what she has buried at immense depths in the earth; the turning away of her thunderbolts by lightning rods, of her inundations by embankments, of her ocean by breakwaters. But to commend these and similar feats, is to acknowledge that the ways of Nature are to be conquered, not obeyed: that her powers are often towards man in the position of enemies, from whom he must wrest, by force and ingenuity, what little he can for his own use, and deserves to be applauded when that little is rather more than might be expected from his physical weakness in comparison to those gigantic powers. All praise of Civilization, or Art, or Contrivance, is so much dispraise of Nature; an admission of imperfection, which it is man’s business, and merit, to be always endeavouring to correct or mitigate.

The consciousness that whatever man does to improve his condition is in so much a censure and a thwarting of the spontaneous order of Nature, has in all ages caused new and unprecedented attempts at improvement to be generally at first under a shade of religious suspicion; as being in any case uncomplimentary, and very probably offensive to the powerful beings (or, when polytheism gave place to monotheism, to the all-powerful Being) supposed to govern the various phenomena of the universe, and of whose will the course of nature was conceived to be the expression. Any attempt to mould natural phenomena to the convenience of mankind might easily appear an interference with the government of those superior beings: and though life could not have been maintained, much less made pleasant, without perpetual interferences of the kind, each new one was doubtless made with fear and trembling, until experience had shown that it could be ventured on without drawing down the vengeance of the Gods. The sagacity of priests showed them a way to reconcile the impunity of particular infringements with the maintenance of the general dread of encroaching on the divine administration. This was effected by representing each of the principal human inventions as the gift and favour of some God. The old religions also afforded many resources for consulting the Gods, and obtaining their express permission for what would otherwise have appeared a breach of their prerogative. When oracles had ceased, any religion which recognized a revelation afforded expedients for the same purpose. The Catholic religion had the resource of an infallible Church, authorized to declare what exertions of human spontaneity were permitted or forbidden; and in default of this, the case was always open to argument from the Bible whether any particular practice had expressly or by implication been sanctioned. The notion remained that this liberty to control Nature was conceded to man only by special indulgence, and as far as required by his necessities; and there was always a tendency, though a diminishing one, to regard any attempt to exercise power over nature, beyond a certain degree, and a certain admitted range, as an impious effort to usurp divine power, and dare more than was permitted to man. The lines of Horace in which the familiar arts of shipbuilding and navigation are reprobated as *vetitum nefas*,^[*] indicate even in that sceptical age a still unexhausted vein of the old sentiment. The intensity of the corresponding feeling in the middle ages is not a precise parallel, on account of the superstition about dealing with evil spirits with which it was complicated: but the imputation of prying into the secrets of the Almighty long remained a powerful weapon of attack against unpopular inquirers into nature; and the charge of presumptuously attempting to defeat the designs of Providence, still retains enough of its original force to be thrown in as a make-weight along with other objections when there is a desire to find fault with any new exertion of human forethought and contrivance. No one, indeed, asserts it to be the intention of the Creator that the spontaneous order of the creation should not be altered, or even that it should not be altered in any new way. But there still exists a vague notion that though it is very proper to control this or the other natural phenomenon, the general scheme of nature is a model for us to imitate: that with more or less liberty in details, we should on the whole be guided by the spirit and general conception of nature's own ways: that they are God's work, and as such perfect; that man cannot rival their unapproachable excellence, and can best show his skill and piety by attempting, in however imperfect a way, to reproduce their likeness; and that if not the whole, yet some particular parts of the spontaneous order of nature, selected according to the speaker's predilections, are in a peculiar sense, manifestations of the Creator's will; a

sort of finger posts pointing out the direction which things in general, and therefore our voluntary actions, are intended to take. Feelings of this sort, though repressed on ordinary occasions by the contrary current of life, are ready to break out whenever custom is silent, and the native promptings of the mind have nothing opposed to them but reason: and appeals are continually made to them by rhetoricians, with the effect, if not of convincing opponents, at least of making those who already hold the opinion which the rhetorician desires to recommend, better satisfied with it. For in the present day it probably seldom happens that any one is persuaded to approve any course of action because it appears to him to bear an analogy to the divine government of the world, though the argument tells on him with great force, and is felt by him to be a great support, in behalf of anything which he is already inclined to approve.

If this notion of imitating the ways of Providence as manifested in Nature, is seldom expressed plainly and downrightly as a maxim of general application, it also is seldom directly contradicted. Those who find it on their path, prefer to turn the obstacle rather than to attack it, being often themselves not free from the feeling, and in any case afraid of incurring the charge of impiety by saying anything which might be held to disparage the works of the Creator's power. They therefore, for the most part, rather endeavour to show, that they have as much right to the religious argument as their opponents, and that if the course they recommend seems to conflict with some part of the ways of Providence, there is some other part with which it agrees better than what is contended for on the other side. In this mode of dealing with the great *à priori* fallacies, the progress of improvement clears away particular errors while the causes of errors are still left standing, and very little weakened by each conflict: yet by a long series of such partial victories precedents are accumulated, to which an appeal may be made against these powerful prepossessions, and which afford a growing hope that the misplaced feeling, after having so often learnt to recede, may some day be compelled to an unconditional surrender. For however offensive the proposition may appear to many religious persons, they should be willing to look in the face the undeniable fact, that the order of nature, in so far as unmodified by man, is such as no being, whose attributes are justice and benevolence, would have made, with the intention that his rational creatures should follow it as an example. If made wholly by such a Being, and not partly by beings of very different qualities, it could only be as a designedly imperfect work, which man, in his limited sphere, is to exercise justice and benevolence in amending. The best persons have always held it to be the essence of religion, that the paramount duty of man upon earth is to amend himself: but all except monkish quietists have annexed to this in their inmost minds (though seldom willing to enunciate the obligation with the same clearness) the additional religious duty of amending the world, and not solely the human part of it but the material; the order of physical nature.

In considering this subject it is necessary to divest ourselves of certain preconceptions which may justly be called natural prejudices, being grounded on feelings which, in themselves natural and inevitable, intrude into matters with which they ought to have no concern. One of these feelings is the astonishment, rising into awe, which is inspired (even independently of all religious sentiment) by any of the greater natural phenomena. A hurricane; a mountain precipice; the desert; the ocean, either agitated or at rest; the solar system, and the great cosmic forces which hold it together; the

boundless firmament, and to an educated mind any single star; excite feelings which make all human enterprises and powers appear so insignificant, that to a mind thus occupied it seems insufferable presumption in so puny a creature as man to look critically on things so far above him, or dare to measure himself against the grandeur of the universe. But a little interrogation of our own consciousness will suffice to convince us, that what makes these phenomena so impressive is simply their vastness. The enormous extension in space and time, or the enormous power they exemplify, constitutes their sublimity; a feeling in all cases, more allied to terror than to any moral emotion. And though the vast scale of these phenomena may well excite wonder, and sets at defiance all idea of rivalry, the feeling it inspires is of a totally different character from admiration of excellence. Those in whom awe produces admiration may be æsthetically developed, but they are morally uncultivated. It is one of the endowments of the imaginative part of our mental nature that conceptions of greatness and power, vividly realized, produce a feeling which though in its higher degrees closely bordering on pain, we prefer to most of what are accounted pleasures. But we are quite equally capable of experiencing this feeling towards maleficent power; and we never experience it so strongly towards most of the powers of the universe, as when we have most present to our consciousness a vivid sense of their capacity of inflicting evil. Because these natural powers have what we cannot imitate, enormous might, and overawe us by that one attribute, it would be a great error to infer that their other attributes are such as we ought to emulate, or that we should be justified in using our small powers after the example which Nature sets us with her vast forces.

For, how stands the fact? That next to the greatness of these cosmic forces, the quality which most forcibly strikes every one who does not avert his eyes from it, is their perfect and absolute recklessness. They go straight to their end, without regarding what or whom they crush on the road. Optimists, in their attempts to prove that “whatever is, is right,”^[*] are obliged to maintain, not that Nature ever turns one step from her path to avoid trampling us into destruction, but that it would be very unreasonable in us to expect that she should. Pope’s “Shall gravitation cease when you go by?”^[†] may be a just rebuke to any one who should be so silly as to expect common human morality from nature. But if the question were between two men, instead of between a man and a natural phenomenon, that triumphant apostrophe would be thought a rare piece of impudence. A man who should persist in hurling stones or firing cannon when another man “goes by,” and having killed him should urge a similar plea in exculpation, would very deservedly be found guilty of murder.

In sober truth, nearly all the things which men are hanged or imprisoned for doing to one another, are nature’s every day performances. Killing, the most criminal act recognized by human laws, Nature does once to every being that lives; and in a large proportion of cases, after protracted tortures such as only the greatest monsters whom we read of ever purposely inflicted on their living fellow-creatures. If, by an arbitrary reservation, we refuse to account anything murder but what abridges a certain term supposed to be allotted to human life, nature also does this to all but a small percentage of lives, and does it in all the modes, violent or insidious, in which the worst human beings take the lives of one another. Nature impales men, breaks them as if on the wheel, casts them to be devoured by wild beasts, burns them to death,

crushes them with stones like the first christian martyr, starves them with hunger, freezes them with cold, poisons them by the quick or slow venom of her exhalations, and has hundreds of other hideous deaths in reserve, such as the ingenious cruelty of a Nabis or a Domitian never surpassed. All this, Nature does with the most supercilious disregard both of mercy and of justice, emptying her shafts upon the best and noblest indifferently with the meanest and worst; upon those who are engaged in the highest and worthiest enterprises, and often as the direct consequence of the noblest acts; and it might almost be imagined as a punishment for them. She mows down those on whose existence hangs the well-being of a whole people, perhaps the prospects of the human race for generations to come, with as little compunction as those whose death is a relief to themselves, or a blessing to those under their noxious influence. Such are Nature's dealings with life. Even when she does not intend to kill, she inflicts the same tortures in apparent wantonness. In the clumsy provision which she has made for that perpetual renewal of animal life, rendered necessary by the prompt termination she puts to it in every individual instance, no human being ever comes into the world but another human being is literally stretched on the rack for hours or days, not unfrequently issuing in death. Next to taking life (equal to it according to a high authority) is taking the means by which we live; and Nature does this too on the largest scale and with the most callous indifference. A single hurricane destroys the hopes of a season; a flight of locusts, or an inundation, desolates a district; a trifling chemical change in an edible root, starves a million of people. The waves of the sea, like banditti seize and appropriate the wealth of the rich and the little all of the poor with the same accompaniments of stripping, wounding, and killing as their human antitypes. Everything in short, which the worst men commit either against life or property is perpetrated on a larger scale by natural agents. Nature has Noyades more fatal than those of Carrier; her explosions of fire damp are as destructive as human artillery; her plague and cholera far surpass the poison cups of the Borgias. Even the love of "order" which is thought to be a following of the ways of Nature, is in fact a contradiction of them. All which people are accustomed to deprecate as "disorder" and its consequences, is precisely a counterpart of Nature's ways. Anarchy and the Reign of Terror are overmatched in injustice, ruin, and death, by a hurricane and a pestilence.

But, it is said, all these things are for wise and good ends. On this I must first remark that whether they are so or not, is altogether beside the point. Supposing it true that contrary to appearances these horrors when perpetrated by Nature, promote good ends, still as no one believes that good ends would be promoted by our following the example, the course of Nature cannot be a proper model for us to imitate. Either it is right that we should kill because nature kills; torture because nature tortures; ruin and devastate because nature does the like; or we ought not to consider at all what nature does, but what it is good to do. If there is such a thing as a *reductio ad absurdum*, this surely amounts to one. If it is a sufficient reason for doing one thing, that nature does it, why not another thing? If not all things, why anything? The physical government of the world being full of the things which when done by men are deemed the greatest enormities, it cannot be religious or moral in us to guide our actions by the analogy of the course of nature. This proposition remains true, whatever occult quality of producing good may reside in those facts of nature which to our perceptions are most noxious, and which no one considers it other than a crime to produce artificially.

But, in reality, no one consistently believes in any such occult quality. The phrases which ascribe perfection to the course of nature can only be considered as the exaggerations of poetic or devotional feeling, not intended to stand the test of a sober examination. No one, either religious or irreligious, believes that the hurtful agencies of nature, considered as a whole, promote good purposes, in any other way than by inciting human rational creatures to rise up and struggle against them. If we believed that those agencies were appointed by a benevolent Providence as the means of accomplishing wise purposes which could not be compassed if they did not exist, then everything done by mankind which tends to chain up these natural agencies or to restrict their mischievous operation, from draining a pestilential marsh down to curing the toothache, or putting up an umbrella, ought to be accounted impious; which assuredly nobody does account them, notwithstanding an undercurrent of sentiment setting in that direction which is occasionally perceptible. On the contrary, the improvements on which the civilized part of mankind most pride themselves, consist in more successfully warding off those natural calamities which if we really believed what most people profess to believe, we should cherish as medicines provided for our earthly state by infinite wisdom. Inasmuch too as each generation greatly surpasses its predecessors in the amount of natural evil which it succeeds in averting, our condition, if the theory were true, ought by this time to have become a terrible manifestation of some tremendous calamity, against which the physical evils we have learnt to overmaster, had previously operated as a preservative. Any one, however, who acted as if he supposed this to be the case, would be more likely, I think, to be confined as a lunatic, than revered as a saint.