

the lives of engine-drivers have been occasionally attempted in this way, though not with dynamite, by jealous or irritated mates; but the destruction of a whole train full of passengers by men able to devise scientific methods of attack is as yet unique. There have been many murderers, actual or potential, among Englishmen, but they have, as a rule, avoided the superfluity of wickedness involved in the deliberate destruction of multitudes in order to secure the death of one, or even the pecuniary gain which might in conceivable cases arise from massacre. There have been men and must be men alive now who have approached the callousness of the Bushey criminals, — men who have sent rotten ships to sea, in the hope and with the knowledge that they were dooming the crews to death for the sake of the insurance; but they have always believed that as the ship could float when she started she *might* arrive, and that the men might escape in boats, on a raft, or through some happy accident. The criminals at Bushey must have intended murder, and wholesale murder, as an incident in their crime, and probably wished murder on a large scale to be its essential feature. The more carefully the affair is examined, the more probable does it appear that the motive was revenge, and the object to inflict a severe pecuniary loss upon the London and North-Western Railway. It is conceivable, of course, that the plotters intended to kill some one individual; and if there were more exact evidence as to the time of the attempt, this motive would require to be carefully considered. There might, for example, be some one in the Irish Mail whom an Irish Secret Society desired to destroy. No such person is, however, known; and such a Society would at once desire to be more certain of its victim, who might escape the general ruin, and be reluctant to slay so many persons with whom they had no quarrel. Such Societies rarely care to load their consciences with useless crimes, to excite needless popular hate, or to multiply tenfold the difficulty and risk of finding willing agents. True, Guy Fawkes, and Fieschi, and Orsini existed, and the Nihilist chiefs exist; but all these assassins risked or risk multitudes of lives on the ground of necessity, on the plea that they cannot reach victims so carefully guarded without sacrificing other lives. They are engaged in war, and cannot think how innocent their adversaries may individually be. There might, again, be one individual in the Scotch Mail who was the object of determined hate. The First Lord of the Admiralty, Lord Northbrook, was on board, and he might conceivably, in total unconsciousness, by some order for reduction affecting arsenal or dockyard, have earned a diabolical hate, not confined to one individual. Instances of murderous hatred felt for officials unknown to the haters are not uncommon, and Ministers of State are much more often threatened than the public is aware. In England, however, men entertaining such a sentiment would think themselves defrauded of their vengeance if they could not single out their victim, would shrink like the Societies from massacre, and would know that a First Lord was but little more protected, if at all, than any other wealthy or prominent individual. Brigandage we may assume to be nearly out of the question. It was Sunday. None of the trains carried any treasure, or any luggage likely to contain it; while an accident draws so many people, that a general plunder of the passengers would have been next to impossible. The English criminal classes dislike to mix murder with plunder, except when murder may remove all evidence, partly from the special conscience against murder created by the retention of the capital penalty, which expresses the iron decision of society on that offence, partly from the national dislike to waste of effort, and partly from a keen sense of the difference in the resulting danger. Besides the dread of the gallows, undoubtedly strong in all criminals, we hunt murderers as plunderers of any kind, unless they have endangered the Bank of England, are very rarely hunted. Excluding plunder or personal hatred, no motive is conceivable for such a crime, except that of inflicting a great injury upon the Company, whose ruling individuals are inaccessible, or nearly so, to any other mode of vengeance, or who might even be unknown. That the destruction of a train is a great injury to the Company owning the line, that it inflicts a fine large enough to be severely felt and bitterly resented, is known to everybody, while it is not equally well known that no such fine would follow the destruction of a train by external agency. There is a strong presumption, therefore, that the criminals tried to blow up the train from some motive of hatred to the Company owning the line, and chose an express train of malice prepense,

because it would be full of wealthy passengers, whose representatives or survivors could secure great damages. Anything more devilishly malignant, more opposed to the ordinary impulses of English human nature, it would be impossible to conceive, more especially if the offence the Company had given were a reduction of wages or unexpected discharge. The disproportion between motive and crime will, indeed, in that case, to many persons seem so great as to make such an explanation impossible, but they must recollect this unpleasant fact. It is nearly certain that the bitterest kind of vindictiveness felt in our modern world is roused by unexpected deprivation of the means of living. Evictions are the grand causes of murder in Ireland, and even in England murder is constantly threatened in revenge for dismissal from employments which the criminals expected to be permanent. Those dismissed grow savage to a degree which those who dismiss, who are probably not thinking of individuals at all, but of getting the work well done, are unable even to understand, and retain the feeling often for long terms of years. It is difficult for decent Englishmen to conceive that men dismissed, even unjustly dismissed, by a Company, would, to reach them, massacre a trainful of men they never saw; but it is equally difficult to conceive that an Irish tenant, in order to express his hatred of a landlord, will waylay and kill a process-server as innocent as the telegraph clerk who transmits an unpleasant message. Yet the latter case occurs every day.

Some of our contemporaries, we see, are discussing the methods of preventing such crimes. They cannot be prevented. We can make dynamite very dear, or possibly unattainable; but we cannot prevent any one with a crowbar, and the necessary wickedness and nerve, from wrecking an express train. Even the Czar, with a million of troops and half-a-million of officials and police, and a devoted peasantry, cannot do it. All we can do—and this we have never done—is to treat every such attempt, when clearly intentional and clearly brought home to the perpetrators, as murder—which morally it is—and relentlessly inflict death. Then, and not till then, the full horror of such a crime will be recognised, even by men malignant enough to conceive of its commission.

#### THE DUKE OF ARGYLL ON THE UNITY OF NATURE.

WE give a hearty welcome to the first of the series of Essays which the Duke of Argyll is to issue in the pages of the *Contemporary Review*. It would be read with interest, we believe, were it the work of some obscure man of letters. We are glad that thoughts of so much permanent value should be given to the world with the additional prestige which attaches to the writing of a man of rank and station. The readers thus attracted will not be those best fitted to appreciate what they read, but it is well that the essay before us should possess attractions for a more numerous class. It opens views of the world which Science makes known to us, touched by a light which is other than that of Science, and thus appears to us, as far as it goes, a step towards healing the great schism of our day. From some defects, very common in every treatise with which it would naturally be compared, we think it remarkably free. It deals with a subject presenting strong temptations to rhetoric, and no one would call it rhetorical; nor is it marked by the vagueness, the cloud of common-place, with which many mediators between Science and Faith endeavour to conceal the chasm they cannot bridge. The writer's meaning is definite, and the confusion from which his work is not quite free seems due rather to a certain haste in bringing together thoughts on a difficult and complicated subject, than to any real incoherence. Whether to this high negative praise we may add that which would outweigh much positive blame, must depend on the meaning which is attached to the word originality. Those who understand by it the power to produce an impression of novelty will not use it here. The ideas brought forward are not unfamiliar to the student of a certain kind of literature, and the main argument might, and indeed, if it is to be put into a small space, must be stated in terms which may seem obvious enough. But originality, as we understand it, does not consist in saying what no one has said before. It is rather a quality than a form of thought. That contagion of interest which enables the reader not only to grasp the writer's meaning, but to share his apprehension of reality, that strength of conception which makes us feel him to be dealing with things and not words,—this is what we mean by originality,

and find in the essay before us. Perhaps we shall hardly be able to justify this ascription in the abstract which we proceed to put before the reader, for it is often lost in the most careful paraphrase, sometimes even in the turn of a sentence. Our aim, however, involves the hazardous attempt, and we will try to give the Duke's argument in outline, not, however, entirely limiting ourselves to his version, but following out some suggestions in a direction which he, possibly, may not intend to open. Most of what we would set forth, however, consists of the thoughts expressed in the essay we are criticising, and often of its very words.

"What," the Duke begins by asking, "do we mean by Unity? In what sense can we say that a variety of things is, nevertheless, one?" We could wish that he had lingered over this answer, that he would have had patience, and forced his reader to have patience, to dwell at some length on the ancient problem of the Many and the One. We think that the argument would have gained in strength, if its base had been somewhat widened; its force, if we have rightly apprehended it, depends on the association of unity with life, on the exhibition of Unity of Nature as a unity of plan, and therefore as implicitly a spiritual unity. As long as we confine our attention to the inorganic world, we know nothing of unity. A pebble, indeed, is, in ordinary reckoning, its most convenient symbol, but a pebble broken in two has lost no real oneness; the two halves are two things, in the very same sense in which they combined to form one thing. Let the waves rub and roll them, and no one can tell that they ever formed one thing. In *Stoffwörter*, as the Germans call them, there is properly no plural. Without life, we have no unity, and therefore no multitude. Even in the lower forms of life, this unity is very incomplete. We do not speak of "many mosses," except in the sense which moss shares with the *Stoffwörter*,—that of many *kinds* of moss. The zoophyte is severed almost as easily as the pebble. Not till we reach the higher forms of animal life do we come in contact with any real oneness,—not till we look within, and trace that adamant thread which binds the memories of the varied past into one experience, do we reach the very origin and fount of the conception. Holding fast that thread, and turning to the world without, we discover another unity, a unity, indeed, which is impressed on every one with a variety and reiteration of illustration that makes it almost, but not entirely, a counterpart to the unity he finds within. He is weary, and the earth draws her curtain of darkness; the sensations of his bodily frame, he finds, stand in some close and delicate adjustment with the forces that move this solid earth. He takes a glimmering light for a candle in a cottage window, and discovers it to be a rising planet, seen through the trees. Light that comes across a few yards of dewy air, he discovers, obeys the same laws as light that comes across millions of miles of interstellar ether. The thought seems to us more forcible than any illustration of the thought, and unquestionably it long preceded those illustrations which have so deeply impressed the imagination of our day. It is, indeed, implied in the very name by which the imaginative Greek designated that totality of phenomena which we may well suppose an unimaginative people would leave without any name at all; the very conception of Nature as an Order, which we translate in the Greek word *Cosmos*, embodies that idea of the Unity of Nature which it is the triumph of modern science to have illustrated; a unity, moreover, which was implied, and in a certain sense exaggerated, by all the early guesses of philosophy. In the dawn of thought, when the search for an *ἄρξ* occupied the minds of all investigators of Nature, and before the world of phenomena was broken up into the domain of things and of thoughts, this idea was the starting-point of thought, and not its goal. Science did not give rise to it, rather it gave rise to Science. Of late years Bacon's claim to an honourable position in the hierarchy of Science has been fiercely disputed; it is urged, and we think truly that no sentence from his pen has ever suggested, or tended to confirm, even when by a curious chance it happened to anticipate, any physical truth. Yet to this attack his admirers may oppose, as a shield of adamant, his unquestioned influence, in suffusing with the light of a powerful imagination what we would call the hyper-physical truth of the Unity of Nature. It was known more than twenty centuries before he was born; it was not demonstrated to the logical intellect till a couple of centuries after he died. But to him it owes that glow of colour, that halo of brilliance, which has more to do with the reception of truth than even its con-

clusive proof has; he has made it a truth for the imagination, and all the distinguished men who have made it a truth for the intellect, have done less to further the progress of Science.

The fact that they have made it a truth for the intellect explains a large part of their influence. The philosophy of Science to which our generation has given rise may be briefly described, if we may borrow the favourite expression of Comte, as a *statical* and *dynamical* version of the belief that Nature is one. The dynamic statement of the Unity of Nature, is, our readers will not need to be told, the great doctrine which would, we suppose, be cited by most physicists as the most important idea of our day,—the doctrine of Evolution. Shall we be thought presumptuous if we avow that we would keep that description for that which we have named its statical version,—the Correlation of Force? It seems to us more important, for the same reason that it would, we believe, have seemed more important to Bacon. If the idea of Evolution is to be applied to the spiritual world, it must either be stripped of much definite meaning, or it must assume much that seems to us very disputable, while the doctrine of the correlation of force is applicable to a large part of the spiritual world, without any loss of either definiteness or certainty. However, we need not encumber the argument we are trying to set forth with any questionable opinion. If the first of these great ideas occupies less attention than the last, its importance, its grandeur, and (in definiteness and accuracy of statement) its novelty are not questioned by any one. What does it imply? State it in general terms,—say merely that force is transformed when it seems to vanish, and you utter a truth that is expressed as clearly by Lucretius as it could be by any scientific man of our day. But the definite illustration and accurate measurement which have brought it home to the imagination and the convictions of every student of our day, have made it practically a different truth. He only discovers who proves, and to prove is to enforce with the lessons of experience, and the impressive result of accurate prediction. For our age, therefore, the correlation of force is a new truth,—it has all the power and all the danger of new truth. Not, we think, that the importance of this truth can be exaggerated. It seems to us the widest which the study of Nature can furnish, applicable, indeed, to much more than is ordinarily understood by Nature, a key to many striking experiences in human life, and on the pages of history. Such a law cannot take too high a place in our apprehension of the Order of the Universe, we are most likely to give it a place not high enough. But our danger is—and this, we think, the Duke points out very forcibly,—that we shall overrate that part of the truth which is new, and suppose it an explanation of problems which it merely curtains off by its own complex and various interest. For instance, it was known from the beginning of sentient existence that light and heat were *united*. What have our scientific contemporaries added to that knowledge in the discovery of what has been called their *identity*? Light and heat, to speak of them as things known to the senses, are as different as two things can be. They are much more different than two opposites. Light and darkness suggest each other, and could not be known apart; but a blind man knows what heat is just as well as any of us, and it is quite conceivable that a person should have excellent eyes and be insensible to temperature. In our own day, a close and intimate connection has been revealed between these two phenomena. What is the nature of this connection? It consists simply in the discovery that the method of operation of their common cause is identical; both consist in a mode of movement; both, so far as they are united, consist in a mode of motion of the same medium. Men of science have discovered that light and heat, so far as they form objects of attention to them, may be regarded as one, and their exaggerating the importance of this aspect of the natural forces is a very important and illustrative fact. The Duke well shows that the unity which they have thus discovered in Nature is, in some respects, a fictitious unity, disguising the need of a directive agency behind the phenomena, but we think this part of his argument wants much expansion and some clearing, and it is possible that our version may a little differ from his.

The unity of the forces of Nature consists in the fact that they are all a kind of movement, and till they part company the same kind of movement. But a kind of movement is not a *thing*. It is an action, a method of working, an event. It points the mind beyond itself to something which is moved, and

to something which moves. The physicists of our day have found the answer to one of these questions so interesting, that they have forgotten that it is not an answer to both. What is the thing which is moved? No conception in metaphysics seems to us more mysterious, more abstract, than that wonderful medium of light and heat which, in the poetic description which the Duke quotes from Dr. Young, "finds its way through all matter, as easily as the wind through a grove of trees;" and yet which Sir John Herschel compares with equal propriety to a crystal matrix in which the stars are inserted like gems, and by means of which the earth is in actual rigid contact with the most distant orb of space; that medium which, the Duke reminds us, can neither be seen, nor touched, nor weighed, "which has neither weight, taste, smell, nor aspect," the existence of which we arrive at by pure reasoning, and can demonstrate only by its effects. When we have to do with a reality which has to be thus described, a reality so remote from all sensible notions, and in many respects so nearly approaching our conception of a Spirit, what wonder that the mere description should seem to answer both the questions involved in every assertion of movement, and that men should forget that movement among particles of ether is not any more an ultimate fact than movement in a heap of pebbles? When the causes of phenomena so multiform and universal as light and heat are, by students of the world they regulate, pronounced to be one, ordinary men easily forget that all which can be here meant is that the causes of these very different effects have a common bond,—that *something* holds together the causes of the warmth that refreshes the paralytic in his sunny nook, and the light which falls on the canvas of the artist; but what that something is, the man of science knows no more than the child. To say it is a mode of movement, is to say nothing,—nothing, we mean, beyond restating the fact that the two things are united. If we know anything, we know that different effects must have different causes, and that warmth and light are as unlike as two phenomena can be. But the mind rests on the idea of unity; when many effects are traced to one cause, the seeker has found a secure station, and is in no hurry to pass on. The abstruse and arduous question—in *what sense is the cause one*?—does not immediately suggest itself. The only ultimate unity is that of which each of us is conscious when he says "I." There is no getting beyond this oneness; it is indeed the measure of every other. Scientific men are occupied with the endeavour to find unity in that world which is properly the sphere of diversity, and, fascinated by the marvellous result which the shadow of mind produces in this world, they forget that the unity which they discover is but the unity which they bring. They bring it to a material, indeed, plastic to receive it; the marvellous order which they thus discover is a real order. But it is real only so far as the phenomena of matter are interpreted by the laws of mind, so far as we "recognise the Unity of Nature as the result of operations which the mind recognises as similar to its own."

If we have been successful in explaining our meaning, we shall have conveyed to the reader's mind some hints for an answer to the question,—Why the generation whose discoveries have most largely illustrated the idea of the Unity of Nature, is also the generation which has most decisively rejected that apprehension of Nature which should ascribe to it that unity which we believe to be the only perfect and literal unity,—that of relation to a central Will? The indications of this central Will have been made a substitute for it. The idea of the Correlation of Force—that is, of some unknown directive agency which varies the rhythm and key of the harmonies of Nature—knits up the interest in an outward world with the belief in God. But it does not create that belief, and easily becomes a substitute for it. All those indications in Nature which point to a personal centre may easily be mistaken for indications of its own completeness. The more entirely the mechanism of the universe speaks of will, the more easily does it become a substitute for will. He who finds his own experience inexplicable, unless on the theory that it involves a Will not his own, and yet in more intimate connection with his own than any human volition, is ready to find this Will the motive-power when physical research has done its part, and the material conditions of movement admit of no further analysis. But in this analysis there is absolutely nothing to suggest such a will. Perhaps there is even something which tends to draw those minds not already inclined towards this belief a little farther away from it. For it brings the

mind in contact with a world where every fact has to be set by the side of every other fact, as possessing not necessarily an *equal* claim to attention (for proportion has to be considered here, as everywhere else), but just the same kind of claim. And the constant contemplation of such a world unfits beings of limited energy to appreciate, and even to believe in, a world where difference of degree is altogether a secondary matter,—where we have to recognise the mysterious and, from the physical point of view, incredible reality of Evil. It needs, we believe, a very large *moral* experience to counteract the influence of a constant and exclusive occupation with the laws of Nature. And it is obvious that not very many persons can have both.

"It will be a good result of our endeavour to see and understand the Unity of Nature," says the Duke, "should it lead us to understand that which constitutes the great exception." We take these words to refer to that unseen world where from the same circumstance may issue the loftiest virtue and the blackest crime. Of course, the existence of such a world is denied by the physicists of our day. The virtue and the crime, they would say, are both preceded by their own antecedents. Clay goes into the fire and comes out solid, wax goes into the fire and comes out liquid, but you do not say that the same cause has different effects. Nor should you, when, from the same temptation, one man issues a hero and one a criminal. Wax was wax, and clay was clay before you brought them near the furnace, and the two men were hero and criminal in soul, while circumstance hid virtue and crime alike. If this is a true account of man's moral position, he is a part of Nature. It is on this point that the Duke seems to us confused. The sentence we have quoted implies what we consider the truth,—that the study of Nature is interesting chiefly as a background against which we may discern "the great exception." "What is natural?" is a question that we should call important chiefly as an introduction to the further question,—*"What is supernatural?"* But we should gather from the concluding sentence of the article that the latter question was superfluous, at all events as far as man was concerned. "Of this system," the Duke concludes, "we are a part, in body and mind." We readily admit that the true answer to all such problems takes most naturally the form of a statement of opposite truths, but the two sentences we have quoted seem to us to involve a contradiction. However, an incomplete statement of a difficult problem often appears to be a contradiction, and it may be that a fuller development of this view may do much to supply stepping-stones across the chasm which we find between our two quotations. Something we had to say on this point ourselves, and something also on the Duke's references to the prevalent ideas of the doctrine of Evolution. But our space is exhausted, and we must take some future opportunity of referring to these two divisions of our subject, which we have left for the present untouched.

#### FEMALE CLERKS IN THE POST OFFICE.

MR. FAWCETT has just sanctioned certain changes in the rules under which ladies are appointed to Clerkships in the Post Office, and upon these changes some angry people are animadverting with amusing severity. In what these critics call "the Female Branch" of the Post Office, we may explain that the great principles of nomination and appointment by means of "interest," so dear to the Philistines of the Civil Service, found a last lurking-place. Mr. Fawcett has, however, determined to abandon that system of distributing the patronage of the Office. In doing so, he has evidently filled with wrath that most worthy class of the community who firmly believe that the service of the State was created, not primarily for the purpose of doing work for the country, but rather for administering, in a genteel sort of way, a thinly-disguised form of out-door relief to the sons and daughters of the upper and upper-middle classes. It was the first care of the late Government to treat tenderly the feelings of this section of the community, on all possible occasions. Indeed, had it not done so, the fight for power at the last General Election would, perhaps, not have been waged with such bitterness by those to whom the defeat of Lord Beaconsfield's Ministry meant the destruction of the quiet family-party system of government, under which the Empire was to be exploited for the benefit of those select circles of society who were to condescend to manage its affairs. It was in strict accordance with the sentiments of these good people, that the "female clerkships" in the Post Office should be given