## NATIONAL SECULAR SOCIETY

## RIGHT AND WRONG:

THE SCIENTIFIC GROUND OF THEIR DISTINCTION.

A Lecture

DELIVERED BEFORE THE

# SUNDAY LECTURE SOCIETY,

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ON

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BY

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### SYLLABUS.

We feel that it is wrong to steal or tell lies, and right to take care of our families; and that we are responsible for our actions. The aggregate of such feelings we call Conscience, or the Moral Sense.

In this lecture it is proposed to consider what account can be given of these facts by the scientific method. This is a method of getting knowledge by inference; first of phenomena from phenomena, on the assumption of uniformity of nature, and secondly of mental facts simultaneous with and underlying these phenomena, on the assumption that other men have feelings like mine. Each of these assumptions rests on a moral basis; it is our duty to guide our beliefs in this way.

A man is morally responsible for an action in so far as he has a conscience which might direct it. Moral approbation and reprobation are used as means of strengthening this conscience and bringing it to bear upon the action. The use of this means involves the assumption that the man is the same man at different times, *i.e.*, that the effect of events is preserved in his character; and that his actions depend upon his character and the circumstances. The notion of responsibility is founded on the observed uniformity of this connection.

The question of right or wrong in a particular case is primarily determined by the conscience of the individual. The further question of what is the best conscience (the question of abstract or absolute right) is only to be determined by knowledge of the function or purpose of the conscience; and this must be got at by study of its origin and evolution. This leads to Mr. Darwin's doctrine that the purpose of conscience is the advantage of the community as such in the struggle for existence. There are two kinds of purpose: one due to natural selection, the survival of the best adaptation, the other (design) due to a complex nervous system in which an image or symbol of the end determines the use of the means. The conscience must always be based on an instinct serving a purpose of the first kind; but it may be directed by a purpose of the second kind.

Allegiance to the community, or piety, is thus the first principle of morals. This involves the negative duty of abstaining from obvious injury to others, and the positive duty of being a good citizen in each department of life. It is to be distinguished from altruism, and from a sentimental shrinking from the idea of suffering.

Truth, or straightforwardness, is a consequence of piety, and depends upon faith in man. The duty of searching after truth is based upon the great importance to mankind of a true conception of the universe. Belief is a sacred thing, which must not be profanely wasted on unproved statements. It is not necessary even for other people to believe what is false in order to do what is right.

## RIGHT AND WRONG:

THE SCIENTIFIC GROUND OF THEIR DISTINCTION.

HE questions which are here to be considered are especially and peculiarly everybody's questions. It is not everybody's business to be an engineer, or a doctor, or a carpenter, or a soldier; but it is everybody's business to be a citizen. The doctrines and precepts which guide the practice of the good engineer are of interest to him who uses them and to those whose business it is to investigate them by mechanical science; the rest of us neither obey nor disobey them. But the doctrines and precepts of morality, which guide the practice of the good citizen, are of interest to all; they must be either obeyed or disobeyed by every human being who is not hopelessly and for ever separated from the rest of mankind. No one can say, therefore, that in this inquiry we are not minding our own business, that we are meddling with other men's affairs. We are in fact studying the principles of our profession, so far as we are able: a necessary thing for every man who wishes to do good work in it.

Along with the character of universal interest which belongs to our subject there goes another. What is everybody's practical business is also to a large extent what everybody knows; and it may be reasonably expected that a discourse about Right and Wrong will be full of platitudes and truisms. The expectation is a just one. The considerations I have to offer are of the very oldest and the very simplest commonplace and common sense; and no one can be more astonished than I am that there should be any reason to speak of them at all. But there is reason to speak of them, because platitudes are not all of one kind. Some platitudes have a definite meaning and a practical application, and are established by the uniform and long-continued ex-

perience of all people. Other platitudes, having no definite meaning and no practical application, seem not to be worth anybody's while to test; and these are quite sufficiently established by mere assertion, if it is audacious enough to begin with and persistent enough afterwards. It is in order to distinguish these two kinds of platitude from one another, and to make sure that those which we retain form a body of doctrine consistent with itself and with the rest of our beliefs, that we undertake this examination of obvious and widespread principles.

First of all, then, what are the facts?

We say that it is wrong to murder, to steal, to tell lies, and that it is right to take care of our families. When we say in this sense that one action is right and another wrong, we have a certain feeling towards the action which is peculiar and not quite like any other feeling. It is clearly a feeling towards the action and not towards the man who does it; because we speak of hating the sin and loving the sinner. We might reasonably dislike a man whom we knew or suspected to be a murderer, because of the natural fear that he might murder us; and we might like our own parents for taking care of us. But everybody knows that these feelings are something quite different from the feeling which condemns murder as a wrong thing, and approves parental care as a right thing. I say nothing here about the possibility of analyzing this feeling, or proving that it arises by combination of other feelings; all I want to notice is that it is as distinct and recognisable as the feeling of pleasure in a sweet taste or of displeasure at a toothache. In speaking of right and wrong, we speak of qualities of actions which arouse definite feelings that everybody knows and recognises. It is not necessary, then, to give a definition at the outset; we are going to use familiar terms which have a definite meaning in the same sense in which everybody uses them. ultimately come to something like a definition; but what we have to do first is to collect the facts and see what can be made of them, just as if we were going to talk about limestone, or parents and children, or fuel.\*

<sup>\*</sup> These subjects were treated in the lectures which immediately preceded and followed the present one.

It is easy to conceive that murder and theft and neglect of the young might be considered wrong in a very simple state of society. But we find at present that the condemnation of these actions does not stand alone; it goes with the condemnation of a great number of other actions which seem to be included with the obviously criminal action in a sort of general rule. wrongness of murder, for example, belongs in a less degree to any form of bodily injury that one man may inflict on another; and it is even extended so as to include injuries to his reputation or his feelings. I make these more refined precepts follow in the train of the more obvious and rough ones, because this appears to have been the traditional order of their establishment. "He that makes his neighbour blush in public," says the Mishna, "is as if he had shed his blood." In the same way the rough condemnation of stealing carries with it a condemnation of more refined forms of dishonesty: we do not hesitate to say that it is wrong for a tradesman to adulterate his goods, or for a labourer to scamp his work. We not only say that it is wrong to tell lies, but that it is wrong to deceive in other more ingenious ways; wrong to use words so that they shall have one sense to some people and another sense to other people; wrong to suppress the truth when that suppression leads to false belief in others. And again, the duty of parents towards their children is seen to be a special case of a very large and varied class of duties towards that great family to which we belong-to the fatherland and them that dwell therein. The word duty which I have here used, has as definite a sense to the general mind as the words right and wrong; we say that it is right to do our duty, and wrong to neglect it. These duties to the community serve in our minds to explain and define our duties to individuals. It is wrong to kill any one; unless we are an executioner, when it may be our duty to kill a criminal; or a soldier, when it may be our duty to kill the enemy of our country; and in general it is wrong to injure any man in any way in our private capacity and for our own sakes. Thus if a man injures us, it is only right to retaliate on behalf of other men. Of two men in a desert island, if one takes away the other's cloak, it

may or may not be right for the other to let him have his coat also; but if a man takes away my cloak while we both live in society, it is my duty to use such means as I can to prevent him from taking away other people's cloaks. Observe that I am endeavouring to describe the facts of the moral feelings of Englishmen, such as

they are now.

The last remark leads us to another platitude of exceedingly ancient date. We said that it was wrong to injure any man in our private capacity and for our own sakes. A rule like this differs from all the others that we have considered, because it not only deals with physical acts, words and deeds which can be observed and known by others, but also with thoughts which are known only to the man himself. Who can tell whether a given act of punishment was done from a private or from a public motive? Only the agent himself. And yet if the punishment was just and within the law, we should condemn the man in the one case and approve him in the This pursuit of the actions of men to their very sources, in the feelings which they only can know, is as ancient as any morality we know of, and extends to the whole range of it. Injury to another man arises from anger, malice, hatred, revenge; these feelings are condemned as wrong. But feelings are not immediately under our control, in the same way that overt actions are: I can shake anybody by the hand if I like, but I cannot always feel friendly to him. Nevertheless we can pay attention to such aspects of the circumstances, and we can put ourselves into such conditions, that our feelings get gradually modified in one way or the other; we form a habit of checking our anger by calling up certain images and considerations, whereby in time the offending passion is brought into subjection and control. Accordingly, we say that it is right to acquire and to exercise this control; and the control is supposed to exist whenever we say that one feeling or disposition of mind is right and another wrong. Thus, in connection with the precept against stealing, we condemn envy and covetousness; we applaud a sensitive honesty which shudders at anything underhand or dishonourable. In connection with the rough precept against lying, we have built up

and are still building a great fabric of intellectual morality, whereby a man is forbidden to tell lies to himself, and is commanded to practise candour and fairness and open-mindedness in his judgments, and to labour zealously in pursuit of the truth. And in connection with the duty to our families, we say that it is right to cultivate public spirit, a quick sense of sympathy, and all that

belongs to a social disposition.

Two other words are used in this connection which it seems necessary to mention. When we regard an action as right or wrong for ourselves, this feeling about the action impels us to do it or not to do it, as the case may We may say that the moral sense acts in this case as a motive; meaning by moral sense only the feeling in regard to an action which is considered as right or wrong, and by motive something which impels us to act. Of course there may be other motives at work at the same time, and it does not at all follow that we shall do the right action or abstain from the wrong one. This we all know to our cost. But still our feeling about the rightness or wrongness of an action does operate as a motive when we think of the action as being done by us; and when so operating it is called conscience. nothing to do at present with the questions about conscience, whether it is a result of education, whether it can be explained by self-love, and so forth; I am only concerned in describing well-known facts, and in getting as clear as I can about the meaning of well-known words. Conscience, then, is the whole aggregate of our feelings about actions as being right or wrong, regarded as tending to make us do the right actions and avoid the wrong ones. We also say sometimes, in answer to the question, "How do you know that this is right or wrong?" "My conscience tells me so." And this way of speaking is quite analogous to other expressions of the same form; thus if I put my hand into water, and you ask me how I know that it is hot, I might say, "My feeling of warmth tells me so."

When we consider a right or a wrong action as done by another person, we think of that person as worthy of moral approbation or reprobation. He may be punished or not; but in any case this feeling towards him is quite different from the feeling of dislike of a person injurious to us, or of disappointment at a machine which will not go. Whenever we can morally approve or disapprove a man for his action, we say that he is morally responsible for it, and vice versā. To say that a man is not morally responsible for his actions, is the same thing as to say that it would be unreasonable to praise or blame him for them.

The statement that we ourselves are morally responsible is somewhat more complicated, but the meaning is very easily made out; namely, that another person may reasonably regard our actions as right or wrong, and

may praise or blame us for them.

We can now, I suppose, understand one another pretty clearly in using the words right and wrong, conscience, responsibility; and we have made a rapid survey of the facts of the case in our own country at the present time. Of course I do not pretend that this survey in any way approaches to completeness; but it will supply us at least with enough facts to enable us to deal always with concrete examples instead of remaining in generalities; and it may serve to show pretty fairly what the moral sense of an Englishman is like. We must next consider what account we can give of these facts by the scientific method.

But first let us stop to note that we really have used the scientific method in making this first step; and also that to the same extent the method has been used by all serious moralists. Some would have us define virtue, to begin with, in terms of some other thing which is not virtue, and then work out from our definition all the details of what we ought to do. So Plato said that virtue was knowledge, Aristotle that it was the golden mean, and Bentham said that the right action was that which conduced to the greatest happiness of the greatest number. But so also, in physical speculations; Thales said that everything was Water, and Heraclitus said it was Allbecoming, and Empedocles said it was made out of Four Elements, and Pythagoras said it was Number. But we only began to know about things when people looked straight at the facts, and made what they could out of them; and that is the only way in which we can know

anything about right and wrong. Moreover, it is the way in which the great moralists have set to work, when they came to treat of verifiable things and not of theories all in the air. A great many people think of a prophet as a man who, all by himself, or from some secret source, gets the belief that this thing is right and that thing wrong. And then (they imagine) he gets up and goes about persuading other people to feel as he does about it; and so it becomes a part of their conscience, and a new duty is created. This may be in some cases, but I have never met with any example of it in When Socrates puzzled the Greeks by asking them what they precisely meant by Goodness and Justice and Virtue, the mere existence of the words shows that the people, as a whole, possessed a moral sense, and felt that certain things were right and others wrong. What the moralist did was to show the connection between different virtues, the likeness of virtue to certain other things, the implications which a thoughtful man could find in the common language. Wherever the Greek moral sense had come from, it was there in the people before it could be enforced by a prophet or discussed by a philosopher. Again, we find a wonderful collection of moral aphorisms in those shrewd sayings of the Jewish fathers which are preserved in the Mishna or oral law. Some of this teaching is familiar to us all from the popular exposition of it which is contained in the three first Gospels. But the very plainness and homeliness of the precepts shows that they are just acute statements of what was already felt by the popular common sense; protesting, in many cases, against the formalism of the ceremonial law with which they are curiously mixed up. The rabbis even show a jealousy of prophetic interference, as if they knew well that it takes not one man, but many men, to feel what is right. When a certain Rabbi Eliezer, being worsted in argument, cried out, "If I am right, let heaven pronounce in my favour!" there was heard a Bath-kol or voice from the skies, saying, "Do you venture to dispute with Rabbi Eliezer, who is an authority on all religious questions?" But Rabbi Joshua rose and said, "Our law is not in heaven, but in the book which dates from Sinai, and which teaches us that in matters of discussion the majority makes the law."\*

One of the most important expressions of the moral sense for all time is that of the Stoic philosophy, especially after its reception among the Romans. It is here that we find the enthusiasm of humanity—the caritas generis humani—which is so large and important a feature in all modern conceptions of morality, and whose widespread influence upon Roman citizens may be traced in the Epistles of St. Paul. In the Stoic emperors, also, we find probably the earliest example of great moral principles consciously applied to legislation on a large scale. But are we to attribute this to the individual insight of the Stoic philosophers? It might seem at first sight that we must, if we are to listen to that vulgar vituperation of the older culture, which has descended to us from those who had everything to gain by its destruction. † We hear enough of the luxurious feasting of the Roman capital, how it would almost have taxed the resources of a modern pastrycook; of the cruelty of gladiatorial shows, how they were nearly as bad as autida-fé, except that a man had his fair chance, and was

\* Treatise Bab. bathr. 59. b. I derive this story and reference from a most interesting book, Kôl Kôre (vox clamantis), La Bible, le Talmud, et l'Evangile; par le R. Elie Soloweyczyk. Paris: E. Brière. 1870.
† Compare these passages from Merivale ('Romans under the Empire,' vi.), to whom "it seems a duty to protest against the common tendency of Christian moralists to dwell only on the dark side of Pagan society, in order to heighten by contrast the blessings of the Gospel."

"Much candour and discrimination are required in comparing the sins of one age with those of another. . . . the cruelty of our inquisitions and sectarian persecutions, of our laws against sorcery, our serfdom and our slavery; the petty fraudulence we tolerate in almost every class and calling of the community; the bold front worn by our open sensuality; the deeper degradation of that which is concealed; all these leave us little room for boasting of our modern discipline, and must deter the thoughtful inquirer from too confidently contrasting the morals of the old world and the new."

"Even at Rome, in the worst of times. . . all the relations of life

the new."

"Even at Rome, in the worst of times. . . all the relations of life were adorned in turn with bright instances of devotion, and mankind transacted their business with an ordinary confidence in the force of conscience and right reason. The steady development of enlightened legal principles conclusively proves the general dependence upon law as a guide and corrector of manners. In the camp, however, more especially as the chief sphere of this purifying activity, the great qualities of the Roman character continued to be plainly manifested. The history of the Cæsars presents to us a constant succession of brave, patient, resolute, and faithful soldiers, men deeply impressed with a sense of duty, superior to vanity, despisers of boasting, content to toil in obscurity and shed their blood at the frontiers of the embire, unrepining at the cold mistrust of their masters, the frontiers of the empire, unrepining at the cold mistrust of their masters, not clamourous for the honours so sparingly awarded to them, but satisfied in the daily work of their hands, and full of faith in the national destiny which they were daily accomplishing." not tortured for torture's sake; of the oppression of provincials by people like Verres, of whom it may even be said that if they had been the East India Company they could not have been worse; of the complaints of Tacitus against bad and mad emperors (as Sir Henry Maine says); and of the still more serious complaints of the modern historian against the excessive taxation\* which was one great cause of the fall of the empire. Of all this we are told a great deal; but we are not told of the many thousands of honourable men who carried civilisation to the ends of the known world, and administered a mighty empire so that it was loved and worshipped to the furthest corner of it. It is to these men and their common action that we must attribute the morality which found its organised expression in the writings of the Stoic philosophers. From these three cases we may gather that Right is a thing which must be done before it can be talked about, although after that it may only too easily be talked about without being done. Individual effort and energy may insist upon getting that done which was already felt to be right; and individual insight and acumen may point out consequences of an action which bring it under previously known moral There is another dispute of the rabbis that may serve to show what is meant by this. It was forbidden by the law to have any dealings with the Sabæan idolaters during the week preceding their idolatrous feasts. But the doctors discussed the case in which one of these idolaters owes you a bill; are you to let him pay it during that week or not? The school of Shammai said "No; for he will want all his money to enjoy himself at the feast." But the school of Hillel said "Yes, let him pay it; for how can he enjoy his feast while his bills are unpaid?" The question here is about the consequences of an action; but there is no dispute about the moral principle, which is that consideration and kindness are to be shown to idolaters, even in the matter of their idolatrous rites.

It seems, then, that we are no worse off than anybody else who has studied this subject, in finding our materials ready made for us; sufficiently definite meanings

<sup>\*</sup> Finlay, 'Greece under the Romans.'

given in the common speech to the words right and wrong, good and bad, with which we have to deal; a fair body of facts familiarly known, which we have to organise and account for as best we can. But our special inquiry is, what account can be given of these facts by the scientific method? to which end we cannot do better than fix our ideas as well as we can upon the

character and scope of that method.

Now the scientific method is a method of getting knowledge by inference, and that of two different kinds. One kind of inference is that which is used in the physical and natural sciences, and it enables us to go from known phenomena to unknown phenomena. Because a stone is heavy in the morning, I infer that it will be heavy in the afternoon; and I infer this by assuming a certain uniformity of nature. The sort of uniformity that I assume depends upon the extent of my scientific education; the rules of inference become more and more definite as we go on. At first I might assume that all things are always alike; this would not be true, but it has to be assumed in a vague way, in order that a thing may have the same name at different times. Afterwards I get the more definite belief that certain particular qualities, like weight, have nothing to do with the time of day; and subsequently I find that weight has nothing to do with the shape of the stone, but only with the quantity of it. The uniformity which we assume, then, is not that vague one that we started with, but a chastened and corrected uniformity. I might go on to suppose, for example, that the weight of the stone had nothing to do with the place where it was; and a great deal might be said for this supposition. It would, however, have to be corrected when it was found that the weight varies slightly in different latitudes. On the other hand, I should find that this variation was just the same for my stone as for a piece of iron or wood; that it had nothing to do with the kind of matter. And so I might be led to the conclusion that all matter is heavy, and that the weight of it depends only on its quantity and its position relative to the earth. You see here that I go on arriving at conclusions always of this form; that some one circumstance or quality has nothing to do with some other

circumstance or quality. I begin by assuming that it is independent of everything; I end by finding that it is independent of some definite things. That is, I begin by assuming a vague uniformity, and I end by assuming a clear and definite uniformity. I always use this assumption to infer from some one fact a great number of other facts; but as my education proceeds, I get to know what sort of things may be inferred and what may not. An observer of scientific mind takes note of just those things from which inferences may be drawn, and passes by the rest. If an astronomer, observing the sun, were to record the fact that at the moment when a sun-spot began to shrink there was a rap at his front door, we should know that he was not up to his work. But if he records that sun-spots are thickest every eleven years, and that this is also the period of extra cloudiness in Jupiter, the observation may or may not be confirmed, and it may or may not lead to inferences of importance: but still it is the kind of thing from which inferences may be drawn. There is always a certain instinct among instructed people which tells them in this way what kinds of inferences my be drawn; and this is the unconscious effect of the definite uniformity which they have been led to assume. in nature. It may subsequently be organised into a law. or general truth, and no doubt becomes a surer guide by that process. Then it goes to form the more precise instinct of the next generation.

What we have said about this first kind of inference, which goes from phenomena to phenomena, is shortly this. It proceeds upon an assumption of uniformity in nature; and this assumption is not fixed and made once for all, but is a changing and growing thing, becoming more

definite as we go on.

If I were told to pick out some one character which especially colours this guiding conception of uniformity in our present stage of science, I should certainly reply, Atomism. The form of this with which we are most familiar is the molecular theory of bodies; which represents all bodies as made up of small elements of uniform character, each practically having relations only with the adjacent ones, and these relations the same all through—namely, some simple mechanical action upon each

other's motions. But this is only a particular case. palace, a cottage, the tunnel of the underground railway. and a factory chimney, are all built of bricks; the bricks are alike in all these cases, each brick is practically related only to the adjacent ones, and the relation is throughout the same, namely, two flat sides are stuck together with mortar. There is an atomism in the sciences of number, of quantity, of space; the theorems of geometry are groupings of individual points, each related only to the adjacent ones by certain definite laws. what concerns us chiefly at present is the atomism of human physiology. Just as every solid is built up of molecules, so the nervous system is built up of nervethreads and nerve-corpuscles. We owe to Mr. Lewes our very best thanks for the stress which he has laid on the doctrine that nerve-fibre is uniform in structure and function, and for the word neurility, which expresses its common properties. And similar gratitude is due to Dr. Hughlings Jackson for his long defence of the proposition that the element of nervous structure and function is a sensori-motor process. In structure, this is two fibres or bundles of fibres going to the same grey corpuscle; in function it is a message travelling up one fibre or bundle to the corpuscle, and then down the other fibre or bundle.\* Out of this, as a brick, the house of our life is built. All these simple elementary processes are alike, and each is practically related only to the adjacent ones; the relation being in all cases of the same kind, viz., the passage from a simple to a complex message, or vice versa.

The result of atomism in any form, dealing with any subject, is that the principle of uniformity is hunted down into the elements of things; it is resolved into the uniformity of these elements or atoms, and of the relations of those which are next to each other. By an element or an atom we do not here mean something absolutely simple or indivisible, for a molecule, a brick, and a nerve process are all very complex things. We only mean that, for the purpose in hand, the properties of the still more complex thing which is made of them have nothing to do with the complexities or the differ-

<sup>\*</sup> Mr. Herbert Spencer had assigned a slightly different element. Principles of Psychology, vol. 1, p. 28.

The solid made of molecules. ences of these elements. the house made of bricks, the nervous system made of sensori-motor processes, are nothing more than collections of these practically uniform elements, having certain relations of nextness, and behaviour uniformly depending on that nextness.

The inference of phenomena from phenomena, then, is based upon an assumption of uniformity, which in the present stage of science may be called an atomic uni-

formity.

The other mode of inference which belongs to the scientific method is that which is used in what are called mental and moral sciences; and it enables us to go from phenomena to the facts which underlie phenomena, and which are themselves not phenomena at all. If I pinch your arm, and you draw it away and make a face, I infer that you have felt pain. I infer this by assuming that you have a consciousness similar to my own, and related to your perception of your body as my consciousness is related to my perception of my body. the same assumption as before, a mere assumption of the uniformity of nature? It certainly seems like it at first; but if we think about it we shall find that there is a very profound difference between them. In physical inference I go from phenomena to phenomena; that is, from the knowledge of certain appearances or representations actually present to my mind I infer certain other appearances that might be present to my mind. the weight of a stone in the morning-that is, from my feeling of its weight, or my perception of the process of weighing it, I infer that the stone will be heavy in the afternoon—that is, I infer the possibility of similar feelings and perceptions in me at another time. The whole process relates to me and my perceptions, to things contained in my mind. But when I infer that you are conscious from what you say or do, I pass from that which is my feeling or perception, which is in my mind and part of me, to that which is not my feeling at all, which is outside me altogether, namely your feelings and perceptions. Now there is no possible physical inference, no inference of phenomena from phenomena, that will help me over that gulf. I am obliged to admit that this second kind of inference depends upon another assumption, not included in the assumption of the uniformity of

phenomena.

How does a dream differ from waking life? In a fairly coherent dream everything seems quite real, and it is rare, I think, with most people to know in a dream that they are dreaming. Now, if a dream is sufficiently vivid and coherent, all physical inferences are just as valid in it as they are in waking life. In a hazy or imperfect dream, it is true, things melt into one another unexpectedly and unaccountably; we fly, remove mountains, and stop runaway horses with a finger. But there is nothing in the mere nature of a dream to hinder it from being an exact copy of waking experience. If I find a stone heavy in one part of my dream, and infer that it is heavy at some subsequent part, the inference will be verified if the dream is coherent enough; I shall go to the stone, lift it up, and find it as heavy as before. And the same thing is true of all inferences of phenomena from phenomena. For physical purposes a dream is just as good as real life; the only difference is in vividness and coherence.

What, then, hinders us from saying that life is all a dream? If the phenomena we dream of are just as good and real phenomena as those we see and feel when we are awake, what right have we to say that the material universe has any more existence apart from our minds than the things we see and feel in our dreams? The answer which Berkeley gave to that question was, No right at all. The physical universe which I see and feel and infer, is just my dream and nothing else; that which you see is your dream; only it so happens that all our dreams agree in many respects. This doctrine of Berkeley's has now been so far confirmed by the physiology of the senses, that it is no longer a metaphysical speculation, but a scientifically established fact.

But there is a difference between dreams and waking life, which is of far too great importance for any of us to be in danger of neglecting it. When I see a man in my dream, there is just as good a body as if I were awake; muscles, nerves, circulation, capability of adapting means to ends. If only the dream is coherent enough, no

physical test can establish that it is a dream. In both cases I see and feel the same thing. In both cases I assume the existence of more than I can see and feel. namely the consciousness of this other man. But now here is a great difference, and the only difference: in a dream this assumption is wrong; in waking life it is right. The man I see in my dream is a mere machine a bundle of phenomena with no underlying reality; there is no consciousness involved except my consciousness, no feeling in the case except my feelings. The man I see in waking life is more than a bundle of phenomena: his body and its actions are phenomena, but these phenomena are merely the symbols and representatives in my mind of a reality which is outside my mind, namely, the consciousness of the man himself which is represented by the working of his brain, and the simpler quasi-mental facts, not woven into his consciousness, which are represented by the working of the rest of his body. What makes life not to be a dream is the existence of those facts which we arrive at by our second process of inference; the consciousness of men and the higher animals, the sub-consciousness of lower organisms, and the quasi-mental facts which go along with the motions of inanimate matter. In a book which is very largely and deservedly known by heart, 'Through the Lookingglass,' there is a very instructive discussion upon this Alice has been taken to see the Red King as he lies snoring; and Tweedledee asks, "Do you know what he is dreaming about?" "Nobody can guess that," replies Alice. "Why, about you," he says triumphantly. "And if he stopped dreaming about you, where do you suppose you'd be?" "Where I am now, of course," said Alice. "Not you," said Tweedledee, "you'd be You are only a sort of thing in his dream." "If that there King was to wake," added Tweedledum, "you'd go out, bang! just like a candle." Alice was quite right in regarding these remarks as unphilosophical. The fact that she could see, think, and feel was proof positive that she was not a sort of thing in anybody's dream. This is the meaning of that saying, Cogito ergo sum, of Descartes. By him, and by Spinoza after him, the verb cogito and the substantive cogitatio were used to denote consciousness in general, any kind of feeling, even what we now call subconsciousness. The saying means that feeling exists in and for itself, not as a quality or modification or state or manifestation of any-

thing else.

We are obliged in every hour of our lives to act upon beliefs which have been arrived at by inferences of these two kinds; inferences based on the assumption of uniformity in nature, and inferences which add to this the assumption of feelings which are not our own. By organising the "common sense" which embodies the first class of inferences, we build up the physical sciences; that is to say, all those sciences which deal with the physical, material, or phenomenal universe, whether animate or inanimate. And so by organising the common sense which embodies the second class of inferences, we build up various sciences of mind. The description and classification of feelings, the facts of their association with each other, and of their simultaneity with phenomena of nerve-action, all this belongs to psychology, which may be historical and comparative. The doctrine of certain special classes of feelings is organized into the special sciences of those feelings; thus the facts about the feelings which we are now considering, about the feelings of moral approbation and reprobation, are organized into the science of ethics, and the facts about the feeling of beauty or ugliness are organized into the science of esthetics, or, as it is sometimes called, the philosophy of art. For all of these the uniformity of nature has to be assumed as a basis of inference; but over and above that it is necessary to assume that other men are conscious in the same way that I am. these sciences of mind, just as in the physical sciences, the uniformity which is assumed in the inferred mental facts is a growing thing which becomes more definite as we go on, and each successive generation of observers knows better what to observe and what sort of inferences may be drawn from observed things. But, moreover, it is as true of the mental sciences as of the physical ones, that the uniformity is in the present stage of science an atomic uniformity. We have learned to regard our consciousness as made up of elements practically alike,

having relations of succession in time and of contiguity at each instant, which relations are in all cases practically the same. The element of consciousness is the transference of an impression into the beginning of action. Our mental life is a structure made out of such elements just as the working of our nervous system is made out of sensorimotor processes. And accordingly the interaction of the two branches of science leads us to regard the mental facts as the realities or things-inthemselves, of which the material phenomena are mere pictures or symbols. The final result seems to be that atomism is carried beyond phenomena into the realities which phenomena represent; and that the observed uniformities of nature, in so far as they can be expressed in the language of atomism, are actual uniformities of things in themselves.

So much for the two things which I have promised to bring together; the facts of our moral feelings, and the scientific method. It may appear that the latter has been expounded at more length than was necessary for the treatment of this particular subject; but the justification for this length is to be found in certain common objections to the claims of science to be the sole judge of mental and moral questions. Some of the

chief of these objections I will now mention.

It is sometimes said that science can only deal with what is, but that art and morals deal with what ought to be. The saying is perfectly true, but it is quite consistent with what is equally true, that the facts of art and morals are fit subject-matter of science. I may describe all that I have in my house, and I may state everything that I want in my house; these are two very different things, but they are equally statements of One is a statement about phenomena, about the objects which are actually in my possession; the other is a statement about my feelings, about my wants and There are facts, to be got at by common sense, about the kind of thing that a man of a certain character and occupation will like to have in his house, and these facts may be organized into general statements on the assumption of uniformity in nature. Now the organized results of common sense dealing with facts are just

science and nothing else. And in the same way I may say what men do at the present day, "how we live now," or I may say what we ought to do, namely, what course of conduct, if adopted, we should morally approve; and no doubt these would be two very different things. But each of them would be a statement of facts. would belong to the sociology of our time; in so far as men's deeds could not be adequately described to us without some account of their feelings and intentions, it would involve facts belonging to psychology as well as facts belonging to the physical sciences. the other would be an account of a particular class of our feelings, namely, those which we feel towards an action when it is regarded as right or wrong. facts may be organized by common sense on the assumption of uniformity in nature just as well as any other facts. And we shall see farther on, that not only in this sense, but in a deeper and more abstract sense, "what ought to be done" is a question for scientific inquiry.

The same objection is sometimes put into another form. It is said that laws of chemistry, for example, are general statements about what happens when bodies are treated in a certain way, and that such laws are fit matter for science; but that moral laws are different, because they tell us to do certain things, and we may or may not obey them. The mood of the one is indicative, of the other imperative. Now it is quite true that the word law in the expression "law of nature," and in the expressions "law of morals," "law of the land," has two totally different meanings, which no educated person will confound; and I am not aware that any one has rested the claim of science to judge moral questions on what is no better than a stale and unprofitable pun. But two different things may be equally matters of scientific investigation, even when their names are alike in sound. A telegraph post is not the same thing as a post in the War Office, and yet the same intelligence may be used to investigate the conditions of the one and the other. That such and such things are right or wrong, that such and such laws are laws of morals or laws of the land, these are facts, just as the laws of chemistry are facts; and all facts belong to science, and are her portion for ever.

Again, it is sometimes said that moral questions have been authoritatively settled by other methods; that we ought to accept this decision, and not to question it by any method of scientific inquiry; and that reason should give way to revelation on such matters. I hope before I have done to show just cause why we should pronounce on such teaching as this no light sentence of moral condemnation: first, because it is our duty to form those beliefs which are to guide our actions by the two scientific modes of inference, and by these alone; and. secondly, because the proposed mode of settling ethical questions by authority is contrary to the very nature of right and wrong.

Leaving this, then, for the present, I pass on to the most formidable objection that has been made to a scientific treatment of ethics. The objection is that the scientific method is not applicable to human action. because the rule of uniformity does not hold good. Whenever a man exercises his will, and makes a voluntary choice of one out of various possible courses, an event occurs whose relation to contiguous events cannot be included in a general statement applicable to all similar cases. There is something wholly capricious and disorderly, belonging to that moment only; and we have no right to conclude that if the circumstances were exactly repeated, and the man himself absolutely unaltered. he would choose the same course.

It is clear that if the doctrine here stated is true, the ground is really cut from under our feet, and we cannot deal with human action by the scientific method. shall endeavour to show, moreover, that in this case, although we might still have a feeling of moral approbation or reprobation towards actions, yet we could not reasonably praise or blame men for their deeds, nor regard them as morally responsible. So that, if my contention is just, to deprive us of the scientific method is practically to deprive us of morals altogether. both grounds, therefore, it is of the greatest importance that we should define our position in regard to this controversy; if, indeed, that can be called a controversy in which the practical belief of all mankind and the consent of nearly all serious writers are on one side.

Let us in the first place consider a little more closely the connection between conscience and responsibility. Words in common use, such as these two, have their meanings practically fixed before difficult controversies arise; but after the controversy has arisen, each party gives that slight tinge to the meaning which best suits its own view of the question. Thus it appears to each that the common language obviously supports that view, that this is the natural and primary view of the matter, and that the opponents are using words in a new meaning and wresting them from their proper sense. Now this is just my position. I have endeavoured so far to use all words in their common every day sense, only making this as precise as I can; and, with two exceptions, of which due warning will be given, I shall do my best to continue this practice in future. I seem to myself to be talking the most obvious platitudes; but it must be remembered that those who take the opposite view will think I am perverting the English language.

There is a common meaning of the word "responsible," which though not the same as that of the phrase "morally responsible," may throw some light upon it. we say of a book, "A is responsible for the preface and the first half, and B is responsible for the rest," we mean that A wrote the preface and the first half. If two people go into a shop and choose a blue silk dress together, it might be said that A was responsible for its being silk and B for its being blue. Before they chose, the dress was undetermined both in colour and in material. A's choice fixed the material, and then it was undetermined only in colour. B's choice fixed the colour; and if we suppose that there were no more variable conditions (only one blue silk dress in the shop), the dress was then completely determined. In this sense of the word we say that a man is responsible for that part of an event which was undetermined when he was left out of account. and which became determined when he was taken account Suppose two narrow streets, one lying north and south, one east and west, and crossing one another. man is put down where they cross, and has to walk. Then he must walk either north, south, east, or west, and he is not responsible for that; what he is responsible for is the choice of one of these four directions. May we not say in the present sense of the word that the external circumstances are responsible for the restriction on his choice? we should mean only that the fact of his going in one or other of the four directions was due to external circumstances, and not to him. Again, suppose I have a number of punches of various shapes, some square, some oblong, some oval, some round, and that I am going to punch a hole in a piece of paper. Where I shall punch the hole may be fixed by any kind of circumstances; but the shape of the hole depends on the punch I take. May we say that the punch is responsible for the shape of the hole, but not for the position of it?

It may be said that this is not the whole of the meaning of the word "responsible," even in its loosest sense; that it ought never to be used except of a conscious agent. Still this is part of its meaning; if we regard an event as determined by a variety of circumstances, a man's choice being among them, we say that he is responsible for just that choice which is left him by the

other circumstances.

When we ask the practical question, "Who is responsible for so-and-so?" we want to find out who is to be got at in order that so-and-so may be altered. If I want to change the shape of the hole I make in my paper, I must change my punch; but this will be of no use if I want to change the position of the hole. If I want the colour of the dress changed from blue to green, it is B,

and not A, that I must persuade.

We mean something more than this when we say that a man is morally responsible for an action. It seems to me that moral responsibility and conscience go together, both in regard to the man and in regard to the action. In order that a man may be morally responsible for an action, the man must have a conscience, and the action must be one in regard to which conscience is capable of acting as a motive, that is, the action must be capable of being right or wrong. If a child were left on a desert island and grew up wholly without a conscience, and then were brought among men, he would not be morally responsible for his actions until he had acquired a con-

science by education. He would of course be responsible, in the sense just explained, for that part of them which was left undetermined by external circumstances, and if we wanted to alter his actions in these respects we should have to do it by altering him. But it would be useless and unreasonable to attempt to do this by means of praise or blame, the expression of moral approbation or disapprobation, until he had acquired a conscience which could be worked upon by such means.

It seems, then, that in order that a man may be morally responsible for an action, three things are ne-

cessary :--

1. He might have done something else; that is to say, the action was not wholly determined by external circumstances, and he is responsible only for the choice which was left him.

2. He had a conscience.

3. The action was one in regard to the doing or not doing of which conscience might be a sufficient motive.

These three things are necessary, but it does not follow that they are sufficient. It is very commonly said that the action must be a voluntary one. It will be found, I think, that this is contained in my third condition, and also that the form of statement I have adopted exhibits more clearly the reason why the condition is necessary. We may say that an action is involuntary either when it is instinctive, or when one motive is so strong that there is no voluntary choice between motives. An involuntary cough produced by irritation of the glottis is no proper subject for blame or praise. A man is not responsible for it because it is done by a part of his body without consulting him. What is meant by him in this case will require further investigation. Again, when a dipsomaniac has so great and overmastering an inclination to drink that we cannot conceive of conscience being strong enough to conquer it, he is not responsible for that act, though he may be responsible for having got himself into the state. But if it is conceivable that a very strong conscience fully brought to bear might succeed in conquering the inclination, we may take a lenient view of the fall and say there was a very strong temptation, but we shall

still regard it as a fall, and say that the man is respon-

sible and a wrong has been done.

But since it is just in this distinction between voluntary and involuntary action that the whole crux of the matter lies, let us examine more closely into it. I say that when I cough or sneeze involuntarily, it is really not I that cough or sneeze, but a part of my body which acts without consulting me. This action is determined for me by the circumstances, and is not part of the choice that is left to me, so that I am not responsible for it. The question comes then to determining how much is to be called *circumstances*, and how much is to be called *me*.

Now I want to describe what happens when I voluntarily do anything, and there are two courses open to I may describe the things in themselves, my feelings and the general course of my consciousness, trusting to the analogy between my consciousness and yours to make me understood; or I may describe these things as nature describes them to your senses, namely, in terms of the phenomena of my nervous system, appealing to your memory of phenomena and your knowledge of physical action. I shall do both, because in some respects our knowledge is more complete from the one source, and in some respects from the other. When I look back and reflect upon a voluntary action, I seem to find that it differs from an involuntary action in the fact that a certain portion of my character has been consulted. There is always a suggestion of some sort, either the end of a train of thought or a new sensation; and there is an action ensuing, either the movement of a muscle or set of muscles, or the fixing of attention upon something. But between these two there is a consultation, as it were, of my past history. The suggestion is viewed in the light of everything bearing on it that I think of at the time, and in virtue of this light it moves me to act in one or more ways. Let us first suppose that no hesitation is involved, that only one way of acting is suggested, and I yield to this impulse and act in the particular way. This is the simplest kind of voluntary action. It differs from involuntary or instinctive action in the fact that with the latter there is no such conscious con-

sultation of past history. If we describe these facts in terms of the phenomena which picture them to other minds, we shall say that in involuntary action a message passes straight through from the sensory to the motor centre, and so on to the muscles, without consulting the cerebrum; while in voluntary action the message is passed on from the sensory centre to the cerebrum, there translated into appropriate motor stimuli, carried down to the motor centre, and so on to the muscles. There may be other differences, but at least there is this differ-Now, on the physical side, that which determines what groups of cerebral fibres shall be set at work by the given message, and what groups of motor stimuli shall be set at work by these, is the mechanism of my brain at the time; and on the mental side, that which determines what memories shall be called up by the given sensation, and what motives these memories shall bring into action, is my mental character. We may say, then, in this simplest case of voluntary action, that when the suggestion is given it is the character of me which determines the character of the ensuing action; and consequently that I am responsible for choosing that particular course out of those which were left open to me by the external circumstances.

This is when I yield to the impulse. But suppose I do not; suppose that the original suggestion, viewed in the light of memory, sets various motives in action, each motive belonging to a certain class of things which I remember. Then I choose which of these motives shall Those who carefully watch themselves find out that a particular motive is made to prevail by the fixing of the attention upon that class of remembered things which calls up the motive. The physical side of this is the sending of blood to a certain set of nerves-namely, those whose action corresponds to the memories which are to be attended to. The sending of blood is accomplished by the pinching of arteries; and there are special nerves, called vaso-motor nerves, whose business it is to carry messages to the walls of the arteries and get them pinched. Now this act of directing the attention may be voluntary or involuntary, just like any other act. When the transformed and reinforced nerve-message

gets to the vaso-motor centre, some part of it may be so predominant that a message goes straight off to the arteries, and sends a quantity of blood to the nerves supplying that part; or the call for blood may be sent back for revision by the cerebrum, which is thus again consulted. To say the same thing in terms of my feelings, a particular class of memories roused by the original suggestion may seize upon my attention before I have time to choose what I will attend to; or the appeal may be carried to a deeper part of my character, dealing with wider and more abstract conceptions, which views the conflicting motives in the light of a past experience of motives, and by that light is drawn to one or the other of them.

We thus get to a sort of motive of the second order or motive of motives. Is there any reason why we should not go on to a motive of the third order, and the fourth, and so on? None whatever that I know of, except that no one has ever observed such a thing. There seems plenty of room for the requisite mechanism on the physical side; and no one can say, on the mental side, how complex is the working of his consciousness. But we must carefully distinguish between the intellectual deliberation about motives, which applies to the future and the past, and the practical choice of motives in the moment of will. The former may be a train of any length and complexity; we have no reason to believe that the latter is more than engine and tender.

We are now in a position to classify actions in respect of the kind of responsibility which belongs to them: namely, we have—

1. Involuntary or instinctive actions.

2. Voluntary actions in which the choice of motives is involuntary.

3. Voluntary actions in which the choice of motives is

voluntary.

In each of these cases what is responsible is that part of my character which determines what the action shall be. For instinctive actions we do not say that I am responsible, because the choice is made before I know anything about it. For voluntary actions I am responsible, because I make the choice; that is, the character of me is what determines the character of the action.

In me, then, for this purpose, is included the aggregate of links of association which determines what memories shall be called up by a given suggestion, and what motives shall be set at work by these memories. But we distinguish this mass of passions and pleasures, desire and knowledge and pain, which makes up most of my character at the moment, from that inner and deeper motive-choosing self which is called Reason, and the Will, and the Ego; which is only responsible when motives are voluntarily chosen by directing attention to them. It is responsible only for the choice of one motive out of those presented to it, not for the nature of the

motives which are presented.

But again, I may reasonably be blamed for what I did yesterday, or a week ago, or last year. This is because I am permanent; in so far as from my actions of that date an inference may be drawn about my character now, it is reasonable that I should be treated as praiseworthy or blameable. And within certain limits I am for the same reason responsible for what I am now, because within certain limits I have made myself. Even instinctive actions are dependent, in many cases, upon babits which may be altered by proper attention and care; and still more the nature of the connections between sensation and action, the associations of memory and motive, may be voluntarily modified if I choose to The habit of choosing among motives is one which may be acquired and strengthened by practice, and the strength of particular motives, by continually directing attention to them, may be almost indefinitely increased or diminished. Thus, if by me is meant not the instantaneous me of this moment, but the aggregate me of my past life, or even of the last year, the range of my responsibility is very largely increased. I am responsible for a very large portion of the circumstances which are now external to me; that is to say, I am responsible for certain of the restrictions on my own freedom. As the eagle was shot with an arrow that flew on its own feather, so I find myself bound with fetters of my proper forging.

Let us now endeavour to conceive an action which is not determined in any way by the character of the agent.

If we ask, "What makes it to be that action and no other?" we are told, "The man's Ego." The words are here used, it seems to me, in some non-natural sense, if in any sense at all. One thing makes another to be what it is when the characters of the two things are connected together by some general statement or rule. But we have to suppose that the character of the action is not connected with the character of the Ego by any general statement or rule. With the same Ego and the same circumstances of all kinds, anything within the limits imposed by the circumstances may happen at any moment. I find myself unable to conceive any distinct sense in which responsibility could apply in this case; nor do I see at all how it would be reasonable to use praise or blame. If the action does not depend on the character, what is the use of trying to alter the character? Suppose, however, that this indeterminateness is only partial; that the character does add some restrictions to those already imposed by circumstances, but leaves the choice between certain actions undetermined to be settled by chance or the transcendental Ego. Is it not clear that the man would be responsible for precisely that part of the character of the action which was determined by his character, and not for what was left undetermined by it? For it is just that part which was determined by his character which it is reasonable to try to alter by altering him.

We who believe in uniformity are not the only people unable to conceive responsibility without it. These are the words of Sir W. Hamilton, as quoted by Mr. J. S.

Mil1:--\*

"Nay, were we even to admit as true, what we cannot think as possible, still the doctrine of a motiveless volition would be only casualism; and the free acts of an indifferent are, morally and rationally, as worthless as the pre-ordered passions of a determined will."

"That, though inconceivable, a motiveless volition would, if conceived, be conceived as morally worthless, only shows our

impotence more clearly."

is the person an original undetermined cause of the determination of his will? If he be not, then he is not a free agent, and the scheme of necessity is admitted. If he be, in the first place, it is impossible to conceive the possibility of this; and in the second, if

<sup>\*</sup> Examination, p. 556.

the fact, though inconceivable, be allowed, it is impossible to see how a cause, undetermined by any motive, can be a rational, moral, and accountable cause."

It is true that Hamilton also says that the scheme of necessity is inconceivable, because it leads to an infinite non-commencement; and that "the possibility of morality depends on the possibility of liberty; for if a man be not a free agent, he is not the author of his actions, and has, therefore, no responsibility—no moral personality at all."

I know nothing about necessity; I only believe that nature is practically uniform even in human action. I know nothing about an infinitely distant past; I only know that I ought to base on uniformity those inferences which are to guide my actions. But that man is a free agent appears to me obvious, and that in the natural sense of the words. We need ask for no better definition than Kant's:—

"Will is that kind of causality attributed to living agents, in so far as they are possessed of reason; and freedom is such a property of that causality as enables them to originate events independently of foreign determining causes; as, on the other hand (mechanical), necessity is that property of the causality of irrationals, whereby their activity is excited and determined by the influence of foreign causes."\*

I believe that I am a free agent when my actions are independent of the control of circumstances outside me; and it seems a misuse of language to call me a free agent if my actions are determined by a transcendental Ego who is independent of the circumstances inside me—that is to say, of my character. The expression "free will" has unfortunately been imported into mental science from a theological controversy rather different from the one we are now considering. It is surely too much to expect that good and serviceable English words should be sacrificed to a phantom.

In an admirable book, 'The Methods of Ethics,' Mr. Henry Sidgwick has stated, with supreme fairness and impartiality, both sides of this question. After setting forth the "almost overwhelming cumulative proof" of uniformity in human action, he says that it seems "more

<sup>\* &#</sup>x27;Metaphysic of Ethics,' chap. iii.

than balanced by a single argument on the other side: the immediate affirmation of consciousness in the moment of deliberate volition." "No amount of experience of the sway of motives ever tends to make me distrust my intuitive consciousness that in resolving, after deliberation, I exercise free choice as to which of the motives

acting upon me shall prevail."

The only answer to this argument is that it is not "on the other side." There is no doubt about the deliverance of consciousness; and even if our powers of selfobservation had not been acute enough to discover it, the existence of some choice between motives would be proved by the existence of vaso-motor nerves. perhaps the most instructive way of meeting arguments of this kind is to inquire what consciousness ought to say in order that its deliverances may be of any use in the controversy. It is affirmed, on the side of uniformity, that the feelings in my consciousness in the moment of voluntary choice have been preceded by facts out of my consciousness which are related to them in a uniform manner, so that if the previous facts had been accurately known the voluntary choice might have been predicted. On the other side this is denied. To be of any use in the controversy, then, the immediate deliverance of my consciousness must be competent to assure me of the non-existence of something which by hypothesis is not in my consciousness. Given an absolutely dark room, can my sense of sight assure me that there is no one but myself in it? Can my sense of hearing assure me that nothing inaudible is going on? As little can the immediate deliverance of my consciousness assure me that the uniformity of nature does not apply to human actions.

It is perhaps necessary, in connection with this question, to refer to that singular Materialism of high authority and recent date which makes consciousness a physical agent, "correlates" it with Light and Nerveforce, and so reduces it to an objective phenomenon. This doctrine is founded on a common and very useful mode of speech, in which we say, for example, that a good fire is a source of pleasure on a cold day, and that a man's feeling of chill may make him run to it. But

so also we say that the sun rises and sets every morn and night, although the man in the moon sees clearly that this is due to the rotation of the earth. One cannot be pedantic all day. But if we choose for once to be pedantic, the matter is after all very simple. Suppose that I am made to run by a feeling of chill. When I begin to move my leg, I may observe if I like a double series of facts. I have the feeling of effort, the sensation of motion in my leg; I feel the pressure of my foot on the ground. Along with this I may see with my eves, or feel with my hands, the motion of my leg as a material object. The first series of facts belongs to me alone; the second may be equally observed by anybody else. The mental series began first; I willed to move my leg before I saw it move. But when I know more about the matter, I can trace the material series further back, and find nerve messages going to the muscles of my leg to make it move. But I had a feeling of chill before I chose to move my leg. Accordingly, I can find nerve messages, excited by the contraction due to the low temperature, going to my brain from the chilled Assuming the uniformity of nature, I carry forward and backward both the mental and the material series. A uniformity is observed in each, and a parallelism is observed between them, whenever observations can be made. But sometimes one series is known better, and sometimes the other; so that in telling a story we quite naturally speak sometimes of mental facts and sometimes of material facts. A feeling of chill made a man run; strictly speaking, the nervous disturbance which coexisted with that feeling of chill made him run, if we want to talk about material facts; or the feeling of chill produced the form of sub-consciousness. which coexists with the motion of legs, if we want to talk about mental facts. But we know nothing about the special nervous disturbance which coexists with a feeling of chill, because it has not yet been localised in the brain; and we know nothing about the form of subconsciousness which coexists with the motion of legs; although there is very good reason for believing in the existence of both. So we talk about the feeling of chill and the running, because in one case we know the

mental side, and in the other the material side. A man might show me a picture of the battle of Gravelotte, and say, "You can't see the battle, because it is all over. but there is a picture of it." And then he might put a chassepot into my hand, and say, "We could not represent the whole construction of a chassepot in the picture. but you can examine this one, and find it out." If I now insisted on mixing up the two modes of communication of knowledge, if I expected that the chassepots in the picture would go off, and said that the one in my hand was painted on heavy canvas, I should be acting exactly in the spirit of the new materialism. For the material facts are a representation or symbol of the mental facts, just as a picture is a representation or symbol of a battle. And my own mind is a reality from which I can judge by analogy of the realities represented by other men's brains, just as the chassepot in my hand is a reality from which I can judge by analogy of the chassepots represented in the picture. When, therefore, we ask, "What is the physical link between the ingoing message from chilled skin and the outgoing message which moves the leg?" and the answer is, "A man's Will," we have as much right to be amused as if we had asked our friend with the picture what pigment was used in painting the cannon in the foreground, and received the answer, "Wrought iron." It will be found excellent practice in the mental operations required by this doctrine to imagine a train, the fore part of which is an engine and three carriages linked with iron couplings. and the hind part three other carriages linked with iron couplings; the bond between the two parts being made out of the sentiments of amity subsisting between the stoker and the guard.

To sum up; the uniformity of nature in human actions has been denied on the ground that it takes away responsibility, that it is contradicted by the testimony of consciousness, and that there is a physical correlation between mind and matter. We have replied that the uniformity of nature is necessary to responsibility, that it is affirmed by the testimony of consciousness whenever consciousness is competent to testify, and that matter is the phenomenon or symbol of which mind or

quasi-mind is the symbolized and represented thing. We are now free to continue our inquiries on the supposition

that nature is uniform.

We began by describing the moral sense of an Englishman. No doubt the description would serve very well for the more civilised nations of Europe; most closely for Germans and Dutch. But the fact that we can speak in this way discloses that there is more than one moral sense, and that what I feel to be right another man may feel to be wrong. Thus we cannot help asking whether there is any reason for preferring one moral sense to another; whether the question, "What is right to do?" has in any one set of circumstances a single answer which can be

definitely known.

Now clearly in the first rough sense of the word this is not true. What is right for me to do now, seeing that I am here with a certain character, and a certain moral sense as part of it, is just what I feel to be right. individual conscience is, in the moment of volition, the only possible judge of what is right; there is no conflicting claim. But if we are deliberating about the future, we know that we can modify our conscience gradually by associating with certain people, reading certain books, and paying attention to certain ideas and feelings; and we may ask ourselves, " How shall we modify our conscience, if at all? what kind of conscience shall we try to get? what is the best conscience?" We may ask similar questions about our sense of taste. There is no doubt at present that the nicest things to me are the things I like; but I know that I can train myself to like some things and dislike others, and that things which are very nasty at one time may come to be great delicacies at another. I may ask, "How shall I train myself? What is the best taste?" And this leads very naturally to putting the question in another form, namely, "What is taste good for? What is the purpose or function of taste?" We should probably find as the answer to that question that the purpose or function of taste is to discriminate wholesome food from unwholesome; that it is a matter of stomach and digestion. It will follow from this that the best taste is that which prefers wholesome food, and that by cultivating a preference for wholesome and

nutritious things I shall be training my palate in the way it should go. In just the same way our question about the best conscience will resolve itself into a question about the purpose or function of the conscience—why we have

got it, and what it is good for.

Now to my mind the simplest and clearest and most profound philosophy that was ever written upon this subject is to be found in the 2nd and 3rd chapters of Mr. Darwin's 'Descent of Man.' In these chapters it appears that just as most physical characteristics of organisms have been evolved and preserved because they were useful to the individual in the struggle for existence against other individuals and other species, so this particular feeling has been evolved and preserved because it is useful to the tribe or community in the struggle for existence against other tribes, and against the environment as a whole. The function of conscience is the preservation of the tribe as a tribe. And we shall rightly train our consciences if we learn to approve those actions which tend to the advantage of the

community in the struggle for existence.

There are here some words, however, which require careful definition. And first the word purpose. A thing serves a purpose when it is adapted to some end; thus a corkscrew is adapted to the end of extracting corks from bottles, and our lungs are adapted to the end of respiration. We may say that the extraction of corks is the purpose of the corkscrew, and that respiration is the purpose of the lungs. But here we shall have used the word in two different senses. A man made the corkscrew with a purpose in his mind, and he knew and intended that it should be used for pulling out corks. But nobody made our lungs with a purpose in his mind, and intended that they should be used for The respiratory apparatus was adapted to its purpose by natural selection-namely, by the gradual preservation of better and better adaptations, and the killing off of the worse and imperfect adaptations. In using the word purpose for the result of this unconscious process of adaptation by survival of the fittest, I know that I am somewhat extending its ordinary sense, which implies con-But it seems to me that on the score of convenience there is a great deal to be said for this extension of meaning. We want a word to express the adaptation of

means to an end, whether involving consciousness or not: the word purpose will do very well, and the adjective purposive has already been used in this sense. But if the use is admitted, we must distinguish two kinds of purpose. There is the unconscious purpose which is attained by natural selection, in which no consciousness need be concerned; and there is the conscious purpose of an intelligence which designs a thing that it may serve to do something which he desires to be done. The distinguishing mark of this second kind, design or conscious purpose, is that in the consciousness of the agent there is an image or symbol of the end which he desires, and this precedes and determines the use of the means. Thus the man who first invented a corkscrew must have previously known that corks were in bottles, and have desired to get them out. We may describe this if we like in terms of matter, and say that a purpose of the second kind implies a complex nervous system, in which there can be formed an image or symbol of the end, and that this symbol determines the use of the The nervous image or symbol of anything is that mode of working of part of my brain which goes on simultaneously and is correlated with my thinking of the thing.

Aristotle defines an organism as that in which the part exists for the sake of the whole. It is not that the existence of the part depends on the existence of the whole, for every whole exists only as an aggregate of parts related in a certain way; but that the shape and nature of the part are determined by the wants of the whole. Thus the shape and nature of my foot are what they are, not for the sake of my foot itself, but for the sake of my whole body, and because it wants to move about. That which the part has to do for the whole is called its function. Thus the function of my foot is to support me, and assist in locomotion. Not all the nature of the part is necessarily for the sake of the whole; the comparative callosity of the skin of my sole is for the

protection of my foot itself.

Society is an organism, and man in society is part of an organism according to this definition, in so far as some portion of the nature of man is what it is for the sake of the whole—society. Now conscience is such a portion of the nature of man, and its function is the preservation of

society in the struggle for existence. We may be able to define this function more closely when we know more about the way in which conscience tends to preserve society.

Next let us endeavour to make precise the meaning of the words community and society. It is clear that at different times men may be divided into groups of greater or less extent—tribes, clans, families, nations, towns. certain number of clans are struggling for existence, that portion of the conscience will be developed which tends to the preservation of the clan; so, if towns or families are struggling, we shall get a moral sense adapted to the advantage of the town or the family. In this way different portions of the moral sense may be developed at different stages of progress. Now it is clear that for the purpose of the conscience, the word community at any time will mean a group of that size and nature which is being selected or not selected for survival as a whole. Selection may be going on at the same time among many different kinds of groups. And ultimately the moral sense will be composed of various portions relating to various groups, the function or purpose of each portion being the advantage of that group to which it relates in the struggle for existence. Thus we have a sense of family duty, of municipal duty, of national duty, and of duties towards all mankind.

It is to be noticed that part of the nature of a smaller group may be what it is for the sake of a larger group to which it belongs; and then we may speak of the function of the smaller group. Thus it appears probable that the family, in the form in which it now exists among us, is determined by the good of the nation; and we may say that the function of the family is to promote the advantage of the nation or larger society in some certain ways. But I do not think it would be right to follow Auguste Comte in speaking of the function of humanity; because humanity is obviously not a part of any larger organism

for whose sake it is what it is.

Now that we have cleared up the meanings of some of our words, we are still a great way from the definite solution of our question, "What is the best conscience? or what ought I to think right?" For we do not yet know what is for the advantage of the community in the struggle for existence. If we choose to learn by the analogy of an

individual organism, we may see that no permanent or final answer can be given, because the organism grows in consequence of the struggle, and develops new wants while it is satisfying the old ones. But at any given time it has quite enough to do to keep alive and to avoid dangers and diseases. So we may expect that the wants and even the necessities of the social organism will grow with its growth, and that it is impossible to predict what may tend in the distant future to its advantage in the struggle for existence. But still, in this vague and general statement of the functions of conscience, we shall find that we have already

established a great deal.

In the first place, right is an affair of the community, and must not be referred to anything else. To go back to our analogy of taste: if I tried to persuade you that the best palate was that which preferred things pretty to look at, you might condemn me à priori without any experience, by merely knowing that taste is an affair of stomach and digestion—that its function is to select wholesome food. And so, if any one tries to persuade us that the best conscience is that which thinks it right to obey the will of some individual, as a deity or a monarch, he is condemned à priori in the very nature of right and wrong. In order that the worship of a deity may be consistent with natural ethics, he must be regarded as the friend and helper of humanity, and his character must be judged from his actions by a moral standard which is independent of him. And this, it must be admitted, is the position which has been taken by most English divines, as long as they were Englishmen first and divines afterwards. The worship of a deity who is represented as unfair or unfriendly to any portion of the community is a wrong thing, however great may be the threats and promises by which it is commended. And still worse, the reference of right and wrong to his arbitrary will as a standard, the diversion of the allegiance of the moral sense from the community to him, is the most insidious and fatal of social diseases. It was against this that the Teutonic conscience protested in the Reformation. Again, in monarchical countries, in order that allegiance to the sovereign may be consistent with natural ethics, he must be regarded as the servant and symbol of the national unity, capable of rebellion and punishable for it. And this

has been the theory of the English constitution from time immemorial.

The first principle of natural ethics, then, is the sole and supreme allegiance of conscience to the community. I venture to call this *piety*, in accordance with the older meaning of the word. Even if it should turn out impossible to sever it from the unfortunate associations which have clung to its later meaning, still it seems worth while to try

An immediate deduction from our principle is that there are no self-regarding virtues properly so called; those qualities which tend to the advantage and preservation of the individual being only morally right in so far as they make him a more useful citizen. And this conclusion is in some cases of great practical importance. The virtue of purity, for example, attains in this way a fairly exact definition: purity in a man is that course of conduct which makes him to be a good husband and father, in a woman that which makes her to be a good wife and mother, or which helps other people so to prepare and keep themselves. It is easy to see how many false ideas and pernicious precepts are swept away by even so simple a definition as that.

Next, we may fairly define our position in regard to that moral system which has deservedly found favour with the great mass of our countrymen. In the common statement of utilitarianism, the end of right action is defined to be the greatest happiness of the greatest number. It seems to me that the reason and the ample justification of the success of this system is that it explicitly sets forth the community as the object of moral allegiance. But our determination of the purpose of the conscience will oblige us to make a change in the statement of it. Happiness is not the end of right action. My happiness is of no use to the community except in so far as it makes me a more efficient citizen; that is to say, it is rightly desired as a means and not as an end. The end may be described as the greatest efficiency of all citizens as such. No doubt happiness will in the long run accrue to the community as a consequence of right conduct; but the right is determined independently of the happiness, and, as Plato says, it is better to suffer wrong than to do wrong.\*

<sup>\*</sup> The word altruism seems to me unfortunate, because the community, (my heighbourn is to be regarded not as other, but as myself. I have endeavoured to defend this view elsewhere.

In conclusion. I would add some words on the relation of Veracity to the first principle of Piety. It is clear that veracity is founded on faith in man; you tell a man the truth when you can trust him with it and are not afraid. This perhaps is made more evident by considering the case of exception allowed by all moralists-namely, that if a man asks you the way with a view to committing a murder. it is right to tell a lie and misdirect him. The reason why he must not have the truth told him is that he would make a bad use of it, he cannot be trusted with it. About these cases of exception an important remark must be made in passing. When we hear that a man has told a lie under such circumstances, we are indeed ready to admit that for once it was right, mensonge admirable; but we always have a sort of feeling that it must not occur again. And the same thing applies to cases of conflicting obligations, when for example the family conscience and the national conscience disagree. In such cases no general rule can be laid down; we have to choose the less of two evils; but this is not right altogether in the same sense as it is right to speak There is something wrong in the circumstances that we should have to choose an evil at all. The actual course to be pursued will vary with the progress of society; that evil which at first was greater will become less, and in a perfect society the conflict will be resolved into harmony. But meanwhile these cases of exception must be carefully kept distinct from the straightforward cases of right and wrong, and they always imply an obligation to mend the circumstances if we can.

Veracity to an individual is not only enjoined by piety in virtue of the obvious advantage which attends a straightforward and mutually trusting community as compared with others, but also because deception is in all cases a personal injury. Still more is this true of veracity to the community itself. The conception of the universe or aggregate of beliefs which forms the link between sensation and action for each individual is a public and not a private matter; it is formed by society and for society. Of what enormous importance it is to the community that this should be a true conception I need not attempt to describe. Now to the attainment of this true conception two things are necessary.

First, if we study the history of those methods by which true beliefs and false beliefs have been attained, we shall see that it is our duty to guide our beliefs by inference from experience on the assumption of uniformity of nature and consciousness in other men, and by this only. Only upon this moral basis can the foundations of the empirical

method be justified.

Secondly, veracity to the community depends upon faith in man. Surely I ought to be talking platitudes when I say that it is not English to tell a man a lie, or to suggest a lie by your silence or your actions, because you are afraid that he is not prepared for the truth, because you don't quite know what he will do when he knows it, because perhaps after all this lie is a better thing for him than the truth would be; this same man being all the time an honest fellow-citizen whom you have every reason to trust. Surely I have heard that this craven crookedness is the object of our national detestation. And yet it is constantly whispered that it would be dangerous to divulge certain "I know the whole thing is untrue: truths to the masses. but then it is so useful for the people; you don't know what harm you might do by shaking their faith in it." Crooked ways are none the less crooked because they are meant to deceive great masses of people instead of individuals. If a thing is true, let us all believe it, rich and poor, men, women, and children. If a thing is untrue, let us all disbelieve it, rich and poor, men, women, and children. Truth is a thing to be shouted from the housetops, not to be whispered over rose-water after dinner when the ladies are gone away.

Even in those whom I would most reverence, who would shrink with horror from such actual deception as I have just mentioned, I find traces of a want of faith in man. Even that noble thinker, to whom we of this generation owe more than I can tell, seemed to say in one of his post-humous essays that in regard to questions of great public importance we might encourage a hope in excess of the evidence (which would infallibly grow into a belief and defy evidence) if we found that life was made easier by it. As if we should not lose infinitely more by nourishing a tendency to falsehood than we could gain by the delusion of a pleasing fancy. Life must first of all be made straight

and true; it may get easier through the help this brings to the commonwealth. And the great historian of materialism\* says that the amount of false belief necessary to morality in a given society is a matter of taste. I cannot believe that any falsehood whatever is necessary to morality. It cannot be true of my race and yours that to keep ourselves from becoming scoundrels we must needs believe a lie. The sense of right grew up among healthy men and was fixed by the practice of comradeship. It has never had help from phantoms and falsehoods, and it never can want any. By faith in man and piety towards man we have taught each other the right hitherto; with faith in man and piety towards man we shall never more depart from it.



<sup>\*</sup> Lange, 'Geschichte des Materialismus.'