

ON THE SCIENTIFIC BASIS OF MORALS.¹

The crude essay which here follows is allowed to see the light rather as a text for the remarks to which it has given rise than for its own sake. It was written as a means of seeking for more light, and in that respect has succeeded. Some remarks of Mr. Darwin's ('Descent of Man,' part i. ch. 3) appeared to me to constitute a method of dealing with ethical problems bearing a close analogy to the methods which have been successful in all other practical questions, but differing somewhat in principle from the theories which are at present in vogue, while in its results it coincides with the highest and healthiest practical instincts of this and of all times. All that is attempted here is to show roughly what account is given by this method of some of the fundamental conceptions—right and wrong, conscience, responsibility—and to indicate the nature of the standard which must guide their application. Exact definitions are not to be looked for; they come as the last product of a completed theory, and are sure to be wrong at an early stage of science. But though we may be unable to define fully what right is, we do, I think, arrive at principles which show us very clearly many things which it is not; and these conclusions are not only of great practical importance, but theoretically bear close analogy to the steps by which complete definition has been attained in the exact sciences.

By *Morals* or *Ethic* I mean the doctrine of a special kind of pleasure or displeasure which is felt by the human mind in contemplating certain courses of conduct, whereby they are felt to be *right* or *wrong*, and of a special desire to do the right things and avoid the wrong ones. The pleasure or displeasure is commonly called the moral sense; the corresponding desire might be called the moral appetite. These are facts, existing in the consciousness of every man who need be considered in this discussion, and sufficiently marked out by these names; they need no further definition. In the same

¹ 'Contemporary Review,' September, 1875.

way the sense of taste is a feeling of pleasure or displeasure in things savoury or unsavoury, and is associated with a desire for the one and a repulsion from the other. We must assume that everybody knows what these words mean; the feelings they describe may be analysed or accounted for, but they cannot be more exactly defined as feelings.

The maxims of ethic are recommendations or commands of the form, 'Do this particular thing because it is right,' or 'Avoid this particular thing because it is wrong.' They express the immediate desire to do the right thing for itself, not for the sake of anything else: on this account the mood of them is called the categorical imperative. The particular things commanded or forbidden by such maxims depend upon the character of the individual in whose mind they arise. There is a certain general agreement in the ethical code of persons belonging to the same race at a given time, but considerable variations in different races and times. To the question 'What is right?' can therefore only be answered in the first instance, 'That which pleases your moral sense.' But it may be further asked 'What is generally thought right?' and the reply will specify the ethic of a particular race and period. But the ethical code of an individual, like the standard of taste, may be modified by habit and education; and accordingly the question may be asked, 'How shall I order my moral desires so as to be able to satisfy them most completely and continuously? What *ought* I to feel to be right?' The answer to this question must be sought in the study of the conditions under which the moral sense was produced and is preserved; in other words, in the study of



its functions as a property of the human organism. The maxims derived from this study may be called maxims of abstract or absolute right; they are not absolutely universal, 'eternal and immutable,' but they are independent of the individual, and practically universal for the present condition of the human species.

I mean by Science the application of experience to new circumstances, by the aid of an order of nature which has been observed in the past, and on the assumption that such order will continue in the future. The simplest use of experience as a guide to action is probably not even conscious; it is the association by continually-repeated selection of certain actions with certain circumstances, as in the unconsciously-acquired craft of the maker of flint implements. I still call this science, although it is only a beginning; because the physiological process is a type of what takes place in all later stages. The next step may be expressed in the form of a hypothetical maxim,—'If you want to make brass, melt your copper along with this blue stone.' To a maxim of this sort it may always be replied, 'I do not want to make brass, and so I shall not do as you tell me.' This reply is anticipated in the final form of science, when it is expressed as a statement or proposition: brass is an alloy of copper and zinc, and calamine is zinc carbonate. Belief in a general statement is an artifice of our mental constitution, whereby infinitely various sensations and groups of sensations are brought into connexion with infinitely various actions and groups of actions. On the phenomenal side there corresponds a certain cerebral structure by which various combinations of disturbances in the sensor tract are made to lead to the appropriate

combinations of disturbances in the motor tract. The important point is that science, though apparently transformed into pure knowledge, has yet never lost its character of being a *craft*; and that it is not the knowledge itself which can rightly be called science, but a special way of getting and of using knowledge. Namely, science is the getting of knowledge from experience on the assumption of uniformity in nature, and the use of such knowledge to guide the actions of men. And the most abstract statements or propositions in science are to be regarded as bundles of hypothetical maxims packed into a portable shape and size. Every scientific fact is a shorthand expression for a vast number of practical directions: if you want so-and-so, do so-and-so.

If with this meaning of the word 'Science,' there is such a thing as a scientific basis of Morals, it must be true that,—

- 1, The maxims of Ethic are hypothetical maxims
- 2, Derived from experience
- 3, On the assumption of uniformity in nature.

These propositions I shall now endeavour to prove; and in conclusion, I shall indicate the direction in which we may look for those general statements of fact whose organization will complete the likeness of ethical and physical science.

The Tribal Self.¹

In the metaphysical sense, the word 'self' is taken to mean the conscious subject, *das Ich*, the whole

¹ This conception of an Extended Self I found many years ago that I had in common with my friend Mr. Macmillan. Since then I have heard and read in many places expressions of it more or less distinct.



stream of feelings which make up a consciousness regarded as bound together by association and memory. But, in the more common and more restricted ethical sense, what we call *self* is a selected aggregate of feelings and of objects related to them which hangs together as a conception by virtue of long and repeated association. My self does not include all my feelings, because I habitually separate off some of them, say they do not properly belong to me, and treat them as my enemies. On the other hand, it does in general include my body regarded as an object, because of the feelings which occur simultaneously with events which affect it. My foot is certainly part of myself, because I get hurt when anybody treads on it. When we desire anything for its somewhat remote consequences, it is not common for these to be represented to the mind in the form of the actual feelings of pleasure which are ultimately to flow from the satisfaction of the desire; instead of this, they are replaced by a symbolic conception which represents the thing desired as doing good to the complex abstraction *self*. This abstraction serves thus to support and hold together those complex and remote motives which make up by far the greater part of the life of the intelligent races. When a thing is desired for no immediate pleasure that it can bring, it is generally desired on account of a certain symbolic substitute for pleasure, the feeling that this thing is suitable to the self. And, as in many like cases, this feeling, which at first derived its pleasurable nature from the faintly represented simple pleasures of which it was a symbol, ceases after a time to recall them and becomes a simple pleasure itself. In this

way the self becomes a sort of centre about which our remoter motives revolve, and to which they always have regard; in virtue of which, moreover, they become immediate and simple, from having been complex and remote.

If we consider now the simpler races of mankind, we shall find not only that immediate desires play a far larger part in their lives, and so that the conception of self is less used and less developed, but also that it is less definite and more wide. The savage is not only hurt when anybody treads on his foot, but when anybody treads on his tribe. He may lose his hut, and his wife, and his opportunities of getting food. In this way the tribe becomes naturally included in that conception of self which renders remote desires possible by making them immediate. The actual pains or pleasures which come from the woe or weal of the tribe, and which were the source of this conception, drop out of consciousness and are remembered no more; the symbol which has replaced them becomes a centre and goal of immediate desires, powerful enough in many cases to override the strongest suggestions of individual pleasure or pain.

Here a helping cause comes in. The tribe, *quâ* tribe, has to exist, and it can only exist by aid of such an organic artifice as the conception of the tribal self in the minds of its members. Hence the natural selection of those races in which this conception is the most powerful and most habitually predominant as a motive over immediate desires. To such an extent has this proceeded that we may fairly doubt whether the selfhood of the tribe is not earlier in point of development



than that of the individual. In the process of time it becomes a matter of hereditary transmission, and is thus fixed as a specific character in the constitution of social man. With the settlement of countries, and the aggregation of tribes into nations, it takes a wider and more abstract form; and in the highest natures the tribal self is incarnate in nothing less than humanity. Short of these heights, it places itself in the family and in the city. I shall call that quality or disposition of man which consists in the supremacy of the family or tribal self as a mark of reference for motives by its old name *Piety*. And I have now to consider certain feelings and conceptions to which the existence of piety must necessarily give rise.

Before going further, however, it will be advisable to fix as precisely as may be the sense of the words just used. Self, then, in the ethical sense, is a conception in the mind of the individual which serves as a peg on which remote desires are hung and by which they are rendered immediate. The individual self is such a peg for the hanging of remote desires which affect the individual only. The tribal self is a conception in the mind of the individual which serves as a peg on which those remote desires are hung which were implanted in him by the need of the tribe as a tribe. We must carefully distinguish the tribal self from society, or the 'common consciousness'; it is something in the mind of each individual man which binds together his gregarious instincts.

The word *tribe* is here used to mean a group of that size which in the circumstances considered is selected for survival or destruction as a group. Self-regarding

excellences are brought out by the natural selection of individuals; the tribal self is developed by the natural selection of groups. The size of the groups must vary at different times; and the extent of the tribal self must vary accordingly.

Approbation and Conscience.

The tribe has to exist. Such tribes as saw no necessity for it have ceased to live. To exist, it must encourage piety; and there is a method which lies ready to hand.

We do not like a man whose character is such that we may reasonably expect injuries from him. This dislike of a man on account of his character is a more complex feeling than the mere dislike of separate injuries. A cat likes your hand, and your lap, and the food you give her; but I do not think she has any conception of *you*.¹ A dog, however, may like *you* even when you thrash him, though he does not like the thrashing. Now such likes and dislikes may be felt by the tribal self. If a man does anything generally regarded as good for the tribe, my tribal self may say, in the first place, 'I like that thing that you have done.' By such common approbation of individual acts the influence of piety as a motive becomes defined; and natural selection will in the long run preserve those tribes which have approved the right things; namely, those things which at that time gave the tribe an advantage in the struggle for existence. But in the second place, a man may as a rule and constantly, being actuated by piety, do good things for the tribe;

¹ Present company always excepted: I fully believe in the personal and disinterested affection of *my* cat.



and in that case the tribal self will say, I like *you*. The feeling expressed by this statement on the part of any individual, 'In the name of the tribe, I like you,' is what I call *approbation*. It is the feeling produced in pious individuals by that sort of character which seems to them beneficial to the community.

Now suppose that a man has done something obviously harmful to the community. Either some immediate desire, or his individual self, has for once proved stronger than the tribal self. When the tribal self wakes up, the man says, 'In the name of the tribe, I do not like this thing that I, as an individual, have done.' This Self-judgment in the name of the tribe is called Conscience. If the man goes further and draws from this act and others an inference about his own character, he may say, 'In the name of the tribe, I do not like my individual self.' This is remorse. Mr. Darwin has well pointed out that immediate desires are in general strong but of short duration, and cannot be adequately represented to the mind after they have passed; while the social forces, though less violent, have a steady and continuous action.

In a mind sufficiently developed to distinguish the individual from the tribal self, conscience is thus a necessary result of the existence of piety; it is ready to hand as a means for its increase. But to account for the existence of piety and conscience in the elemental form which we have hitherto considered is by no means to account for the present moral nature of man. We shall be led many steps in that direction if we consider the way in which society has used these feelings of the individual as a means for its own preservation.

Right and Responsibility.

A like or a dislike is one thing; the expression of it is another. It is attached to the feeling by links of association; and when this association has been selectively modified by experience, whether consciously or unconsciously, the expression serves a *purpose* of retaining or repeating the thing liked, and of removing the thing disliked. Such a purpose is served by the expression of tribal approbation or disapprobation, however little it may be the conscious end of such expression to any individual. It is necessary to the tribe that the pious character should be encouraged and preserved, the impious character discouraged and removed. The process is of two kinds; direct and reflex. In the direct process the tribal dislike of the offender is precisely similar to the dislike of a noxious beast; and it expresses itself in his speedy removal. But in the reflex process we find the first trace of that singular and wonderful judgment by analogy which ascribes to other men a consciousness similar to our own. If the process were a conscious one, it might perhaps be described in this way: the tribal self says, 'Put yourself in this man's place; he also is pious, but he has offended, and that proves that he is not pious enough. Still, he has some conscience, and the expression of your tribal dislike to his character, awakening his conscience, will tend to change him and make him more pious.' But the process is not a conscious one: the social craft or art of living together is learned by the tribe and not by the individual, and the purpose of improving men's characters is provided for by complex social arrange-



ments long before it has been conceived by any conscious mind. The tribal self learns to approve certain expressions of tribal liking or disliking; the actions whose open approval is liked by the tribal self are called right actions, and those whose open disapproval is liked are called wrong actions. The corresponding characters are called good or bad, virtuous or vicious.

This introduces a further complication into the conscience. Self-judgment in the name of the tribe becomes associated with very definite and material judgment by the tribe itself. On the one hand, this undoubtedly strengthens the motive-power of conscience in an enormous degree. On the other hand, it tends to guide the decisions of conscience; and since the expression of public approval or disapproval is made in general by means of some organized machinery of government, it becomes possible for conscience to be knowingly directed by the wise or misdirected by the wicked, instead of being driven along the right path by the slow selective process of experience. Now right actions are not those which are publicly approved, but those whose public approbation a well-instructed tribal self would like. Still, it is impossible to avoid the guiding influence of expressed approbation on the great mass of the people; and in those cases where the machinery of government is approximately a means of expressing the true public conscience, that influence becomes a most powerful help to improvement.

Let us note now the very important difference between the direct and the reflex process. To clear a man away as a noxious beast, and to punish him for

doing wrong, these are two very different things. The purpose in the first case is merely to get rid of a nuisance; the purpose in the second case is to improve the character either of the man himself or of those who will observe this public expression of disapprobation. The offence of which the man has been guilty leads to an inference about his character, and it is supposed that the community may contain other persons whose characters are similar to his, or tend to become so. It has been found that the expression of public disapprobation tends to awake the conscience of such people and to improve their characters. If the improvement of the man himself is aimed at, it is assumed that he has a conscience which can be worked upon and made to deter him from similar offences in future.

The word *purpose* has here been used in a sense to which it is perhaps worth while to call attention. Adaptation of means to an end may be produced in two ways that we at present know of; by processes of natural selection, and by the agency of an intelligence in which an image or idea of the end preceded the use of the means. In both cases the existence of the adaptation is accounted for by the necessity or utility of the end. It seems to me convenient to use the word *purpose* as meaning generally the end to which certain means are adapted, both in these two cases, and in any other that may hereafter become known, provided only that the adaptation is accounted for by the necessity or utility of the end. And there seems no objection to the use of the phrase 'final cause' in this wider sense, if it is to be kept at all. The word 'design' might then be kept for the special case of adaptation by an intelligence.



And we may then say that since the process of natural selection has been understood, *purpose* has ceased to suggest *design* to instructed people, except in cases where the agency of man is independently probable.

When a man can be punished for doing wrong with approval of the tribal self, he is said to be *responsible*. Responsibility implies two things:—(1), The act was a product of the man's character and of the circumstances, and his character may to a certain extent be inferred from the act; (2), The man had a conscience which might have been so worked upon as to prevent his doing the act. Unless the first condition be fulfilled, we cannot reasonably take any action at all in regard to the man, but only in regard to the offence. In the case of crimes of violence, for example, we might carry a six-shooter to protect ourselves against similar possibilities, but unless the fact of a man's having once committed a murder made it probable that he would do the like again, it would clearly be absurd and unreasonable to lynch the man. That is to say, we assume a uniformity of connexion between character and actions, infer a man's character from his past actions, and endeavour to provide against his future actions either by destroying him or by changing his character. I think it will be found that in all those cases where we not only deal with the offence but treat it with moral reprobation, we imply the existence of a conscience which might have been worked upon to improve the character. Why, for example, do we not regard a lunatic as responsible? Because we are in possession of information about his character derived not only from his one offence but from other facts, whereby we

know that even if he had a conscience left, his mind is so diseased that it is impossible by moral reprobation alone to change his character so that it may be subsequently relied upon. With his cure from disease and the restored validity of this condition, responsibility returns. There are, of course, cases in which an irresponsible person is punished as if he were responsible, *pour encourager les autres* who are responsible. The question of the right or wrong of this procedure is the question of its average effect on the character of men at any particular time.

The Categorical Imperative.

May we now say that the maxims of Ethic are hypothetical maxims? I think we may, and that in showing why we shall explain the apparent difference between them and other maxims belonging to an early stage of science. In the first place, ethical maxims are learned by the tribe and not by the individual. Those tribes have on the whole survived in which conscience approved such actions as tended to the improvement of men's characters as citizens and therefore to the survival of the tribe. Hence it is that the moral sense of the individual, though founded on the experience of the tribe, is purely intuitive; conscience gives no reasons. Notwithstanding this, the ethical maxims are presented to us as conditional; if you want to live together in this complicated way, your ways must be straight and not crooked, you must seek the truth and love no lie. Suppose we answer, 'I don't want to live together with other men in this complicated way; and so I shall not do as you tell me.' That is not the end of the matter,



as it might be with other scientific precepts. For obvious reasons it is *right* in this case to reply, 'Then in the name of my people I do not like you,' and to express this dislike by appropriate methods. And the offender, being descended from a social race, is unable to escape his conscience, the voice of his tribal self which says, 'In the name of the tribe, I hate myself for this treason that I have done.'

There are two reasons, then, why ethical maxims appear to be unconditional. First, they are acquired from experience not directly but by tribal selection, and therefore in the mind of the individual they do not rest upon the true reasons for them. Secondly, although they are conditional, the absence of the condition in one born of a social race is rightly visited by moral reprobation.

Ethics are based on Uniformity.

I have already observed that to deal with men as a means of influencing their actions implies that these actions are a product of character and circumstances; and that moral reprobation and responsibility cannot exist unless we assume the efficacy of certain special means of influencing character. It is not necessary to point out that such considerations involve that uniformity of nature which underlies the possibility of even unconscious adaptations to experience, of language, and of general conceptions and statements. It may be asked 'Are you quite sure that these observed uniformities between motive and action, between character and motive, between social influence and change of character, are absolutely exact in the form in which

you state them, or indeed that they are exact laws of any form? May there not be very slight divergences from exact laws, which will allow of the action of an "uncaused will," or of the interference of some "extramundane force"? I am sure I do not know. But this I do know: that our sense of right and wrong is derived from such order as we can observe, and not from such caprice of disorder as we may fancifully conjecture; and that to whatever extent a divergence from exactness became sensible, to that extent it would destroy the most widespread and worthy of the acquisitions of mankind.

The Final Standard.

By these views we are led to conclusions partly negative, partly positive; of which, as might be expected, the negative are the most definite.

First, then, Ethic is a matter of the tribe or community, and therefore there are no 'self-regarding virtues.' The qualities of courage, prudence, &c., can only be *rightly* encouraged in so far as they are shown to conduce to the efficiency of a citizen; that is, in so far as they cease to be self-regarding. The duty of private judgment, of searching after truth, the sacredness of belief which ought not to be misused on unproved statements, follow only on showing of the enormous importance to society of a true knowledge of things. And any diversion of conscience from its sole allegiance to the community is condemned *à priori* in the very nature of right and wrong.

Next, the end of Ethic is not the greatest happiness of the greatest number. Your happiness is of no use to



the community, except in so far as it tends to make you a more efficient citizen—that is to say, happiness is not to be desired for its own sake, but for the sake of something else. If any end is pointed to, it is the end of increased efficiency in each man's special work, as well as in the social functions which are common to all. A man must strive to be a better citizen, a better workman, a better son, husband, or father. *Farvi migliori; questo ha da essere lo scopo della vostra vita.*¹

Again, Piety is not Altruism. It is not the doing good to others as others, but the service of the community by a member of it, who loses in that service the consciousness that he is anything different from the community.

The social organism, like the individual, may be healthy or diseased. Health and disease are very difficult things to define accurately: but for practical purposes, there are certain states about which no mistake can be made. When we have even a very imperfect catalogue and description of states that are clearly and certainly diseases, we may form a rough preliminary definition of health by saying that it means the absence of all these states. Now the health of society involves among other things, that right is done by the individuals composing it. And certain social diseases consist in a wrong direction of the conscience. Hence the determination of abstract right depends on the study of healthy and diseased states of society. How much light can be got for this end from the historical records we possess? A very great deal, if, as I believe, for ethical purposes the nature of man and of society may

¹ Mazzini, *Doveri dell' Uomo*.

be taken as approximately constant during the few thousand years of which we have distinct records.

The matters of fact on which rational ethic must be founded are the laws of modification of character, and the evidence of history as to those kinds of character which have most aided the improvement of the race. For although the moral sense is intuitive, it must for the future be directed by our conscious discovery of the tribal purpose which it serves.