

theory of Automatism on the ground most commonly taken. Though it gives a very inadequate expression to the infinite variety of circumstances determining human actions as viewed objectively, people must learn to be content with the plain truth that man, however he may be "man" (which is saying much), is not "master of his fate," but has his part and lot in the destiny of that—whatever it may be—which is called the physical world. But this truth is little towards all that we want to know of our strange double-sided human existence, and we cannot know more if our scientific activity is to be limited to such abstract theorising as finds expression in the doctrine of Automatism. Mental life can never be understood either in its essence or in its fullness, unless it is studied directly alike as it discloses itself to subjective introspection and as it is manifested more broadly in social relations and in the record of history.

The conclusion of the whole matter is that Psychology, however it may be related to biology, must be upheld as a perfectly distinct science—in no sense less distinct than chemistry is from physics, and in truth much more distinct because of the transition from the objective to the subjective point of view. And, returning to Mr. Lewes who has shown himself among the first—who claims indeed in his present preface to have been quite the first—to understand Psychology as the science of Mind in its wider implications, I cannot but venture the opinion that he has not now made all the use that might have been expected of his insight in dealing with the fallacy of "Animal Automatism".

EDITOR.

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### III.—THE USE OF HYPOTHESES.

THE thorough working out of that general view of the nature and province of Logic which, for the sake of brevity, may be termed the Material or Objective view, throws a new light upon, and therefore demands a reconsideration of, a good many detached points. Amongst these, as it seems to me, is the question of the nature and functions of Hypotheses.

We must first ascertain what, for the purposes of this inquiry, is to be understood by the term Hypothesis, especially since the use of the word in any kind of logical discussion will probably suggest a narrower limitation than that which will here be adopted. We need not strive after rigid accuracy, but half a page will be well expended if it aids in indicating what we have in view and in calling attention to various cautions which are often neglected. What will here be understood by the term,

then, is, briefly speaking, nothing else than a mental representation, or conception of our own, which is either known or suspected not to be in accordance with actual facts. It would be a truism to say that for all ordinary purposes our conceptions should be in entire accordance with fact, so far as this is attainable. Often they are so, or are fully believed to be so, and they then go by various names according to conditions of time or mode of acquirement. If they refer to future events we might term them predictions or confident anticipations; if to the past, and within our own experience, recollections, and so on. Often, however, we have occasion to picture to ourselves a state of things which we deliberately contemplate as not-actual; it may be merely that the things are considered as uncertain, it may be that they are utterly and even whimsically false. With regard to their nature they may be either concrete facts, or groups of facts, or properties of bodies, or laws of connection or succession, which we thus picture to ourselves as other than they are. Such suppositions as these, in so far as they are seriously made for scientific or practical purposes, and not with any prominently æsthetic or humorous aim, may be roughly taken to correspond to 'hypotheses' as we are here concerned with them. The account thus sketched out may seem at first sight to have no very close connection with the term in many of its common significations; but it will be found, it is hoped, to be a consistent one, and we must trust for its justification to the discussion which follows.

The remarks just made imply the existence or assumption of a tolerably sharp distinction between the objective and the subjective, between the complex of external facts and our conceptions of them. This is, of course, distinctive of the Material view of Logic. We cannot pause to enter into any justification of such a view here, but shall postulate it for the present as being, if not philosophically unassailable, at any rate a perfectly tenable and consistent view for all purposes of science and therefore of logical inference.

It may serve to make our task plainer if we pause for a minute to consider what is the ideal towards which such a view or system of Logic tends; how would the world be represented to it if it had attained its ultimate state of perfection? If this state were attained every fact would be certain, that is potentially certain or capable of exact inference. The universe would be like a vast volume which happened to lie open before us at some page in the middle, but the leaves of which could readily be turned so as to enable us to consult and acquire with equal certainty the contents of any other page standing anywhere before or behind the one in question. Such a possible and accurate

determination of all facts, past, present, or future, would be a necessary consequence of a complete determination and mastery of all the data requisite, and of all the laws of sequence and coexistence by which they are connected together. A well known passage in Mill's *Logic* intimates that this is to be regarded as the ideal of that branch of Material Logic which he terms Sociology, and it need hardly be remarked that what holds good of animate nature would *a fortiori* hold good of the inanimate or physical world.

Now supposing that this ideal were attained would there be any further occasion for Hypotheses? or, to put it otherwise, would the word 'if' have any meaning or use? At first sight it might almost seem as if there would be no such meaning or use. If all that we wanted was merely to call up before the mind, and contemplate, the absent, whether past or future, and this in a concrete form, 'if' would really have no place in the scientific vocabulary of such a perfected system of scientific logic. The absent events which the mind would thus succeed in calling up at will out of the boundless sea of time and space might doubtless be less vivid than those which were present to its direct consciousness, but they need be none the less certainly apprehended. Why then should those who could thus get a sure and certain hold of any fact they wanted go out of their way by supposing or hypothesising a state of things other than that which exists? Confident anticipations might be made about the future, just as recollections or records might be entertained of the past, but on the view in question the former would be no more suitable ground than the latter for an 'if' to grow and flourish in.

The obvious reply is that, although this attainment of facts which are remote from us in time or in space is one part of science, it is very far indeed from being the whole. We have much more to do than to construct, in the concrete, the course of history past and future. We have to get at the abstract, to analyse, and become acquainted with the laws of things. This would be the case even though our predictive power were complete, for we cannot know the concrete in complicated cases without a considerable progress in analysis; but with our present imperfect attainments it becomes more obviously necessary.

There seem to be three main reasons why we have occasion to indulge in hypotheses. They are obvious enough when stated, but their definite enunciation will suggest certain cautions in their employment which are often neglected.

In the first place, they are used for what may be called *constructive* purposes. When thus employed they are simply, so to say, a sort of framework or scaffold, useful in the process

of erecting our edifice, but forming no integral part of it and therefore intended sooner or later to disappear. Our faculties being what they are, we can seldom succeed in tracing out remote consequences by direct deduction. Our only practicable course, when the problem is at all complicated, is to make assumptions or hypotheses, one after the other, and proceed to test them by experience. We make a variety of suppositions, ascertain, by experiment or reasoning, what would follow were they true, compare these consequences with the results which experience affords, and then reject and dismiss from the mind all those which have thus displayed their incorrectness.

Again, another use is simply *illustrative*, as when we employ hypotheses to familiarise ourselves or others with the bearing and the limits of any of the laws of nature. Such a use is a sort of fencing to which we have to resort in order to make ourselves thoroughly acquainted with the use of our weapons. These hypotheses, or problems as they are then generally called, are serviceable in accustoming us to every possible combination of events, so that we may be the better capable, when the time comes, to work out the consequences with which we shall be seriously concerned. The innumerable imaginary combinations which are introduced in problems in mathematics and the physical sciences have this purpose in view. In order to attain a clear comprehension of the bearing of a law or principle in the occasional and perhaps complicated combinations in which it is found in nature, we must work out the result which would follow from it in simpler imaginary examples.

The two above mentioned uses are by comparison speculative or scientific; with them may be contrasted the *practical* use. This latter arises out of the necessity of our being forewarned and forearmed against a great number of contingencies which may at one time or another come in our way. We find it useful to invent many imaginary combinations and to trace their consequences, because we cannot be sure but that some one or other of them may befall us. We are in fact simply making an approach to anticipating future experience. If we knew for certain in what form the experience would occur, we should only need to prepare ourselves for that particular form of it. The shape in which we pictured it to ourselves beforehand would then be called—not a hypothesis but—an anticipation. But this previous certainty is naturally in many cases unattainable. We can reach to nothing more than an alternative certainty; our knowledge being confined to the fact that some one or other of a given number of contingencies will occur, but which of them we cannot tell.

In reference to the first two of the above-mentioned employ-

ments, an important remark must be made. In each case alike, that change in what may be called the natural career of events, which is mentally introduced when we make the hypothesis, is arbitrary but perfectly determinate. We might rather say that it is determinate because it is arbitrary, a change which we introduce ourselves being in our own power to make it what we will. The framer of the hypothesis ought to be able to assign precisely the limits of the change which he contemplates, and to recognise that everything which he does not so change or which is not implicated in what he does so change, remains as it was and is left to develop itself according to its natural laws. Our hypothesis generally introduces some supposed definite alteration into the course of nature; an alteration consisting either in a variation of the laws which govern the events, or in the introduction of fresh events, or in the mutual collocations of existing events. Suppose, for instance, that we are discussing the consequences which would result from a variation in the velocity of rotation of the earth. We suppose the velocity, say, to be doubled, and then calculate the consequences;—that the shape of the earth itself might be altered, that the arrangement of land and water would be different, that changes of climate would thence ensue, and so on. Here, as we have said, the contemplated change is perfectly definite and assignable. We know exactly what we suppose to be altered, and how much, and assuming that the laws and collocations remain unaltered in other directions we trace the consequences of the proposed innovation. In physical science, at any rate, any haziness as to the precise limits of our hypothesis would never be tolerated.

Let us examine a case or two from the social and moral sciences, by way of illustration, beginning with Political Economy. Every one must have noticed how in this science the wildest suppositions are constantly made by sober writers: suppositions which no one would expect to see realised except in a world constructed out of a magnified Bedlam. Cases are put as to what would follow were all money abolished, were the amount in circulation instantly doubled, were all productive labourers to cease working for a given period, and so on without limit. Such hypotheses are perfectly admissible and often highly serviceable. Their function is explanatory. They are intended to explain the working of some general law, and for that purpose extreme instances will serve at least as well as any others, and often much better. They have too an important practical use within certain limits. Though Political Economy does not generally attempt to wander far from our present standing-point of time, it constantly does so to a short extent, especially into the immediate future. But owing to the great complication of

many of the data upon which it has to rely, it can seldom venture upon such a step without much hesitation and uncertainty. It can only make its assertions in the alternative or hypothetical form. If so and so is the case, then such results will follow ; if so and so, then such other results, and so on.

Turn now to Ethics. Here again we have general laws, at least on most theories of Ethics, and therefore all the range of their application is valid for the purpose of illustration. We are at liberty to discuss the consequences, from a moral point of view, of putting our pauper population to death, just as we might discuss the economical consequences of such a step. And yet the example would strike most minds as being in some way unwarrantable. Why so ? The difference between such a supposition and those welcomed in Political Economy cannot be rested upon any such reason as that one of them is possible or practicable and that the other is not. If we mean by possible that the events are so far within human control that did the desire exist it would be followed by performance, of course both enterprises are equally possible. If, on the other hand, we term our event impossible merely because we feel perfectly certain that as a matter of fact it never will occur, then both are equally impossible. The distinction is doubtless partly to be sought in the strongly practical nature of Ethics even on the most speculative treatment. It consists prominently of rules such as we are all concerned with more or less every day of our lives. The perpetration of a murder, even against the person of a tyrant, falls more within the practical sphere of the average agent than does an over-issue of paper money or a large diversion of fixed capital into circulating. We get therefore to interpret our rules by their practical aims, and therefore resent examples which make violent or unlikely suppositions when more moderate ones would at all answer the purpose.

The foregoing cases are simple enough ; let us now turn to History. What we mean here by the term is not so much the Philosophy of History, or Sociology, as the more ordinary narrative history. The former consists in great part of general rules applied to the particular course of events under discussion. It is therefore for most intents and purposes a branch of Ethics ; it may be regarded as a sort of applied Ethics on a large scale. But in the simplest narration, if the historian be at all given to reflection, we shall often find an 'if' introduced into the story in a way which makes one ask what it means. "No one can doubt that the Roman Republic would have subsided into a military despotism if Julius Cæsar had never lived ; but is it at all clear that in that case Gaul would ever have formed a province of the Empire ?" Such imaginary contingencies are not the amuse-

ment of the frivolous. On the contrary some of the thought-fullest and most practical of writers are as fond of them as any others. Mill says, in his essay *On Liberty*: "It is a bitter thought how different a thing the Christianity of the world might have been, if the Christian faith had been adopted as the religion of the empire under the auspices of Marcus Aurelius instead of those of Constantine".

Now is such a supposition as this a merely sportive exercise of the fancy, a sort of instantaneous romance, in fact, with no more practical or scientific aim than if a theologian were to set about guessing what might have happened had Adam been firmer in resisting temptation? Clearly there must be something to be gained either speculatively or practically by such an exercise of the inventive imagination. Some might express it by saying that the supposition of such a complete turn in the course of events is legitimate when the primary divergence contemplated is one that 'might have happened,' which was, to use the vulgar metaphor; 'on the cards'. This however fails to mark any philosophical distinction between the reasonable and unreasonable suppositions. In one sense, as already remarked, nothing could have happened otherwise than it did, for from unchanged antecedents the same consequences would always follow. And in another sense the events might have turned out other than they did, for in either case had the antecedents been changed so would the consequences.

I am disposed to think that we should find upon examination that the reasonable suppositions in such cases as these, as distinguished from the unreasonable and from those which are fanciful, fall mainly into two classes. One class of them are such as deal with the conduct of an individual only, or with a body of persons small enough to be likely to act in concert or be swayed by an individual will. We make our supposition about the behaviour of a king, a minister, or a parliament, rather than of any miscellaneous group. We ask, what if Luther had been less firm, if the Long Parliament had been more compliant, and so on; but not, what if such a nation or such a miscellaneous group of people had altered their course of action, or undergone a sudden change of sentiment. The other class of reasonable suppositions would be those which turn upon the use of some physical event which in conventional phrase 'might just as well have happened,' that is, which does not readily admit of being foreseen. The historian for instance would probably count it quite fair to speculate how European history would have been affected had a hurricane shattered the British fleet just before the battle of Trafalgar, or if Grouchy at Waterloo had been a little more rapid in his movements.



But what is the prerogative of such cases as these over others? That they can have nothing of what we have termed *constructive* value is obvious. When we indulge our fancy by framing such a hypothesis we are consciously stepping aside from the known course of events, we are postulating something which we are well aware did not happen; and we are doing this with no intention of becoming more certain as to what did happen. Nor can such suppositions claim to do much service in the way of *illustration*, at least not in any such sense as we have seen that they may help us in Political Economy. They are put in too concrete a form; they postulate too complicated a group of events for consideration. The consequences resulting from our supposition can never be more than guessed at, and unless they can be compared with the alternative and tested, there is no illustration gained by their employment.

The purpose they are really meant to subserve is, I apprehend, a *practical* one. It is quite compatible with this view that they are mostly found, not among future contingencies relevant to our own circumstances, but amongst those which are past and irrevocable, and often widely alien from anything likely to recur at the present day. For the study of history has with every one, to some extent, a prospective reference. Even if we do not consciously philosophise by generalising the laws whose working we are tracing, we are always on the look-out for precedents which have relevance to our own present and future needs. Consequences which turn upon the deeds of an individual, say the assassination of a ruler, are within the power of many other individuals. Those which turn upon the conduct of persons high in office are within the power of a sufficient number to give a certain practical value to the speculation.

It is not meant of course that these are the only circumstances under which the historian may put in an 'if'. But when he is dealing with occurrences so nearly unique, or so remote in some of their circumstances, that we can never expect to encounter anything similar to them, it appears to me that their interest must be rested on other than scientific grounds. It should rather be sought in that dramatic interest which induces us to fashion out a better life, more stirring incidents, or a more consistent career than that which truth compels us to accept. For a line or two the historian turns into the writer, or at least the suggester, of romance—a perfectly legitimate use of his powers but one which is æsthetic rather than scientific or practical.

But theologians also are sometimes given to meddling with suppositions. It appears to me that within their own department there is very little use in appealing to such a method, and indeed next to no meaning in their doing so. Take an instance



or two. In discussions upon Ethics, or in controversies upon the evidential value of miracles, we may sometimes fall in with hypotheses such as these:—What ought men to do in case the Deity were to command a wicked action? What should they believe were a miracle worked in support of some immoral doctrine? To a heathen such questions might not be intrinsically absurd. If there are plenty of gods who are mostly little better than men in their moral character, no one could undertake to say what sort of commands might not proceed from them, and it might be well therefore to be prepared for contingencies of the kind. But to any believer in a perfect Being such hypotheses are idle. It is as if one were to ask a geometer to work out some of the consequences of supposing the focus of an ellipse to change its relative position. He would not quite understand what we meant, and would remind us that any such hypothesis as this was self-contradictory; that we were in fact postulating by implication an entirely new kind of curve but retaining the old and now inappropriate name for it. Moral attributes of a Deity must upon almost any view be regarded as essential, and therefore capable of none but slight modification.

These considerations seem to apply to any kind of ideal, theological or ethical. Such ideals must always imply and be grounded upon a very complicated synthesis of intuitions, emotions and inductions. Now to conceive a serious alteration in any important group of these supports would by implication demand a reconsideration of the whole synthesis. What was supposed to be removed or changed would react on what was left (as it was thought) untouched; would disturb its balance, perhaps break up its cohesion, and thence bring about a profound alteration of the ideal itself. When speculations are indulged in as to what would follow were the popular belief in immortality to be changed or abandoned, it is not always remembered that there is a good deal more to be thought of than the *consequences* of such a change of belief. To suppose the change at all is in effect to presuppose a change in many other directions. It could only have come about by such a disturbance of the common foundations as would cause a very serious resettlement in other directions as well. In other words, if we please to put the hypothesis of a total change in some one moral or theological principle we ought in logical consistency to reconsider the question from a prior point of view, and try to ascertain what sort of concurrent changes we have tacitly supposed amongst those which are left.

It was pointed out that for any hypothesis to be admissible its precise limits must be determined, and if needful be stated. In Political Economy, for instance, it is easy, to an only slightly less extent than in physical science, to be thus precise. We are

dealing with men and their institutions in a somewhat abstract form, and when we postulate an alteration of motive or innovation in practice (as we always must do in such problems as those in question) we are able to conceive precisely the amount of change hypothetically contemplated, and to take good care that we do not thereby unconsciously introduce further changes which were not contemplated. But in Theology, in Ethics, in fact in any subject where man has to be regarded with the infinitely varied interaction of innumerable motives, such precision is altogether unattainable.

In their familiar form such hypotheses are often merely an indirect way of urging a recommendation. "If only the clergy would abandon their disputes and unite to oppose immorality and irreligion, what a mighty effect might they produce!" True, but why not say at once: "If the immoral and irreligious themselves changed their practice and their views?" Then we should have the end without needing to trouble ourselves about securing one particular means towards it. What is really meant is to address a bit of exhortation, and it is thought more hopeful to address it to a limited body, by reminding them of their influence for good or evil, than by letting it waste its force by a too indiscriminate application. In strictness our hypothesis is idle. We could not really suppose a change of sentiment affecting some thousands of persons (the clergy in question) without some sort of supposition as to how it could have come about. We should then perceive that we had had to assume a change of training and of thought in their case, and of feeling and judgment in those about them, which carried along with it by implication a good deal of that resultant change which was supposed to be circuitously effected through their agency.

There is another way in which hypotheses enter into ethical inquiries, which deserves notice, as it not unfrequently confounds together two very different classes of cases. The attempt is often made to deter any one from performing some particular action, or at least to demonstrate its pernicious character, by exhibiting the action on a large scale. "Only see," it is said, "what would follow, if all men or a great many, were to do so." I propose to pluck a bunch of grapes in a field through which I pass, and urge in defence that the owner will never miss that one. "Quite true," it is often replied, "but only see what would come of it if every one did the same, the owner would be ruined by the year's end." There is nothing wrong in this mode of illustration if no more is meant by it than to exhibit on a large scale what might fail to secure attention on a small scale. The consequences may be thus forced home upon an obtuse and selfish mind. But nothing is proved; nothing is shown which an acute and im-

partial mind might not equally have seen without the help of any supposition. It is as if I wished to prove that even a glass of water taken from a pond would lower the level of the surface. Some one, say, is tempted to doubt the fact. But he must admit that the deduction of a few hogsheads would produce a perceptible result, and can persuade himself therefore that a similar though very small effect would result even from the loss of a glassful.

But it is surely inconsistent to admit that in the individual case the good of the action outweighs the evil, and yet to claim that on the large scale these consequences are reversed. Magnify the good and the evil to any extent we please, but their proportions to one another will not be altered if they are magnified equally. Mr. Austin, for instance, argues thus:—"If I evade the payment of a tax imposed by a good Government, the *specific* effects of the mischievous forbearance are indisputably useful. For the money which I unduly withhold is convenient to myself, and compared with the bulk of the public revenue is a quantity too small to be missed. But the regular payment of taxes is necessary to the existence of the Government. And I, and the rest of the community, enjoy the security which it gives, because the payment of taxes is rarely evaded."

If we judge by consequences only I do not think that this line of reasoning would keep me from smuggling. It is not easy to see how a series of actions each of which is to yield a result of positive good are somehow to add up into a total which is negative. It is assumed, say, that by keeping £10 to myself, the balance of happiness is increased, since the consequent increase of comfort to myself by its detention is greater than the consequent diminution to the community by its expenditure for them. But this plea of the first defrauder is equally open to the second and to those who come after him. If the taxes of a thousand persons are lost, just one thousand persons are rendered happier by having the money to spend as they please. Would it not be sounder to argue thus—"By defrauding the revenue of £10 you *do* injure the community; you cause more injury to others than you cause happiness to yourself". The surface of happiness, so to say, which you want to skim from the rest of society and to put into your own cup, is thin, no doubt, but it is very broad, and it makes up in area what it loses in depth. You cannot gain in this way without others losing, whether they know it or not.

There is another class of cases, a reference to which will show us how very misleading a test is furnished by an examination of the consequences of such a hypothetical extension of the action upon a large scale. A father, say, is proposing to train his son

to enter the ministry. A friend seeks to dissuade him upon the plea that if all took this line it would be highly injurious, that production would come to a complete standstill, and so on. What would his reply be? Naturally he replies that his conduct must be judged separately; that if too many adopt the particular course in question, he for one will cease to do so. But if actions are to be judged by their consequences only, there is little or no formal difference between the line of argument adopted in this case and in those previously under discussion. The fact is that though something may be *illustrated*, nothing can really be *proved* by framing and contemplating the supposition of similar actions upon a large scale. If performance upon a small scale has mischievous consequences, performance upon a large scale will almost necessarily have consequences still more mischievous and therefore more obvious. But we cannot convert *this* line of reasoning and argue that, because identity of action by a multitude is disastrous, that therefore the same action when performed by the individual must be forbidden as pernicious.

The same remarks apply to many important affairs in life. Suppose I had been an African merchant engaged in the slave trade: suppose moreover that the test of actions is to be sought in their consequences only, neglecting all the potent indirect influences which depend upon sympathy with a good cause, and with the struggle towards an ideal. I take my stand upon this ground:—I quite admit that the slave trade is a grievous injury to the human race. I have no objection to its total suppression, in fact I would readily aid in procuring this suppression. But, so long as the trade is permitted, the fact of my carrying on the business does no direct harm to any one, at least in the way in question. I do not even really add to the total number of slaves imported, for, by the well known laws of supply and demand, if the number of traders in any direction is artificially diminished profits will rise, and others be attracted into the business. To make any rational appeal to a man upon the consequences of his actions, we must try to convince him, not by pointing out what would happen if something else were to come about, but by showing him what *will* result from his conduct. We may appeal to his self-interest by maintaining that it is the worse for him to transgress any law divine or human, or to blunt his conscience, or we may appeal to his sympathetic feelings by showing that every one who triumphs over the love of gain is a help to humanity and may do good by his example. These are rational appeals, but they do not involve any imaginary hypothesis.

Hypotheses are constantly implied even where they are not explicitly stated. This is the case when judgment is passed

upon the conduct of an individual or body of persons. On any theory of ethics, to blame an agent must imply that we contrast the conduct he really did pursue with other conduct which he might have pursued. When we say that he did wrong, the same idea may be conveyed by saying, had he done so and so instead he would have done right, or at least have done better. And when the consequences of his conduct are the only element taken into account, we may translate our condemnation into the terms—"If so and so had been done instead, then the consequences would have been certainly or probably better." That is, we are ready on demand with some hypothetical line of conduct different from the actual. But here comes in the difficulty already mentioned. To make the comparison a sound one we ought to contrast his own actual conduct with some hypothetical alternative which is equally limited in its application to his individual case. Nothing is proved by contrasting what he did with that which some *class* to which he is referred, perhaps rather arbitrarily, might have done.

Examples need not be multiplied ; but I think that any one who contemplates Political Economy ethically, that is who tries to deduce rules good for the individual agent from the general conclusions of that science will find plenty of illustrations of what has just been advanced. Conduct is sometimes good (or bad) alike when done by the many or by the few. This is the ground mainly occupied by Ethics, though it is but a portion of human conduct, and therefore corresponds to a portion only of the general art of adding to human happiness. Sometimes, again, conduct is bad when pursued by the many, but good for the few. This is often the case in Political Economy, and is connected with the advocacy of the *laissez faire* principle, and with the great practical difficulty which is so often felt when we try to guide ourselves ethically by the conclusions of economists. Sometimes, again, the result is good if all without exception combine, either by consent or under compulsion, to do the same ; but the infringement by but a very few will destroy all good result as effectually as a general permission. In such cases the economist is driven to appeal to the State for aid.

In the last case we are led to the apparently paradoxical conclusion that it is logically consistent, when consequences are the test, to blame a body of persons collectively, but to absolve them each individually. This is the case when we see that the whole body, by combining, might abolish some injurious practice. We then compare what that body does do with what it might do, and blame it accordingly. But till the members do combine we cannot say the same to them individually. When we picture what would follow did a few abstain, we see not merely an

insignificant gain, but no gain at all ; for what they leave undone others will certainly make up.

When therefore we test the character of an action by its hypothetical generalisation, that is by seeing what would follow were it performed by many or by all, the test becomes very untrustworthy, for the cases to which we may have to apply it are widely distinct.

Those who are familiar with the science of Ethics will of course have noticed already that we have touched incidentally upon some of Kant's doctrines. He repeatedly lays down, as a test to the individual agent of the rightness of his conduct—Can you will the maxim according to which you act to be a law universal to mankind ? There seems to be more than one objection to the validity of such a test. For one thing it assumes that there is but one maxim, or but one that is thoroughly appropriate, to which the action is to be referred, for it speaks of *the* maxim according to which we act ; whereas any particular action will always admit of reference to an indefinite number of maxims according to the degree of particularity with which we specify the characteristics of the action. But passing this over, the question, What would follow if all men were to do as I do ? can surely never lead to an answer which will give a certain test of the goodness or otherwise of the action. If the test is to be at all serviceable it must mean that the *consequences* of the act would be bad when we suppose it thus generalised, for to confine it to those cases in which the action, so generalised, would not merely involve bad results but become self-inconsistent or downright absurd, would be to limit its applicability to a very small portion indeed of the field of Ethics as commonly understood. But, as above remarked, this way of looking at the matter confounds several widely different cases. Sometimes it serves to illustrate on the large scale consequences which should really be visible also on the small scale ; but then the action here must really admit of examination by itself. But often when the action would be pernicious on the large scale, the agent is at liberty to reply : " I do in part because all others *do not*, and I should begin to change my practice if I saw them begin to imitate generally my example". And finally, when the general consequences would be beneficial, he may sometimes say : " Yes, I know it would be better if we all combined for the purpose, but till I see some signs of such a combination there is no need for me just to sacrifice myself for a formula".

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