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PROCEEDINGS

OF THE

ARISTOTELIAN SOCIETY.

NEW SERIES.—VOL. XLIII.

Containing the Papers read before the Society during the Sixty-fourth Session, 1942–1943.

PUBLISHED BY
HARRISON & SONS, LTD.,
44-47, ST. MARTIN'S LANE, LONDON, W.C.2.
1943

Price Twenty-five Shillings net.

LONDON:
HARRISON AND SONS, LTD.,
Printers to His Majesty The King,
ST. MARTIN'S LANE, W.C.2.

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1942-43.

Meeting of the Aristotelian Society at the British Medical Association, Tavistock House, Tavistock Sq., London, W.C., on Saturday, March 27, 1942, *at* 2.30 *p.m.*

THE INDIVIDUALIST BASIS OF INTERNATIONAL LAW AND MORALS

THE PRESIDENTIAL ADDRESS

By MORRIS GINSBERG

I.

IN a world in which international law is widely disregarded and defied and elementary human rights are denied to millions, it may seem futile to talk of the moral relations between peoples. Political " realists ", surveying the field, will tell us that ethical ideals are merely the " ideology " of the strong who make use of them in order to hide from others and perhaps from themselves the motives by which they are in fact inspired. Or, varying the argument, they will tell us that justice is the necessity of the weak, who, however, repudiate its claims as soon as they are powerful enough to defy them with impunity.

In whatever form the argument is put it involves the admission that the idea of justice, or perhaps more clearly the sense of injustice, is a powerful force in human affairs. It is sometimes said that National Socialist or Fascist theories reject all appeals to ethics. The disconcerting thing is rather that they speak in the name of ethics. The National Socialist theorists even go to the length of claiming that they have bridged the gulf between law and morals and that their law alone is " *richtiges Recht.*" Hitler's speeches from

the beginning contained constant appeals to justice. The Versailles agreement was repudiated on the ground that it had been obtained under duress and that only those contracts are "holy" which are entered into freely by equals.* The Locarno Pact was broken on the ground that its partners had not stood by its terms. The repudiation of reason so common in Nazi writings is by no means whole-hearted. The New Order in Europe, Hitler tells us, would rest on "*Vernunft und Logik, Verständnis und gegenseitige Rücksichtsnahme.*" Competent observers have testified that the strength of the Nazi propaganda, at least in the early period of the movement, lay in the skill with which it managed to keep alive and to intensify the resentment felt by the people against the injustice supposed to have been inflicted on them by their conquerors. Witness the frequent use made in their propaganda of the "war guilt" clauses, the failure of the Allies to disarm, the alleged determination to keep the German people in a state of inferiority and the like. This kind of propaganda was intended, it will be noted, not only for external but for internal consumption, and shows clearly the faith of its authors in the dynamic value of the sense of injustice.

It seems clear that in popular morality the distinction between what is just and unjust, fair and unfair, right and wrong, is held to be applicable to the behaviour of states to each other. Some philosophers have, however, denied this or, at least they have questioned whether these distinctions are applicable in the same sense to the relations between states as between individuals. Bosanquet has argued, for example, that states in their relations to one another have no common standards to guide them analogous to the framework of social and legal obligations which help the individual within a state to discern his duty at any moment of difficulty. "A state cannot tell whether it is being less than just, or merely just, or kind and generous. For it every case is under altering conditions and new, and it is

* Rede in Essen, March 27th, 1936.

sole judge in is own cause. A state may think that it is behaving with superhuman generosity, while its antagonist may think it is behaving like a bandit. There is no complete or detailed scheme and scale of conduct and sentiment to operate as a norm of feeling and judgment."*

I do not propose to pursue this matter here in detail. Bosanquet himself realises that he has rather over-stated his case. He notes that in peace time at any rate and over a great part of their conduct the course of states, like that of the individual, " may be considered as plainly marked."† Yet in times of crisis, he thinks, problems may arise involving a whole philosophy of life as well as the prediction of the future history of the world. It seems that in such a case there is no recognised moral order to guide the conscience of statesmen, and each state will then have to fight for the defence of the " best thing it knows." Now that statesmen may have to make important decisions on matters on which they have inadequate knowledge whether in respect of the facts involved or the relevant ethical principles is clear enough, and such cases are by no means confined to problems of international adjustment, but arise equally in the internal problems of a state. The problem of importance seems to be what the function of the moral philosopher is in these circumstances. It is clear, firstly, that if there really are distinct moral worlds between which there is no bridge it is urgently necessary to define exactly the differences that divide them and to indicate clearly the boundaries of these " worlds." Are the moral ideas of the French in relation to international affairs radically different from those of the British? Did the war of 1914-18 really involve, as Bosanquet suggests, conflicting philosophies of history? If, as the German writers now maintain, all values are rooted in the race, what races are sufficiently akin to permit of common values? Is it true, as is often alleged, that what divides peoples now is that some assign supreme value to the individual human being, while

* *Patriotism in the Perfect State. The International Crisis in its Ethical and Psychological Aspects*, 1915, p. 138.

† *Arist. Proceedings*, 1916-17, p. 45.

others claim supremacy for the values of the community.* The Nazi theorists, so far as I can gather, do not speak with one voice on this matter. Formally they do not deny the value of individual personality. They do indeed start with the Volk as an organic whole, and the individual, they urge, can only achieve free development through life in the community. But such freedom is essential for the growth of the community and is accordingly required not only in his own interests, but also in the interest of the community.†

The divergence, it would seem, does not really lie in the views regarding the value of the individual, but in the difference in the methods by which the development of the individual is to be furthered. In the Nazi view only the leader can tell the individual where his " true " freedom lies.‡ I do not raise these questions with any intention of trying to solve them but merely in order to urge that those philosophers who base their ethical theories on the *Sittlichkeit* of particular communities ought to give a great deal more attention than they do to the analysis of the moral opinions prevailing in the different " moral worlds," and to ascertaining the nature and extent of the differences that divide them.

But, if the first duty of the philosopher is to collate and classify the moral judgments that he finds in more or less unorganised form, in tradition, in law and in current moral opinion, his second is to inquire into their coherence and

* Cf. Prof. Julian Huxley, *Evolution*, p. 578 :

" To-day we are experiencing the struggle between two opposed ideals—that of the subordination of the individual to his community, and that of his intrinsic superiority."

Sir Walter Langdon Brown in a Presidential Address to the British Hygiene Social Council, declared : The present issue is clear-cut. Do individuals exist for the state or the state for individuals ? It is quite possible to win the war and yet lose on that issue. Quoted in *Nature*, October 31st, 1942.

† Cf. Otto Dietrich, *Die Philosophischen Grundlagen des Nationalsozialismus*, p. 29.

‡ So Hegel says formally : " The basic principle of the state is the full development of the individual." " Its institutions are to express the knowledge and the will of its individuals." *Philosophy of Law*, 279, Addition and 260, 261. The trouble begins with the methods. In actual fact individuals are dominated by selfish interests. Only the monarch can cancel particularity " in the simple certainty of his self." The people does not know what it wants and its action would be elemental, void of reason, violent and terrible. 279, 301 and 303.

consistency, to disentangle their hidden assumptions, and, in the light of this inquiry to enunciate principles which presumably would go beyond the beliefs and judgments with which he starts. Such a method applied to the field of international relations would involve a detailed study of the opinions actually held regarding what is fair and unfair, just or unjust in the way in which states behave to one another and of the changes which such opinions have undergone in the course of time. This, of course, would be a very big undertaking. What I propose to do here is to follow up certain changes which can, I think, be discerned in the history of international law, on the assumption that these changes reflect in part, at any rate, changes in moral outlook. I shall try to show that the principles underlying international law correspond pretty closely to what in the sphere of private morality is summed up by the term " individualism," and that there has been a certain lag in applying the criticisms which in the course of the nineteenth century were directed against the principles of individualism, in so far as they bear on the relations between the individuals inside the state, to the problem of the relations betweens tates.

II.

The theory of international law has been for the most part based, so far as I can ascertain, either on the conception of a law of nature and natural rights or on a kind of utilitarianism, and in both cases it has a strongly individualist flavour. According to the latter view the sole principle of modern international law, in so far as this is conceived to be determined on rational grounds, is the principle that the function of law is to ensure mutual non-interference, to see that contracts freely entered into are fulfilled, and that reparation is made for wrong done. The reasons given for this limitation of the function of international law are analogous to those which are given for a similar limitation in the case of the internal law of states, but are held to be more obvious. In view of the difficulty experienced in preventing nations from doing mischief to each other it

would be futile to attempt the much harder task of compelling states to work for a common good or to render each other positive services. The active promotion of common interests should accordingly be left to voluntary combination, until the reign of peace among independent nations is established. Even the prevention of aggression and the securing of reparation for wrong done, which are the chief functions of government within the state, are in the case of international law handicapped by the absence of an effective international authority, from which it is concluded that individual states retain the right of self-protection and even of securing reparation. The full implications of the individualist position thus briefly summarised were worked out by Sidgwick with his customary thoroughness and fairness in his *Elements of Politics*, and there can hardly be any doubt that the realities of international law were, at least when Sidgwick was writing, in close correspondence with the account there given.

I propose now to inquire how far the criticism directed by liberal thinkers against the individualist position in so far as it concerned the internal life of the state may throw light on the analogous problem concerning the external relations of states. This criticism seized mainly on two points* in the individualist argument, namely its handling of the right of property and the freedom of contract. On the individualist theory the principle of mutual non-interference was applied not only to secure the protection of the person but also of his property. The ethical justification of private property was the individual's right to the produce of his labour, where at least such labour would not be expended by the individual if he could not be sure of the exclusive enjoyment of its results. This right, however, was subject to the limitation that the appropriation by the individual involved no encroachment on the opportunities of others to productive labour. It became clear even within the camp of the individualists that this condition could not

* Cf. T. H. Green, *Liberal Legislation and the Freedom of Contracts*; L. T. Hobhouse, *Liberalism*, and *The Elements of Social Justice*.

be fulfilled when, as was the case with land, there was only a limited supply. The problem of balancing conflicting claims then arose which led individualists in many cases well on the way towards the opposed camp of the socialists, or at least towards admitting a much greater amount of social control of property than was originally thought compatible with the strict principles of individualism. The argument can be and was in fact easily extended to other cases of monopoly and led to very radical revision and reconstruction of liberal policy.

The analysis of the notion of freedom of contract worked in a similar direction. In the individualist view the principle of freedom of contract applied only to contracts made freely, i.e. without coercion or the exercise of "undue influence." Liberal criticism pointed out that here freedom implies substantial equality between the parties and that there was no such equality, for example, in the case of a factory owner who employed children or even in the case of a bargain between an employer and the unorganised adult workers. It was necessary therefore to control contracts with the object of preventing those who have power from abusing it or by forcing others less powerful to enter into contracts which they would not accept if they were in fact equal in power. This was only very slowly recognised and it is only recently that legislation has avowedly undertaken the task of controlling the conditions of work and the remuneration of workers. In this way it was realised that effective liberty implies a large measure of social control even on the individualist principle that coercion by the state should be limited to the prevention of coercion by individuals. It was further realised that the principle of non-coercion applies to the community as well as to individuals, and that, therefore, in cases where individual recalcitrance or non-conformity amounts to the coercion of the entire community by the individual, the community has the right to exercise constraint against him.

Turning now to the applications of these arguments to the sphere of international relations, it must be noted to

begin with that international law has not so far succeeded in fulfilling its primary function and the function of all law, namely that of preventing aggression, though it has succeeded in rendering many positive services in securing a great many forms of cooperation between states. From the beginning, however, international law did make a distinction between just and unjust war, though many authorities maintain that states never did in fact abandon the right to make war and never did recognise any legal restriction of this right. Other authorities deny this and point to the fact that in practice states never confess to a war of aggression and always seek to justify their conduct by the plea that the other side had broken the law. Whether governments are sincere in such pleas or not, they know that their peoples have to be satisfied of the justice of their cause if they are to fight with enthusiasm. On this ground it is maintained that a legal restriction on the right of making war has existed in the customary law of states even before the covenant of the League of Nations and the Pact of Paris. It seems that lawyers in their desire to prove themselves men of the world, in close touch with the "realities" of life, have been so impressed by the failure of states to respect the law that they have shown an excessive timidity in the accounts they gave of what the law actually was.*

Reverting now to the above discussion of the individualist position in regard to the right of property and freedom of contract I wish to follow the parallel development in the theory of international relations. The rights that a state has over its own territory do not, as I understand, come strictly under the category of the rights of property, yet the problems that arise in connection with territorial competence have some resemblance to those which have arisen in the case of property. It is easy to see that so far as the law is concerned, the actual practice of most states rests on the maxim *ex facto oritur jus*. The law gives legal recognition

* Cf. L. J. Brierley, *Règles du droit de la paix*, Recueil des cours, Academie de droit international, 1936. Ch. IV.

to the facts without inquiring too closely into the circumstances in which they had their origin. There is no doubt, however, that the theorists found the question of territorial rights based on conquest extremely embarrassing. Sidgwick, discussing the matter from the point of view of individualist theory, concludes that when the conquerors and the conquered are approximately equal in civilisation expansion is not likely to benefit either party and that therefore it "seems to be, under ordinary circumstances, rightly disapproved of by the morality of modern civilised nations."* The case was different, he thought, when the conquered were markedly inferior in civilisation to the conquerors. But even here he qualifies his approval by insisting that it applies only to cases in which the war that led to the conquest was justified by obstinate violation of international duty on the part of the conquered. How many cases of annexation by conquest would stand this test he does not inquire.

In Sidgwick's time the whole surface of the earth had already come under the juridical order of the several states and it did not seem probable that the question of territorial control would be seriously raised again on a large scale. This, however, has, as we know, happened. Germany, Italy and Japan have argued that the world had been unfairly partitioned to the great disadvantage of the powers that had arrived late on the scene. It is interesting to look at the theoretical basis of their challenge. Broadly they reject the individualist outlook and appeal to the social principle of a world community of states based on the principle of equality. The parts of the world, they say, which are indispensable to all peoples should belong to them in common. Accordingly the high seas, the Straits, the inter-oceanic canals, the great maritime stations should be the property of all peoples. Hence, for example, it was argued that the British should give up Gibraltar and the Suez Canal should come under an effective condominium. This is what the German writers understand by the freedom

* Elements of Politics, p. 310. (1891).

of the seas. Moreover, in dealing with undeveloped territories, preference should be given to peoples who as yet have no colonial possessions in proportion to their capacity for expansion and their power to develop the territories. Some German writers went further and demanded a repartition of the colonial domains already under control in accordance with the principle of proportionate equality.*

It is clearly no answer to these arguments to say with Professor Redslob and others that legally they have no warrant, that the partition of the world rests on titles universally admitted by agreements tacit or express. For the demand was for a revision of the law, and the question is whether it is ethically justified.

It seems to me that what is gradually emerging from the vast amount of discussion that has been devoted to this question is a revision of the individualist approach to these matters, more radical than is attempted by the representatives of the so-called Have-Not powers. What is wanted is not a re-distribution of colonies, but rather the creation of some form of supra-national authority to control all non-self-governing territories and to supervise international monopolies, cartels and raw material schemes. The remedy does not consist in taking away power from some particular state and giving it to others, but in socialising or de-nationalising control over forces that are vital to all nations.†

A similar need of transcending individualist principles comes to light if we consider the problems connected with the freedom of contract. Here, as we have seen, liberal criticism stressed the need of regulating the conditions under which contracts are made with the object of preventing unequal contracts being entered into under the stress of economic inequality. In the field of international relations the analogous problem is concerned with the validity of treaties made under duress after a conquest or otherwise

* Cf. Redslob, *Histoire des Grands Principes du Droit des Gens*, p. 550.

† Cf. especially Prof. E. Stanley, *The Economic Organisation of Peace*. International Conciliation, No. 369.

between parties unequal in economic or political power. A great deal of discussion has been devoted to this subject. It is possible that treaties of the kind referred to are not properly to be regarded as coming under the category of voluntary contracts, but more candidly as legislative acts of another order imposed by an authority endowed with the necessary power. If so, it is clearly to be expected that when the balance of force is changed attempts will be made to change the state of affairs *de facto* and ultimately *de jure*. The ethical question then raised would be whether there is a right of repudiating by force a law imposed by force. But whether treaties be regarded as contracts or not it is clear that the difficulties arising from unequal power will not be removed until treaties come to be made under the aegis of an impartial authority administering justice on the basis of the relevant claims and irrespective of the differences in the power of the parties concerned. Here I cannot do better than to quote the words of Professor Brierley: "The sanctity of treaties will never be more than a cant phrase so long as the law is too weak to deny the validity of a treaty entered into under coercion, or to lay down canons of international public policy, comparable to those of municipal law, which shall be conditions of any treaty's validity *ab initio*. In part the ultimate solution can be found only in some quasi legislative action comparable to the legislative interferences which modify the obligations of private contracts within a state in the interests of the social order."*

Analogous considerations apply to the problems that arise in connection with treaties that have become, or are alleged to have become, oppressive under changed circumstances from those in which they were initiated. These have usually been discussed in terms of the doctrine of the clausula *rebus sic stantibus*. It is clear that this doctrine lends itself to abuse, since it can easily be employed to provide states with a legal excuse for tearing up treaties which they find inconvenient. In some of the recent German writings the

* Cf. Brierley, *Law of Nations*, p. 208. On the whole question see further Scelle, *Précis du Droit des Gens*, Receuil, 1932-4, and Brierley, *Règles du droit de la paix*, Receuil, 1936.

doctrine is interpreted in such a way as to reduce the validity of treaties to a shadow. According to Graf Westarp, for example, each state remains " master of its contracts," and can renounce them when they have in its own view become incompatible with its right and duty of self-preservation. This is said to be a limitation " inherent in all state contracts," and, since there are no objective criteria for defining the limitation, the last decision must be left to war. Numerous writers join in this protest against making the principle, *pacta sunt servanda* " too absolute, on the plea that contracts are made for the welfare of peoples and not for their own sake."*

This is not the place for a detailed study of these controversies. It seems clear, however (i) that it is a mistake to try to bring all the problems that arise in this connection under the doctrine of the *clausula*, since this would require the stretching of the notion of " implicit reservations " to a point which would endanger all contracts ; (ii) that unilateral denunciation must be regarded as unjustifiable ; (iii) that the moral issues which arise in hard cases are analogous to, though frequently more complex than, those which arise in the case of individuals in dealing with promises or undertakings whose fulfilment in changed circumstances is likely to produce greater evil than their abrogation ; and finally (iv) that the situation will not be seriously eased until there is an international authority capable of prescribing the conditions of contracts *ab initio* and of revising them in an impartial manner when this is considered necessary in the interests of general public policy. Thus in the matter of contracts as in the case of territorial rights the theory of international law seems to be tardily following the line of criticism to which individualist views regarding the internal functions of law were subjected. Here too it is gradually being realised that freedom and equality are closely related and that effective freedom necessitates social control.

* Numerous citations will be found in Bristler, *Die Völkerrechtslehre des Nationalsozialismus*, 1938, pp. 154-6.

So far I have dealt with that form of the theory of international relations which is based on what perhaps may be called utilitarian individualism. Far more common has been the appeal to the law of nature and the conception of natural rights. Here, too, I wish to show that the tendency has been to interpret this conception in an extremely individualistic manner and that writers on international law are only very slowly becoming aware of the criticism that has been directed against this conception in its application to the relations of individuals inside the state and of the re-interpretation of the doctrine which has resulted from this criticism.

The general effect of this constructive criticism may perhaps be summed up thus.* (*a*) Rights are held to be claims which can be made by or on behalf of an individual or group to the conditions necessary for the good life, (*b*) Rights have correlative duties ; a right is what is due to an individual, a duty is what is due from an individual, (*c*) Rights define social relations and cannot be said to inhere in individuals in a pre-social state or apart from social relations ; (*d*) Owing to the complexity of relations no single right can be absolute. To determine what is right or due in a particular case involves a weighing of claims, and this necessitates reference to a general form of life, judged on the whole to be good. The system of rights and duties may be regarded as laying down the general conditions of this form of life, but they are not self-subsistent and they require restatement and modification as historical circumstances change. Legal rights and duties (as distinguished from moral) would define those conditions of the good life which require and permit of enforcement by the machinery of the law.†

If this conception of natural rights is to form the basis of international law, it would be necessary to ascertain

* Cf. especially, T. H. Green, *Principles of Political Obligation ;* L. T. Hobhouse, *Elements of Social Justice.*

† This, of course, formulates an ethical ideal. In existing states particular legal rights may not be ethically defensible.

what conditions are essential for a good life, whether for individuals or groups, and which of these both can be and ought to be enforced by international legal organs. Since communities differ widely in their level of life and in the views which they have of the general form of the good life, the rights and duties arrived at would have to be of the nature of a minimum requirement to be progressively revised as mutual understanding increases and the power of controlling the conditions of life grows. Needless to say no such elaborate inquiry has ever been attempted, though I suppose the various efforts to define the rights of man anew which have been made recently may be tending in this direction. If there are rights of states these would define the conditions which are necessary for the good life of states as component parts of an international order. They would not inhere, any more than this is the case in reference to the rights of individuals, in each state apart from its social relations, or be conceived as existing in a pre-social "state of nature."

When we turn to the use that has been made of the notion of natural rights in the theory of international law we find, however, that the atomistic view which regards them as inhering in individuals as such, instead of defining the conditions of membership in a society, persists. This is particularly clear in many forms of the doctrine of the "fundamental rights of states" which is regarded as a corollary of the theory of natural rights. There is no agreement among the authorities as to the precise number or content of these rights. Generally five are assumed, namely, self-preservation, independence, equality, respect and intercourse. Oppenheim mentions the right of existence, self-preservation, equality, independence, territorial supremacy, holding and acquiring territory, intercourse, good name and reputation.* The fundamental rights are supposed to provide the moral basis of the international order and are taken to inhere in every state as

* *International Law*, I. 217, 218.

such. From these rights deductions have been drawn which, if given effect, would seriously hinder the growth of an international order.

I can best bring this out by reference to some recent German views. Professor Bruns* argues that independence is of the essence of the state. This means that no state can claim hegemony over other states and that in this respect all states are equal. But, since no state can be said to be independent which does not possess the means of defending itself, the right to arm is a fundamental right and an essential presupposition of membership in the international order. From the right of equal independence is also deduced the right to a *Lebensraum.* Similarly Professor Carl Schmitt† appeals to the doctrine of fundamental rights to justify Germany's right to arm herself. It will be seen that in these and similar arguments the system of rights which should define the conditions of a common regulated life is construed in a manner which is bound to hinder the development of a community of states. Independence is interpreted as equivalent to freedom from regulation, and the right to arm, which might be conceded to individuals or groups as an unfortunate necessity in the absence of a communal order, is made the very basis of that order.

The abuse of the doctrine of fundamental rights does not, however, as it seems to me, justify us in rejecting this doctrine. There is surely a sense in which it might be of value, providing it be remembered that no single right is absolute and that the various rights must not be regarded as the elements out of which the common order is constructed but rather as defining the requirements of that order. Let us consider from this point of view the principles of independence and equality.

Clearly, on the view of natural rights here adumbrated, independence should not be interpreted as excluding interdependence. What it asserts is that no state has the right to

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* *Deutschlands Gleichberechtigung als Rechtsproblem.*

† *Nationalsozialismus und Völkerrecht.*

claim superiority over any other state or to reduce it to dependence. This does not exclude the common submission of all states to an international authority or the acceptance by each state of limitations to its liberty imposed upon it by international law. Independence, in other words, defines the relation of the constituent members of the society of states to each other, while subordinating them to a legal order which binds them all alike.* Independence, in this sense, is a negative term excluding dependence on particular states, and throws no light on what a state may be entitled to do. The positive term, presumably, is freedom. But this again, it need hardly be asserted, does not mean absence of control, but the possession of a body of liberties, that is rights or powers to act defined by law.

The principle of equality in its application to states as to individuals does not assert equality of power or even equality of treatment. The essence of the matter is the exclusion of arbitrary inequality, the insistence that discriminatory treatment requires justification in the light of some relevant difference in the grounds on which the claims of the parties concerned are made. The difficulty is, of course, to determine what differences are relevant. It may not be obvious to some people, for example, that a difference in colour is not relevant in considering the claim to political rights. It should further be noted that we are here considering equality as an ethical principle. The question how far it is in fact recognised by international law is a separate question, and if it is found that it does not do this, it does not follow that it ought not to, or that it is not worth while to inquire what, as an ideal, equality implies.

In the light of these considerations we may distinguish various senses of equality. There is to begin with (*a*) equality before the law. This means that the rights of any state, whatever these rights may be, are equally entitled to the protection of the law ; in other words, that the weakness

* Cf. Professor J. L. Brierley, *Recueil*, 1936, p. 25, and the "individual opinion" there quoted given by M. Anzilotti, with reference to a dispute between Germany and Austria.

of any state shall not prevent it from having its claims heard, or affect the decision. This is admitted in principle, but neither in relation to individuals or states is it in practice realised. It is obviously easier for a strong state to defy the law with impunity than for a weak one, and weak states will find it more prudent to forego their claims rather than risk antagonising their stronger neighbours. There is secondly (*b*) equality in the rights themselves. In the law as it is states are not equal in their rights. There are differences in rights resulting from differences in status, as is the case with the forms of " dependent " states, protectorates and the like. There are also differences due to the abandonment of certain rights or limitations of rights through the instrumentality of treaties. In relation to these differences, it is important to observe that they are not necessarily condemned by the principle of equality. There may be good reasons for them, that is the differences may be justified by relevant differences in the circumstances. What is important from the ethical point of view is that discrimination in rights shall not be grounded in differences of arbitrary power, and that there should be an international authority, capable of revising or invalidating treaties made under coercion, open or disguised, and of reviewing differences of status in an impartial manner. The recent relinquishment of the extra-territorial rights in China by Britain and the United States is a good example of the movement towards equality in this sense. There is thirdly (*c*) equality in the right of making law. If ever an effective international legislative authority comes into being, it would follow from this principle that all states should have the right to participate in law making. Oddly enough the principle of equality has been invoked to justify insistence on unanimity as against vote by majority. One would have thought that to give a single state the power of coercing all the rest by standing out is a plain violation of equality. I suspect that what really lies behind insistence on unanimity or even of general consent is, firstly, the persistence of positivist views of international law which

regard the validity of law as bound up with consent, and secondly the well grounded belief that in existing circumstances the chances of enforcing a law which has not been widely accepted are very small indeed. The root of the matter is, of course, that until the nations of the world come to have implicit faith in the fair-mindedness and impartality of the law making power they will not wish to consider themselves bound by a law or treaty to the making of which they were not a party. It remains to be added that the principle of equality does not carry with it the principle of " one state, one vote." It is generally agreed that size of population is an unsatisfactory basis. But there are various possibilities of securing proportionate equality exemplified in existing federal constitutions and it should not be beyond the wit of man to devise a system suitable for larger combinations of states. There is fourthly (*d*) equality as a principle of distributive justice. This is the sense of the principle which is only slowly coming to be accepted and which obviously presents the greatest difficulties. Here belong the problems connected with the so-called *Lebensraum*, of access to raw materials, of the occupation or administration of areas not yet under the control of particular governments, spheres of influence, protectorates and so forth. I have already referred to some of these problems in dealing with what I have called utilitarian individualism. But they have also been approached from the point of view of fundamental rights, especially the right of equality. The doctrine of the freedom of the seas, for example, has been held to imply not merely that the navigation of the oceans should be open to all peoples alike. It has been argued that the principle of equality demands not only open access, but also that no particular power should be in a position to bar access by control of maritime stations and points commanding the straits.* It will be noted that in this case the principle of equality is held to imply that control should be taken

* For references cf. Redslob, *Op. Cit.* pp. 38 sec.

away from particular states and entrusted to a common authority. In the case of the right to colonies and protectorates, on the other hand, the principle is interpreted in a different way. Here a right of expansion is claimed which shall be in proportion to the capacities, attainments and needs of the colonising powers. It is on the principle of relative or proportionate equality that the claims of the Germans, the Italians and the Japanese to territorial expansion have been based. In dealing with this claim in so far as it appeals to a fundamental right, just as in dealing with the similar claim based on utilitarian individualism, it is not a sufficient answer to say that it is not in harmony with established titles of possession or control, since what is in question is the moral validity of the titles. The answer is, I think, that the claim takes for granted the right of conquest and completely ignores the rights of the peoples in the conquered areas. Clearly, if a redistribution of power in colonial areas is to be attempted the question of the moral justification of the exercise of power in these areas should be re-examined. So far as I can see, there are two points to be considered. Firstly, the "advanced" peoples may claim the right to penetrate into those parts of the world which are only capable of being developed by their energy, capital and resourcefulness. Secondly, if such penetration be admitted it becomes necessary to protect the natives of those areas from exploitation by settlers and from being driven into accepting conditions detrimental to their well being and future development. These grounds clearly do not justify any state in annexing territory or utilising its resources for its exclusive requirements. The solution lies therefore not in any re-distribution of territorial rights, but in abandoning the whole notion of exclusive possession and entrusting such control as is necessary in the interests of the natives and of the whole of humanity to bodies acting under international control. What these bodies should be is a matter which may require different solutions in different areas, but in no case should they be regarded as owners of the areas in question or as

having the rights of unlimited sovereignty over them. Here again therefore the principle of equality, freed from the individualistic associations of the notion of independent sovereignty and applied universally, proves to be of real value and importance as a guide to policy. Analogous considerations apply to the problem of access to raw materials. The Atlantic Charter commits its signatories to further the enjoyment by all states of access on equal terms to the trade and raw materials of the world which are needed for their economic prosperity. In all probability however, the granting of formal equality to states differing widely in their level of economic development will not be sufficient. Some positive effort in the direction of rational distribution is needed to make equality real.*

The view of fundamental rights here defended involves a re-interpretation of the notion of freedom as applied to states. In the case of the individual we have long come to recognize that liberty does not mean the right to do what he likes, but consists of his *liberties*, that is the rights or claims to those conditions which are necessary to his good life in society. Liberty is his sum of rights or assured powers. In the case of the state the notion of liberty has tended to be fused with that of unlimited sovereignty, that is the refusal to submit to any law not voluntarily agreed to and the right to make law without regard to the needs and claims of other countries. It is clear that in this sense liberty cannot be a right. To give positive content to the notion of liberty it is necessary to define the *liberties* of the state or to mark out the spheres of activity, within which the state should in the interests of humanity as a whole be given autonomy. The questions involved would require different answers in different historical circumstances. It is being gradually recognised, for example, that in future states ought not to have the right to change their economic legislation, e.g. to increase import barriers or alter the value of their currency,

* On the whole question of the equality of states, cf. Arnold D. McNair, *Equality of States in International Law, Michigan Law Review*, 1927, to which I am much indebted.

without regard to the effect of these changes on other states, and that at least they ought to agree to consult with all other states likely to be affected. Similarly, the regulation of migration should not be left to the unfettered will of each country, but should be entrusted to an international authority capable of taking into consideration the needs of would-be migrants, the absorption capacity of different areas, the effect of immigration on the standard of life of the receiving country and the methods of preventing a decline, the provision of alternative solution where migration is not desirable, and so forth. Here, as in other matters of economic control, the conditions of the modern world require the relinquishment by states of their claims to the exercise of sovereignty. Further, it is clear that if positive content is to be given to the notion of liberty in the sense of a body of rights and duties there must come into being an international authority with sufficient force to prevent their violation and to balance and adjust conflicting claims in a manner conducive to greater freedom on the whole. This obviously implies that the international authority must have the power of initiating changes in the body of rights and duties and above all of making it impossible for any state to bring about any such changes by resorting to force.

The notion of freedom is closely connected with that of self-determination, though the latter is used to refer not to states already in being but rather in the process of coming into being. The right of any body of people to their own mode of government cannot, any more than any other single right, be absolute. The problem at bottom is what, in the interests of the common good, is the best unit of government, and it is quite possible that what is a good unit for some purposes is unsuitable for other purposes. The whole problem of national self-determination would be completely transformed, for example, if states abandoned the right of arming themselves and if their economic relations to one another were controlled by an international authority. The remaining spheres of activity could then be left to units, small or large, without much risk of tension or struggle.

There is a tendency among recent writers to consider the small states as unsuited to modern conditions and even as "danger spots," hampering the movement of trade and a constant temptation to their stronger neighbours. It has to be remembered, however, that the autarkic policy of the smaller states was in most cases due to the need they felt of defending their national economies from the violent fluctuations originating in the economic pressure of the world markets traceable in the main to the economic policy of the Great Powers.* What is needed is the creation of conditions which will remove the drive towards economic self-sufficiency which has been so noticeable in states, small and large alike. This implies the recognition by all states of their obligations to a wider society and their willing submission to international control. In such circumstances there would be no reason for discriminating between small and large states and there would be no reason why the small states should not continue to exist. Much more serious difficulties arise in connection with the treatment of minorities. But these again are not difficulties peculiar to small states and perhaps they would not loom so large if the major causes threatening the security of peoples were removed.

The socialised conception of the rights of states here illustrated by reference to the rights of equality, independence and self-determination is undoubtedly implicit in a great deal of current discussion. It can be traced in the numerous attempts now being made to draw up declarations of rights, in the changing attitude towards the problem of the administration of so-called backward areas, the recognition in many quarters that even the notion of "trusteeship" which has been appealed to in this connection, must be purged of the implication of overlordship and mastery which it carries with it. It is seen above all in the growing realisation that the duties of states are not exhausted in the negative injunctions of non-aggression

* Cf. J. B. Condliffe, *Reconstruction of World Trade.*

and non-aggrandizement but include also the positive duties of collaboration for a common good, with the object, as expressed in the Atlantic Charter, " of securing for all improved labour standards, economic adjustment and social security." These changes in attitude imply a radical abandonment of individualism in international affairs. Here, as in the case of individuals, rights define social relations and social functions. They cannot be ascertained without taking into consideration the needs of all affected, and in this sense they depend upon and serve to define the common good. It follows that we cannot construct a system of international morality and international law by beginning with a list of self-subsistent rights. The fundamental rights and duties can only be ascertained as a result of an inquiry into the needs of various groups and the relations arising out of these needs. Construed in this manner the doctrine of fundamental rights does not seem open to the objections which have been raised against it, though it must be admitted that in many current interpretations of it, it has tended to encourage an atomistic view of the bond between states, an over-emphasis of rights which states possess and a readiness to overlook or disregard the duties which they owe to each other.*

III.

Some recent writers have maintained that the notion of rights is not applicable to collective entities and that only individuals have rights.† This view is mainly a reaction against extreme forms of nationalism. In dealing with, it it is necessary to distinguish between the general question of the applicability of the notion of rights and duties to corporate entities and the special question of its applicability to such entities as nations. The first question raises the

* Cf. J. L. Brierley, *Law of Nations*, pp. 39-41.

† Cf. E. H. Carr, *Conditions of Peace*, pp. 47, 273.

whole problem of the basis of rights. Rights are commonly described as claims to the conditions necessary for the good life. This seems to imply that the good must be first known and the rights then shown to be conditions needed for its attainment. But even on the Utilitarian view of ethics it is doubtful whether justice can be equated with conduciveness to good. Sidgwick, at any rate, admitted, in discussing the possible ways of distributing a given quantum of happiness, that " we have to supplement the principle of seeking the greatest happiness on the whole by the principle of just or right distribution of that happiness."* As I see the matter, what is good on the whole cannot be determined without taking just distribution into account. What is good on the whole is a certain order or mode of life of individuals in their relations to one another. Rights are assignable to the elements of that order. These elements need not, as I see it, be individuals. They may well consist of individuals in certain relations who, in those relations, have something specific to contribute to the total life of society. In this way we may, for example, regard a certain type of family as entitled to the conditions necessary to it as a family, and in this sense the family has rights. Similarly with churches, local communities and nations. The community, as a whole, also has rights and its constituent elements owe it duties. The denial of rights to such entities as nations and the tendency to insist that everything must be referred back to individuals may appear at first sight as a healthy protest against excessive abstraction in social theory. But it may easily result in an unreal universalism and, I suspect, serve as a cloak for what may perhaps be called the cultural imperialism of the more powerful nations. It is the value of the smaller nationalities that is called in question, but hardly that of the great powers. There is clearly a need for a great variety of corporate bodies to mediate between the mass of individuals and the community of mankind. Such

* Methods of Ethics, Bk. IV, Ch. I.

corporate bodies, as standing for a certain distinctive form of life, or as making possible the fulfilment of specific social functions, have rights and duties and in their fulfilment contribute to the common good. The difficulty, is, of course, to define these rights and duties, and, in particular, the problem of the best unit for purposes of government is extremely complex. There is, it may be noted, an analogous problem in the theory of international law. Here too, some writers, in their anxiety to refute the view that only states can be subjects of international law, have gone to the other extreme of asserting that only individuals can be such subjects.* It remains to be added that the view which regards collective entities as capable of rights and duties, both in the legal and moral sense, does not entail the ascription to them of a mystical personality. In the long run, of course, legal and moral rules can be addressed only to individuals who alone are capable of willing and thinking. Nevertheless they may be addressed to them in their collective capacity, as representing a certain form of life or as fulfilling a certain social function on which the rights and the duties are founded.

From the point of view here put forward, the right of national self determination does not rest merely on the right of association which belongs to the members of the nation taken as individuals. It is based also on the claim that a specific order or mode of life is entitled to the conditions necessary for its realisation. What conditions are so necessary is a question which has to be examined in each case. It does not follow, for example, that every cultural group has a right to be politically or economically self-governing. But this question as we have seen affects large and small states alike, and if the large states were willing to accept international control in the matter of armaments and of economic regulation, there would in all probability be considerable weakening of the pressure towards unity inside states. Cultural diversity would then be more easily

* Cf. Brierley, *Recueil*, 1936, p. 47, for a discussion of this question.

tolerated and the problem of minorities would then, perhaps, be handled in a more amicable spirit.

To anyone whose eyes are fixed on the actual behaviour of states and peoples towards each other this may seem idle theorising. All that is claimed here is that a study of opinion as reflected in discussions on international law and in other ways suggests that there is growing acceptance of the view that there can be no peace without justice among nations and that justice does not consist in mere non-interference, but involves positive efforts of collaboration for common ends. There are signs that in the external as in the internal relations of states, the individualist conception is slowly giving place towards more organic views of the nature of human relations.

I.—HOBBES ON ARISTOTLE'S *POLITICS.*

By J. LAIRD.

IN the *Leviathan*, chapter XXI (III, 202 f*) Hobbes wrote : " In these western parts of the world we are made to receive our opinions concerning the institution and rights of commonwealths from Aristotle, Cicero and other men, Greeks and Romans that, living under popular states, derived those rights, not from the principles of nature, but transcribed them into their books, out of the practice of their own commonwealths which were popular ; as the grammarians describe the rules of language out of the practice of the time, or the rules of poetry out of the poems of Homer and Virgil. . . . And by reading of these Greek and Latin authors, men from their childhood have gotten a habit, under a false show of liberty, of favouring tumults and of licentious controlling the actions of their sovereigns, and again of controlling those controllers ; with the effusion of so much blood, as I think I may truly say, there was never anything so dearly bought, as these western parts have bought the learning of the Greek and Latin tongues."

That was plain speaking and a plain good-bye to classical philosophy, at any rate in matters of political theory. Again, in the penultimate chapter of the *Leviathan*, Hobbes's attack upon the " vain philosophy " of the Universities was chiefly an attack upon their " Aristotelity " (III, 670) in all the principal branches of learned study. " Since the authority of Aristotle is only current there," Hobbes asserted " that study is not properly philosophy, the nature whereof dependeth not on authors." " I believe," he went on, " that scarce anything can be more absurdly said in natural philosophy than that which now is called *Aristotle's Metaphysics* ; nor more repugnant to government than much

* The references in this form are to volume and page of Molesworth : *Hobbes's English Works.*

of that he hath said in his *Politics*, nor more ignorantly than a great part of his ethics" (III, 669).

Indeed, by the year 1651 when the *Leviathan* appeared Hobbes, by his own way of it, was engaged, not so much in flogging a dead horse (though he did have a kick at it) as in demanding the removal of its rotting carcase. He was fulminating in the name of the new post-Galileo world and there is no need to say much about this part of the story. "Aristotelity," especially in physics, had had far too long a reign, but it refused to abdicate, commanded considerable forces, and would probably instigate many troublesome legitimist risings in the future. In short, it was not so dead as Hobbes thought it should be. Nevertheless, Hobbes showed a certain restraint. In the *Behemoth*, it is true, he spoke of "the babbling philosophy of Aristotle and other Greeks" (VI, 282). Generally, however, he was content to say that Aristotle, after all, was but a man. Thus, in his *Dialogue of the Common Laws*, written about 1666, he said: "All men, you know, are subject to error, and therefore it is no wonder if these wise and diligent searchers of the truth did . . ." where the reference was to Plato, Zeno, Epicurus and Aristotle (VI, 99). At the age of ninety, writing the *Decameron Physiologicum*, he said very handsomely (VII, 72), "Some but few there be that have studied it [philosophy] for curiosity, and the delight which commonly men have in the acquisition of science, and in the mastery of difficult and subtle doctrines. Of this last sort I count Aristotle and a few others of the ancients, and some few moderns; and to these it is that properly belong the praises which are given to philosophy."

My intention in the present essay is to consider Hobbes's attitude towards Aristotle's *Politics*, and not his attitude towards "Aristotelity" in general. This political theory, in all probability, had an earlier start than the rest. By his own account in his Latin *Vita*, Hobbes's interests were classical and humanist between 1608 when he left Oxford and 1628 when he published his translation of Thucydides in order, as he later said, to show the follies of democracy to his countrymen (although, one may add, very obliquely). The man who twenty years later was mathematical tutor

to the exiled Charles Stuart was in these years tutor (and principally classical tutor) to the Devonshire branch of the Cavendish family. Hobbes's serious pursuit of the new world-philosophy seems to have begun with his elderly introduction to Euclid's *Elements* about 1629. The flame once kindled burned quickly, steadily and even furiously, being sheltered and fanned by the vivid interest of the Cavendish family in all the new science as well as in political theory and in the liberal arts. By 1637, as the manuscript of what is now called the *Little Treatise* shows, Hobbes had gone far towards developing a general theory of motion, but it was not till 1655 that *De Corpore* appeared and elaborated the physical foundation of his general philosophy. The great work had been very sticky. In comparison, Hobbes's political doctrine developed much earlier. The *Elements of Law** was circulated in manuscript in 1640, the first small edition of the *De Cive* was published in Paris in 1642 and the *Leviathan* in London (as we have seen) in 1651. So the last part of the trilogy *De Corpore; De Homine; De Cive* was the first to reach the public.

According to Hobbes it was the Civil Wars that " ripened and plucked " (II, xx) this third part of his philosophy from him before its natural predecessors were ready, and this (he said) was possible (*ibid.*) because " experience " supplied all the knowledge of man that was needed for political theory. In fact, however, he never attained and seldom attempted any close derivation of psychology from physics. Therefore his political theory remained largely independent of his world-philosophy ; and classical humanism *could* have been its quarry.

Hence Dr. Leo Strauss in his recent interesting and informative book, *The Political Philosophy of Hobbes: Its Basis and its Genesis*, had many inducements for attempting to develop his thesis that the classics and not the new world-views were the sources of Hobbes's political theory, for putting the Thucydides through a fine sieve in this connection, and for showing in detail Hobbes's debt to Aristotle's *Rhetoric*. * He may also have made a case for the view that

* Printed in Molesworth (IV) as two distinct Treatises, viz., *Human Nature* and *De Corpore Politico*.

Hobbes's anti-Aristotelianism progressively hardened. Since, however, Hobbes's first political work, *The Elements of Law*, was circulated three years after the *Little Treatise* was written and twelve years after Hobbes had changed his ways on becoming acquainted with Euclid, it is plain that conjectures based upon Hobbes's earlier humanism are precarious.

Even if the provenance of Hobbes's political theory had been predominantly classical it would not follow that his views were " modifications of Aristotelianism " as Dr. Strauss incautiously suggests on page 79 of his book. In the architecture of this theory Hobbes was nearer to the Stoics (the " right " and the " laws of nature "). In its substance (the compact of egoists) he was nearer to Epicurus or to the sophist Lycophron, whom Aristotle (*Pols*, Bk. III, ch. ix) censured for holding that the state was a mere alliance, a mutual assurance society without concern for the promotion of goodness or justice. Hobbes may have read Aristotle with mediaeval eyes. He certainly interpreted him in post-Aristotelian terms as his " Brief " of the *Rhetoric* clearly shows, for instance in the exordium to its fifteenth chapter (VI, 445). But he could scarcely have overlooked differences of this magnitude.

The more important, and, I think, the decisive point, however, is that, even if Hobbes *quarried* extensively from the classics, it cannot be inferred that he *built* a classical structure ; and he was, in fact, superbly confident that he had erected a *new demonstrative* science of Natural Justice. The very first paragraph of the *Elements of Law* states that the " true and perspicuous explication " of his subject depends upon accurate knowledge of human nature, the body politic and " what it is we call a law " and complains that the ancients and their successors " have not well understood their own subject." Similarly the epistle dedicatory to the *De Cive* complains (II, vi) that of all former moral and political philosophers " there is not one that hath used an idoneous principle of tractation." And about 1646 in his " Minute or First Draught of the Optiques " (in manuscript) Hobbes declared : " If it be found true doctrine, I shall deserve the reputation of having been the first to

lay the grounds of two sciences, this of *Optiques*, the most curious, and that other of *Natural Justice* which I have done in my book *De Cive*, the most profitable of all other" (VII, 471). According to Hobbes, this new demonstrative science had to be *new* because all who had written "concerning the faculties, passions and manners of men, that is to say, of moral philosophy, or of policy government and laws, whereof there be infinite volumes" ancient as well as modern "take for principles those opinions which are already vulgarly received, whether true or false; being for the most part false" (*Elements of Law*, Pt. I, ch. xiii, §4; IV, 73)—in short precisely the reason given in the passage from the *Leviathan* with which I began this paper.* And the new science had to be *demonstrative* because all true knowledge, in Hobbes's view, proceeded from first principles and the causes of things. In 1640, and before it, Hobbes counted himself one of the *mathematici;* but deduction is a matter of logic and Hobbes had been a logician, and a good one, from his student days, although, as a geometer, he made a very late arrival.

Since the hinge-points of the new demonstrative science (or what Hobbes took to be such) were "human nature," "law" and "the body politic," the proper plan of the present essay is plainly to consider each of these in turn with special reference to Aristotle's *Politics*. I shall follow this plan but shall introduce (or re-introduce) it with a rather undemonstrative, though not with a wholly fanciful preamble.

The marrow of Hobbes's political philosophy, as I understand it, is contained in the epistle dedicatory to the *De Cive* (II, ii), "To speak impartially, both sayings are very true: that *man to man is a kind of God*; and that *man to man is an arrant wolf*. The first is true if we compare citizens among themselves; and the second if we compare cities. In the

* Hobbes even said repeatedly (and twice in the *Elements of Law*) that "Aristotle, Seneca and others of like authority" gave the names of right and wrong "as their passions have dictated, or have followed the authority of other men as we do theirs" (IV, 211) and that "Aristotle and others have delivered nothing concerning morality and policy demonstratively but being passionately addicted to popular government have insinuated their opinions by eloquent sophistry" (IV, 219).

one there is some analogy of similitude with the Deity, to wit, justice and charity, the twin sisters of peace. But in the other, good men must defend themselves by taking to them for a sanctuary the twin daughters of war, deceit and violence, that is, in plain terms, a mere brutal rapacity." For fellow citizens under an ordered government, peace, reason, and (Hobbes said) the whole *law* though not the whole *doctrine* of Christ (II, 62) : *homo homini deus.* For ungoverned independent men (or gladiatorial states), that is, for all in a " state of nature " (*i.e.*, of anarchy) war, appetite and nasty short, brutality : *homo homini lupus.*

These notions, in a general way, are bred from the classics ; and similar sentiments are plainly expressed in the second chapter of the first book of Aristotle's *Politics.* There we read that Homer's " clanless, lawless, hearthless " man is an outlaw and a lover of war, that a man wholly independent would be either wild beast or a God ; that as a " complete " man (in the completion of his *polis*) is the noblest of all animals, so, apart from law and justice, he is the vilest of all ; and that, since a man can take arms and use them, he is also the most dangerous of animals. " If man be devoid of virtue no animal is so unscrupulous or so savage, none so sensual, none so gluttonous."

Homo homini lupus, indeed, was not a cynical invention of Hobbes's either verbally or in substance. Verbally it was a proverb and appears pretty much in that guise, say, in the speech of Ulysses about " degree " in *Troilus and Cressida*, Act I, Scene 3.

> " Take but degree away, untune that string,
> And hark, what discord follows. . . .
> Force should be right : or, rather, right and wrong,
> Between whose endless jar justice resides,
> Should lose their names and so should justice too.
> Then everything includes itself in power,
> Power into will, will into appetite,
> And appetite *an universal wolf*
> So doubly seconded with will and power
> Must make perforce an universal prey
> And last eat up himself."

In substance *homo homini lupus* was an old-world description of appetitive man.* To be sure, lawless men need not necessarily lose their wits; but Hobbes himself was prepared to say (II, 107) that "the natural state hath the same proportion to the civil (I mean, liberty to subjection) which passion hath to reason or a beast to a man."

Similarly, it is a preposterous piece of negligence to speak as if *homo homini lupus* was the whole of Hobbes's account of the human nature from which government was instituted. The complementary formula *homo homini deus* was equally applicable. Man, for Hobbes, was as truly and as much a rational as an appetitive animal. *Qua* rational he sought peace and security through the device of government, the need for which, in its simplest essence, even the meanest human intellect could easily grasp. It may be true that Hobbes, like some among the ancients, thought that the practical use of reason was simply "to assure the ways of one's future desires" as well as might be; and Aristotle and other Greeks in their various and subtle attempts to find intermediaries between reason and passion, to exhibit their union in a formed virtuous character and to indicate something of majesty in godlike reason even when it was not predominantly speculative, may have been deeper and more accurate psychologists than Hobbes. All the same, Hobbes was never an irrationalist or an antirationalist, a misologist, in his views of human nature. He always regarded human nature as rational-appetitive, and always attempted to hold the balance evenly between the two constituents.

This preamble has led me, almost insensibly, to make several incidental observations about human nature, the first of the hinge-points in Hobbes's new demonstrative science of Natural Justice. It is obvious, however, that the general ambitious plan of comparing Hobbian psychology with Aristotelian would require much greater space than is permissible on the present occasion, and I have to confess that I do not have the knowledge which a part of such an

* Plato's werewolf story in *Rep. VIII* 566–7 said to be "currently applied to the temple of Lycaean Zeus in Arcadia" was on the same lines and referred expressly to appetite.

undertaking would entail, namely, the tracing of particular phrases and turns of thought to their original. I do not doubt that much of Aristotle has somehow got into Hobbes, although I suppose that the *Rhetoric* had more of this kind of influence than any other of Aristotle's works. There, as Dr. Strauss has shown in the third chapter of his book, Hobbes borrowed rather freely in his descriptions of the passions, etc., and, what is more important, modelled his style very largely upon the ancient rhetoricians when they delineated *les caractères*. But in this respect the *Rhetoric* was singular. According to Aubrey, Hobbes qualified his statement that Aristotle was " the worst teacher that ever was " by adding " but his rhetorique and discourse of animals was rare." It is now known that Hobbes published a " brief " (*i.e.*, a digest) of the *Rhetoric* in 1637* ; and from a Latin manuscript digest that appears to have been dictated to a pupil about 1635, it seems plain that Hobbes found Aristotle's compendous manual, the *Rhetoric*, with its logic, ethics and politics as well as its account of style, peculiarly suitable for a tutor's business. It would be odd indeed if there were not frequent echoes from that particular origin.

However that may be, I shall now embark upon my much more limited theme, and shall consider only Hobbes's express references to Aristotle's *Politics*, beginning with the first hinge-point, viz., " human nature."

Here Hobbes's main references to Aristotle were two, something about bees, and more about natural slavery.

The point about the bees was this : Early in his *Politics* (Bk. I, ch. ii), Aristotle said that man was " naturally " a political (or social) animal and a higher kind of social animal than a bee since he could use intelligent speech and discriminate between good and evil. Hobbes attacked this statement at least five times, and in the *Leviathan* (III, 156 f), where he was fullest, made six separate criticisms. Unlike bees, he said, men were competitive ; by nature men competed for private good, and did not instinctively seek public good after the way of the hive ; men, unlike bees,

* Strauss, *op. cit.* p. 41n.

criticised their rulers and rebelled ; men, not bees, used their eloquence to stir up sedition ; bees could not, like men, distinguish between illegality and mere mischief ; and, lastly, men institute political government by covenant, whereas bees hive by natural instinct.

The sting of the discussion of the bees was in its tail. According to Hobbes, men did not naturally drift or tumble or congregate into orderly political government and subsequently describe the fact in speech and philosophy. Government was an artifice, a device that had to be won by hard thinking, and it was opposed rather than helped by the sub-rational, appetitive nature of mankind. Political justice was " natural " in one sense ; for it pertains to man's nature to use his reason. But the natural office of human reason is to devise an appropriate means, an artifice, for dealing with problems that man's instincts and passions do not and cannot solve. " Go to the bee, thou theorist " should never be an instruction to mankind.

Hobbes's repudiation of Aristotle's doctrine of " natural slavery " had ultimately the same motive. As the *Leviathan* put it : " The question who is the better man has no place in the condition of mere nature ; where, as has been shown before, all men are equal. The inequality that now is has been introduced by the laws civil " (III, 140). Aristotle's mistake in this matter, Hobbes maintained, was of the utmost gravity. In the *Elements of Law* (IV, 103) Hobbes said : " He (Aristotle) putteth so much difference between the powers of men by nature that he doubteth not to set down as the ground of all his politics that some men are by nature worthy to govern and others by nature ought to serve. Which foundation hath not only weakened the whole frame of his politics, but hath also given men colour and pretences whereby to disturb and hinder the peace of one another." According to Hobbes, human equality " in a state of nature " was an obvious inference from the simple fact that, where there was anarchy, the weakest could do the strongest in. Jael had only to wait until Sisera slept. Then she could reach for her hammer and nail. Given *such* equality, the inequality in men's wits and wisdom (which Hobbes did not dream of denying) was out of the

picture of sovereignty. Indeed, Hobbes maintained that "equality" was one of the "laws of nature" although, it would seem, on grounds of expediency rather than on grounds of pure reason. The typical passage I have just quoted from the *Elements of Law* continues thus: "For though there were such a difference of nature, that master and servant were not by consent of men but by inherent virtue; yet who hath that eminency of virtue above others, and who is so stupid as not to govern himself, shall never be agreed upon amongst men, who do every one naturally think himself as able at the least to govern another, as another to govern him. And when there was any contention between the finer and the coarser wits (as there hath been often in times of sedition and civil war) for the most part these latter carried away the victory; and as long as men arrogate to themselves more honour than they give to others, it cannot be imagined how they can possibly live in peace."*

If Aristotle's *Politics* had been a well-planned unitary treatise instead of being the collection of sub-treatises that it is, the prominence given to the doctrine of natural slavery at the outset of the book might justify the inference that "natural slavery" was, as Hobbes said, "the ground of all its politics." In an extended sense it may have been; but it is not at all clear that Aristotle's attempt to justify natural slavery had directly any more sinister aim than the "natural" justification of slavery within the *polis*. The doctrine does not seem to apply at all, or be meant to apply at all, to the *freemen* in the *polis*, for, to mention no other point, Aristotle held (*e.g.*, *Pols.*, Bk. I, ch. 6) that master is to slave as soul is to body; which is never the case in any subordination among freemen. If there is any natural analogy in the case of freemen, it was, according to Aristotle, the quite different analogy of intellect counselling the passions. And Aristotle seems to have used that analogy when he was thinking, not of freemen, but of women and children, as well as when he spoke of constitutional forms of kingship.

So it is not at all clear that Hobbes's repudiation of Aristotle's doctrine of natural slavery had quite the

* Aristotle (*Pols.*, Bk. VIII, etc.) admitted the tendency to sedition.

significance that Hobbes claimed for it; and Hobbes's own account of paternal and despotic governments (*i.e.*, of governments *not* established by institution) cost him much pains to evolve. The relevant chapters (VIII and IX) of the *De Cive* for instance "concerning a *natural* government which may also be called *acquired* because it is that which is gotten by power and natural force" are almost tediously involved and look very like an uncomfortable appendage to the primary doctrine wrung from the author by his inability to deny that the traditionalists were right in asserting that many governments arose from conquest and that, especially in small communities, *patria potestas* was a very stubborn fact.

In the *Leviathan* (ch. 20), however, Hobbes had got his ideas clear, and so he produced the very lucid statement that one might expect of him. "The rights and consequences of sovereignty," he said, "were the same however the sovereignty arose." The only relevant difference between government by conquest and government by institution was that, in the former, men promised for fear of a conqueror while in the latter they promised for fear of one another. Unless a slave or a captive in war is actually kept in fetters his subjugation is a covenant on his part, obtained under duress, but still a covenant. "It is not therefore the victory that giveth the right of dominion over the vanquished, but his own covenant." As for paternal dominion, it was the mother not the father who had whatever claims there were to such dominion "in the state of nature." (In the *De Cive* Hobbes had spread himself upon this topic, declaring among other things that "the birth follows the belly"). Paternal rights, in effect, were matters of legal institution; "and whereas some have attributed the dominion to the man only, as being of the more excellent sex, they misreckon in it."

In substance, therefore, Hobbes was able to maintain, clearly and consistently, that sovereignty was artificial and not "natural" whether or not it had been founded by institution. That, obviously, was an important line of argument, and scarcely of lesser consequence than the earlier argument we have just been considering. Few

political assertions could be of greater moment than these Hobbian assertions about " equality " ; for the pith of them was that the sovereign, even if he were a monarch, need not be, and need not be presumed to be, a better or a wiser or a more divine man than any of his subjects. The sovereignty was vested in him by agreement, and not on account of any natural superiority whatever. The device of government offered no excuses at all for the murmurs of the many Jacks who thought themselves (and might very well be) as good as their master. In principle, the master (if there were but one) was just one of the Jacks invested by agreement with the unlimited powers of sovereignty. The sovereignty was an artificial soul giving life and motion to the equally artificial body of the commonwealth.

Let us pass, now, to the second hinge-point of this discussion, that is to say, to the true conception of " law."

In this matter Hobbes professed the same general purpose as " Plato, Aristotle, Cicero and divers others " " my design being not to show what is law here, and there ; but what is law " (III, 251). His complaint was that the ancients, and Aristotle in particular, had got their answer wrong. His specific charges against Aristotle were that Aristotle had absurdly concluded that laws, not men, should rule, and, to speak bluntly, had misconceived the nature of law.

Saith the *Leviathan* (III, 683) : " It is men and arms, not words and promises that make the force and power of the laws. And therefore, this is another error of Aristotle's politics that in a well-ordered commonwealth not men should govern but the laws. What man that hath his natural senses, though he can neither write nor read, does not find himself governed by them he fears, and believes can kill or hurt him when he obeyeth not ? Or that believes the law can hurt him : that is, words and paper, without the hands and swords of men ? And this is of the number of pernicious errors ; for they induce men, as oft as they like not their governors, to adhere to those that call them tyrants, and to think it lawful to raise war against them."

These vigorous remarks refer to the enforcement of laws

(or at any rate to enforcement) and I shall return to the point. In a general way, however, it may be observed in this connection that the maxim " laws, not men, should rule," despite the appeal it made to Harrington, the founders of the American Constitution and others, seems to be decidedly obscure. What Aristotle seems chiefly to have had in mind (*e.g.*, in *Pols.*, Bk. VIII, ch. ix, when he spoke of the power of the masses being superior to the laws) was the danger of snap decisions contrary to established precedent and justified current expectations. That was a legitimate argument and so was his contrast between a tyrant deciding " at his arbitrary pleasure " and a constitutional ruler (*Pols.*, Bk. III, ch. xvi). Still it is men who rule in both cases, tyrants without regard to precedents and promises, constitutionalists with a careful regard to the same. A constitution cannot govern. At the most it describes the way in which men have agreed and now consent to be governed. When Aristotle (*loc. cit.*) said that " to invest the laws with authority is to invest God and intelligence only " he was speaking in a figure which deserved caustic criticism.

Aristotle's misconception of the very nature of law, according to Hobbes in the *De Cive* (ch. xiv, §2 ; II, 183 ff), was quite radical. He took laws to be only " ὁμολογήματα or forms of living determined by the common consent of men." His definition of law Hobbes Englished as follows : " Law is a speech, limited according to the common consent of the city declaring every thing that we ought to do " (Hobbes also gave the Greek but did not supply a reference). This definition, Hobbes said, could refer only to civil laws, and it misdescribed them badly. What it described was only promises and understandings, " naked and weak contracts." What Aristotle should have said was " A civil law is a speech limited by the will of the city commanding everything behoveful to be done " and that, said Hobbes, would have been equivalent to Hobbes's own definition " to wit that the civil laws are the command of him, whether man or court of men, who is endowed with supreme power in the city concerning the future actions of his subjects."

In short, Hobbes had the same quarrel with Aristotle's account of law as he had with the accounts that Coke and the common law Parliamentarians gave of it, or that Bracton had given in an earlier age. They talked about custom, case-law and precedent when they should have talked about the commands of a determinate superior enforced by judicial punishment.

Since Hobbes based his entire theory upon " laws " which, at any rate, in a secular sense, were *not* commands and were *not* enforced, namely, upon the so-called " laws of nature"—" this is that law which in this whole book I have endeavoured to unfold " (*De Cive*, xiv, 4)—and expressly maintained (*e.g.*, *loc. cit.*, §21) that " our obligation to civil obedience, by virtue whereof the civil laws are valid, is before all civil law," it seems clear that explanations were needed, especially as he admitted in the *Leviathan* that the " laws of nature " were " conclusions or theorems " rather than laws proper (III, 147). I cannot suppose that Hobbes was altogether consistent here, but I shall try to describe, in a rough way, what he maintained.

The " laws of nature " (he said) were " the ways of peace " and sometimes, as in the case of " equality," were (as we saw) defended largely on the grounds of their beneficent results. For the most part, however, Hobbes regarded them, stoicwise, as dictates of natural reason, that is, in modern jargon, in a deontological not in a utilitarian way. (Promise-keeping was an outstanding instance of this.) These " laws " or theorems according to Hobbes " obliged " but did not " tie," that is to say they connoted what nowadays we should usually call a moral obligation which, however, was not enforced in any human way. Since they " obliged " in their own right they " obliged " independently of politics and therefore in a " state of nature." (Sovereign monarchs, for instance, who are *ex officio* in a " state of nature " could sin, that is, act and think against right reason and could do so in their public capacity, though, being the source of civil laws, they could not commit *legal* crimes.) Since a " state of nature," however, is a state of war, the laws of nature " obliged "

only so far as " right reason " had a place in war.* In the civil state the subjects put themselves voluntarily under subjection. The responsibility (including the moral responsibility) for all their *actions* became in principle the sovereign's and not theirs. Their sole duty, being subjects, was to obey the civil laws which the sovereign enforced. In principle, there could be no reservation of any kind, although a man's belief and conscience (which could not be " tied " by any legal power) remained intact. Therefore, in the end, we have, *for all subjects*, the doctrine that the *Leviathan* so emphatically declared (III, 680 f) : " Aristotle and other heathen philosophers define good and evil by the appetite of men : and well enough, as long as we consider them governed every one by his own law ; for in the condition of men that have no other law but their own appetites, there can be no general rule of good and evil actions. But in a commonwealth this measure is false ; not the appetite of private men, but the law, which is the will and appetite of the state, is the measure."

The third and the last hinge-point of our present theme is the nature of the body politic.

Here Hobbes's criticism of Aristotle and the other ancients was simple and radical. They had not got down to first principles (he said) and so had failed to understand the nature of the rational artifice which determined the body politic.

According to Hobbes the institution of a political body meant that the multitude, by personal agreements *inter se*,

* In the extreme case the " natural right " of self-defence implied, according to Hobbes, the complete abrogation of all the " ways of peace " and Hobbes developed this theme in a fashion that may seem lyrical and perverse, holding, *e.g.*, that there was no limit to rapine and slaughter if grounded even on remote and fanciful apprehensions regarding personal safety. (In a " state of nature " each man was the judge of what was to be feared and of what was to be done about it.) In a general way, this " right of nature " was simply the commonly admitted principle that the primitive right of self-defence reverts to each man when the police are out of the way. But it might and often did conflict with the peaceful " laws of nature." Properly speaking a " right " is either what the laws secure or what the laws permit. The " laws of nature " *secure* nothing at any time in a human way. It is not so clear what they permitted in a " state of nature " but at any rate they permitted every action undertaken in self-defence or in what could be presumed to be such.

established a sovereign state with power to command absolutely and enforce its commands through its monopoly of serious punishment. When the members of the multitude did so they transformed the multitude into a sovereign people, and it made no difference in principle whether the "people" was a democracy (where the citizens *collectively* were the sovereign) or an oligarchy (where a council ruled) or a monarchy (where a single man ruled).* In all three cases the sovereign was the *people*, and in none of them the *multitude*, that is, the sovereign was the acknowledged repository of the power and the will which the multitude severally relinquished and bestowed on the government by the mere act of instituting a body politic. In all three cases the nature of the device was the same, viz., submission of all the subjects to absolute rule ; and that was the whole of a profoundly simple matter. Hobbes believed, it is true, that the rational artifice of government (*i.e.*, of rule and subjection) worked most smoothly in a monarchy ; but that, he acknowledged, was largely a matter of opinion "which one thing alone I confess in this whole book not to be demonstrated but only probably stated" (*De Cive*, To the Reader).

From these premises Hobbes's objections to Aristotle can be readily drawn.

In the first place (he said) democracy is a matter of popular *rule*, not of popular liberty. Aristotle, "through the custom of that time miscalled dominion liberty" in *Pols.*, Bk. vi, ch. 2 (Hobbes punctiliously gave the reference in all his three political treatises). "From whence," Hobbes went on in his *De Cive* (ch. x, §8), "we may collect that those subjects

* *I.e.* Simple democracy, simple oligarchy (or aristocracy) and simple monarchy. More complicated systems, *e.g.*, King, Lords and Commons today, or Cabinet, Commons and Lords, or the "checks and balances" of the contemporary American system would not impair the principle that sovereignty is indivisible. It would only be evidence of a complicated system of the bearers of the indivisible sovereignty. This also, in a general sense, is good Hobbian doctrine (*e.g.*, *Lev.*, ch. xix), although Hobbes's very understandable objections to muddled phrases like mixed monarchy—"mixed monarchy forsooth" (II, 96)—led him to speak rather crabbedly about "all, some few, but one." Sovereignty cannot be mixed or limited. To limit it would be to subject the supreme to something more supreme ; but the unitary supreme thing which is sovereignty may be shared in different hierarchies by different officers on different technical principles.

who in a monarchy deplore their lost liberty do only stomach this, that they are not received to the *steerage* of the commonweal." "Subjects have no greater liberty in a popular than in a monarchical state. That which deceives them is the equal participation of command and public places" (*ibid.*). In short, Aristotle, when he maintained that a free citizen was one who took his turn both at ruling and at being ruled was misunderstanding the entire situation.* As for "liberty" in its proper sense, that is, freedom from prohibitions and hindrances, "I deny," said Hobbes, "that there is more liberty (of *that* kind) in democracy than monarchy; for the one as truly consisteth with such a liberty as the other" (*ibid.*).

In the second place the persistent Athenian and Roman objection to tyranny, and Aristotle's inveterate confusion between kingship and tyranny, had to be condemned (Hobbes said) on the point of theory as well as on the point of practice. Absolute power was the essence of sovereignty. To forget this was to forget the nature of the political artifice, and Aristotle had again been misled by false inferences from equality. According to Aristotle (*e.g.*, in *Pols.*, Bk. VIII, ch. xi) there could be no natural kings (at any rate in enlightened Greece) since there was no impassable gulf in virtue or other noble quality between any man whatsoever and those who might be his subjects. (This was an extension, very much stretched, of the doctrine of "natural slavery"). The truth (according to Hobbes) was not that a monarch was in any sense a superhuman being, but that he was a man who had been invested with super-individual powers, that is to say, invested by agreement with the *collective* power of the community. Sovereignty in all its forms was an affair of combination and not of deference.

In the third place, Hobbes argued (*e.g.*, II, 127), that Aristotle had misled posterity by saying that there were two forms of government, one for the ruler's benefit, the other for the subjects'. The truth, said Hobbes, was that government had always the same essence and function, with many

* Hobbes would have discerned the same confusion about "liberty" in Plato's *Republic VIII* at 557.

benefits and some disadvantages in every instance. Aristotle had no case. " As if where subjects are severely dealt with there were one, and where more mildly, there were another form of government. Which opinion may by no means be subscribed to ; for all the profits and disprofits arising from government are the same, and common both to the ruler and the subject " (*ibid.*).

These were the main counts of Hobbes's indictments. They all depended on the fundamental criticism that Aristotle, instead of developing first principles, preferred, in the guise of principles, to describe what he saw around him, and that in a prejudiced way. I shall append a few comments.

(1) Hobbes took some time to appreciate the full force of his objection to Aristotle in some of these matters. In the *Elements of Law* he wrote : " Aristotle saith well (*lib.*, Vi cap ii of his *Politics*) *The ground or intent of a democracy is liberty.*" As we saw, Hobbes's comment on the same passage in his *De Cive* turned praise into censure.

(2) According to Aristotle, democracy was a declension from πολιτεία and, in extreme cases, a dangerous perversion of such a Polity. Hobbes paid no attention to this and for his purposes did not need to. Aristotle did maintain that " citizens " could best be defined as those who participated in judicial and deliberative office (*e.g.*, *Pols.*, Bk. III, ch. 1). Again, Aristotle did maintain in essentials that absolute political power was tyranny (*e.g.*, *Pols.*, Bk. VIII, ch. xi).

(3) There is at least one passage in Aristotle's *Politics* which is thoroughly Hobbian in its logic. This occurs in Bk. VI, ch. v, where Aristotle spoke of the commons converting themselves into a monarch, *i.e.*, into an individual composed of the many, not as individuals, but collectively. It is futile to conjecture whether Hobbes had meditated on this passage or, having forgotten it, was subconsciously influenced by it. If he had been, the difference between him and Aristotle would still have been enormous. For Aristotle's conclusion was that *such* a collective power would be a tyranny and would occur only when democrats fell

under the spell of demagogues who set themselves above the law.

This concludes what I intend to say upon the restricted but manageable theme of the present essay, namely, what Hobbes expressly said about Aristotle's *Politics* in his various attempts to expound his new demonstrative science of Natural Justice. Restricted as this topic is, it is not, I think, wholly devoid of interest and even of importance, but certainly it would have greater importance, and, I believe, greater interest if it turned from what Hobbes said about Aristotle to what Aristotelians would say about Hobbes. Perhaps, without unpardonable effrontery, I may suggest this complementary topic to the attention of some other members of the Aristotelian Society. But my present concern is with the Hobbian aspect of these questions.

Had Aristotle, or any other Greek, a tenable conception of sovereignty? Without such a conception can there be any health in political theory? Can any philosophy of orderly human fellowship, of noble traditions and of the ideal of the good life dispense with quite special enquiry into the *artifice* of effective government? Can custom and tradition be a substitute for *will*, and is not will backed by force the active body although it may not be the musing spirit of positive law? Are men governable primarily because they are deferential, or primarily for some other reason? Is their natural friendliness and their extensive good will sufficient to tell them how order may be attained in a large community, or how the peace can be kept even if the mischief makers are relatively few? All these questions are about the three hinge-points of Hobbian theory, the "body politic," "law" and "human nature" in its social and political aspects. The Greeks said many wise things about many of these matters. But were not Hobbes's contentions also rather pertinent?

I have not tried to give a modish turn to this discussion, though many of the questions at issue are decidedly topical. It is best, I think, to treat topical matters topically and historical matters historically, even if the penalty be that the latter type of treatment does not cut much ice on the popular rinks. The questions themselves, however, have no

particular date and it is what is dated, not what is dateless, that makes the history of ideas so difficult to grasp with ease and comfort.

So to end this paper I shall put a few queries which seem to me to arise out of the discussion and to be at least as pertinent today as they were in Hobbes's time or in Aristotle's.

Query 1. When all is said, is it not a government's business to *govern?*

Query 2. Why have governments a monopoly of punishment, *except* to enforce their will? Does anyone want to partition their monopoly?

Query 3. Is there any intelligible sense of "freedom" *except* "freedom-from"?

Query 4. If democracy be the *rule* of all, *from* what precisely is any democrat "free"?

Query 5. Is it not a subject's duty to *obey?*

Query 6. Is not political government a device, an elaborate artifice?

Query 7. Does the device imply, in any sense at all, that the men who rule should in some sort be supermen?

Query 8. Should the artifice of government be disparaged in any way on the ground that it *is* an artifice?

Aphrodite rose naked from the foam of the sea; Pallas Athene sprang fully-armed from Zeus's brow.

Joint Meeting of the Aristotelian Society and the Moral Science Club at King's College, Cambridge, on November 27th, 1942, at 8.30 p.m.

II.—CONCERNING IMAGINATION.

By C. A. MACE.

I.

ACCORDING to James Mill, Dugald Stewart was chiefly responsible for the modern tendency to restrict the use of the term 'imagination' to those activities in which 'the mind forms new combinations, or creations, *i.e.*, to cases in which the ideas which compose trains of thought do not come together in the same combinations in which sensations had been received.' Be this as it may, the usage is now well established. Earlier, the term had been employed to describe all activities involving the use of mental images, a distinction being drawn between 'reproductive' imagination which simply copies previous sensations or perceptions and 'productive' imagination in which what is imaged differs from what had been previously sensed or perceived.

Contemporary usages show pronounced tendencies both to a restriction and an extension in the application of the term. The tendency to restriction is that favoured by Stewart. The tendency towards extension is illustrated in all those cases in which we speak of imagination as displayed in any kind of constructive, inventive or creative process, whether it occurs in terms of mental images or any other material or medium. It is with imagination in this sense that I am here concerned.

Any kind of material that admits of manipulation or of modification by human agency may be a medium for imagination. For our present purposes it will suffice to distinguish three types of such activity which may be labelled respectively practical, linguistic (or verbal) and imaginal (or pictorial) construction.

By practical imagination or practical construction I mean the production of novel movements and of novel objects, that is, objects which are 'novelties' in the haberdasher's use of the term. Two subordinate cases are here distin-

guished: (i) that in which the novelty pertains to the movement itself as in the gesture of an actor, the posture of a ballet dancer or the stroke of a tennis player; and (ii) that in which the novelty resides less in the movement than in its effects, as when a painter making quite conventional movements so mixes and disposes his paints as to produce original results.

My second species of imagination is that which is involved in the use of words. Interest here attaches less to the coining of new words than to the combining of words in original ways. One feature of this case is that in speaking of the use of language no antithesis can be drawn between the original and the merely reproductive functions. To *use* language at all is to use it for original effects. It is presumably for this reason that we do not say that a parrot is using language when it has learned to talk.

I place only third in importance the special case with which traditional theory has been in the main concerned, the construction of novel pictures 'in the mind,' or more generally the case of 'mental imagery' in all the modalities of sense. Quite naturally, the case arouses interest by reason of its 'queerness' and its obscurity, but it has, I believe, little to contribute to an elucidation of the constructive operations of the mind. Anything that we can do with mental pictures we seem to be able to do better in other ways, for example, by drawing pictures on paper, by playing on a flute or by saying things in words.*

There are, of course, innumerable questions of interest with regard to the similarities, the differences and the interrelations of these three 'forms of imagination.' One set of differences lies in their respective relations to the actual and the possible. In the case of what I have called practical imagination the act of imagination results in the creation of something that 'actually exists'; whereas in pictorial (or imaginal) imagination what is said to have been imagined is something that is merely possible. It is, how-

* The reservations to which remark is subject arise from the fact that we have no simple ways of making models of organic sensations, feelings of vertigo, perplexity, intoxication and so forth. Hence the conventions of the comic strip cartoonists—stars, question and exclamation marks, whirling lines, etc.

ever, always that. But linguistic or verbal imagination would seem to be one step further removed from actuality. What we imagine by combining words is something which only *may be* possible and frequently is not. Nothing is more familiar to the philosopher than the fatal facility we enjoy in respect of linguistic construction. We know to our cost how easy it is to construct sentences that are grammatically and syntactically impeccable, sentences which are novel and entertaining, and often apparently profound, but sentences the meaning of which, if meaning they have, would point to things which do not and could not exist. What makes the matter of some consequence is the fact that we do not always know when we are doing that.

I should include among the products of linguistic imagination Wisdom's pleasant example of the ' brownie and the leprechaun hypotheses ' constructed for the purpose of explaining the peculiar behaviour of a watch.* If in quasi-poetic mood I suggest that my watch is possessed of a brownie or a leprechaun, and then by a quick transition to the scientific mood I inquire which it really is, the case might at first sight be thought to be analogous to the situation in which I surmise that the ill-health of my friend is due to some bacillus gnawing at his entrails and in which I inquire what bacillus it is.

In both cases we are concerned with imperceptible agents, imperceptible bacilli, imperceptible leprechauns and brownies. But as Wisdom sufficiently shows, the cases are very different.†

Our invisible bacillus in the most ordinary case is invisible only to the naked eye. It is not invisible on principle. We can draw a picture of it and say ' It's just like this only, of course, *much smaller.* If it were magnified five thousand times this is what it would look like.' But our brownie is quite a different sort of creature. We cannot say ' It is just like this only so much smaller.' If I want to show you what I mean by an imperceptible brownie and an

* J. Wisdom, *Other Minds.* MIND, Vol. xlix, N.S., No. 196, p. 379.

† Or rather, the cases *may be* very different. They may also be—even when they are thought to be very different—very much the same.

imperceptible leprechaun, I can hand you a blank sheet of paper and say, 'Now this is a good picture of an imperceptible brownie,' and handing another blank sheet say, 'And here is an imperceptible leprechaun. Now which do you think is inside my watch?' Wisdom speaks of the brownie hypothesis and the leprechaun hypothesis as 'hypotheses' with 'idle' pictures, but there is one respect in which I think we can improve upon his language. Having in mind the distinctions we have drawn, the point to stress with respect to the two hypotheses is the fact that they cannot be pictured at all. They are not idle pictures, surely, but just idle words. The words 'leprechaun' and 'brownie' are idle precisely because they do not, or at least should not, give us pictures. The pictures which would have been appropriate to the cases are rubbed out directly we add the qualification 'imperceptible' in the sense in which the term is here employed. The pictures are, so to speak, rubbed out before they are drawn. If we get pictures of anything like a leprechaun or a brownie that is because we are not 'thinking what we are saying.' There is a lack of co-ordination between our verbal and our pictorial imaginations. If we are taking the pictures seriously we have not used the right words, but if we take our own words seriously we have got the wrong pictures. The right picture would be more like the blank sheet of paper employed quite seriously and not as a joke.

I doubt if it is possible to exercise any one of these three kinds of imagination independently. It is certainly very usual to imagine things in a composite sort of way—with gestures, words and pictures curiously entangled. To illustrate I cannot do better than again take one of Wisdom's examples.

There is something queer, he says, about our imagining when, for example, we imagine that Smith sees the Union Jack not as red, white and blue, but as black, green and yellow. There certainly is something queer in this and so there is in Wisdom's own suggestion as to how we might conceivably do it. Considering the two 'hypotheses' (as to how Smith sees the flag), Wisdom remarks "Here we have two rival pictures, one of the Union Jack in red,

white and blue, and one of it in black, green and yellow, underneath each is written 'Smith'."*

This, of course, is something of a joke, but a part of the joke is that it has a philosophical point. To bring out the philosophical point one has in some measure to sacrifice the joke by saying the same thing with a larger number of words. Let us say, then, that here we have two pictures and under them is written 'Smith sees *this*, perhaps; or perhaps *that*,' adding two arrows, one pointing from 'this' to one flag and the other pointing from 'that' to the other flag. So, too, when we have made up our minds on the point we might imagine that under the same pair of flags is written 'Smith sees *this* not *that*,' again with the appropriately directed arrows. Now what has happened here?

To answer this question we may inquire what is meant by the familiar statement that we *use* mental images for the purpose of thought. How, exactly, do we *use* them?

It is to be noticed that a part of the curious effect of Wisdom's suggestion arises from the fact that he is not describing an ordinary or typical 'mental picture,' but a mental picture of a picture—a mental picture of a picture of Smith's mind such as we might draw *if he had to represent it on paper.*

This consideration helps us because if we could understand how in thought we can use a picture drawn on paper we have gone some way towards understanding how for the same purposes we can use a picture that is not drawn on paper but is 'called up' in the mind. It is also to be noticed that the difference between Wisdom's terse and epigrammatic version of the situation and my long-winded equivalent corresponds to two sets of circumstances in which pictures may be employed. My expanded statement is more appropriate to an occasion in which we are concerned with communication, and perhaps communication with a rather tiresome person who insists on everything being made explicit. Such a person if shown Wisdom's picture would say: 'What does this mean? Does it mean that this is *what Smith looks like*, that this is a picture *of*

* The same article, p. 379.

Smith or a picture drawn *by* Smith, or what?' This, of course, is not the situation with which Wisdom is concerned. He has in mind, I suppose, the case in which one jots down a note to remind oneself of something on a later occasion. For this purpose one can lapse into shorthand, and dispense with the frills. When I jot down 'Smith' I know what I mean, and there is no need to write it out in full; just as when I enter in my diary for next Thursday 'Tea—Smith,' I know that this means that I am going to tea with Smith and not that Smith is coming to tea with me. In fact, in the case of the flag, I need only draw the picture of the flag. I shall remember who it is that sees the Union Jack like this.

But to keep to the more explicit statement, how do we 'use' the pictures of the flags? Presumably, we use them to contemplate possibilities and to help us to assert or deny propositions. And to answer the further question: How do they help us to do this? we must avoid being too pedantic in the way we apply the word 'proposition.' Let us say, as a first approximation, that to assert a proposition is to make a noise (for example) with the intention of influencing someone's behaviour. This, of course, covers the case of saying 'Bo' to a goose. But I think we shall be treating propositions in the right spirit if we say that saying 'Bo' to a goose is a sort of assertion or that it is at least akin to asserting a proposition. We can go on to tighten up the definition until its application is narrowed down to the kind of case that interests philosophers. Accordingly, when I say 'That man's name is "Smith"' I am doing something the intention of which is to induce others to call him by this name, to deliver to him letters so addressed, and generally to give him his due. It is clear, too, that my gesture in pointing or looking in the direction of Smith is an integral part of my behaviour in asserting the proposition, so that if I had pointed or looked at someone else I should have asserted a different proposition. We may say, if we like, that my gesture is a 'constituent' of the proposition just as the word 'Smith' is. But instead of using the gesture I might have drawn an arrow on the floor pointing in the direction of Smith and

then I should have used an arrow as a sort of constituent of my assertion. Similarly if I put up a post with an arm inscribed 'To Cambridge,' pointing in any direction, I have asserted a proposition. I have told a lie or made a mistake if the arm is pointing in the wrong direction. In either case I have done something at least closely akin to asserting a proposition, and I have used a wooden post in doing it.

So, too, if I sketch a map upon a postcard and add an arrow pointing to a spot marked 'Cambridge' I have asserted a proposition, using a picture and an arrow in asserting it. This is like the case in which I assert that Smith sees the Union Jack in black, green and yellow by taking crayons, drawing the flag, and writing 'Smith' below. I have used the picture I have drawn in quite the most ordinary sense of the verb 'to use.'

One small step takes us to Wisdom's case. I have no crayons or paper at hand. Accordingly I draw, or as the saying goes, I 'construct' or 'call up' a picture in my mind. I can either call up an image of the sort of picture I should draw if I had paper and crayons, or I may visualize some flag I have actually seen. In the latter case it is perhaps misleading to say that I have used a picture of a Union Jack at all. It would be better, perhaps, to say that I had used a Union Jack—though I have, of course, not used it in the way I should have used it if I had held it in my hand and waved it before your face to show you what I mean. The great defect both of mental pictures and of memories is that you cannot use them to *show anything* at all.*

* To object to calling visual memories 'pictures' is perhaps to strain at the gnat while swallowing the camel. We have swallowed the camel when we agreed to speak of 'mental pictures' at all. Pictures which can be drawn without pencil, crayon or paint, and are not drawn on paper, canvas, wood or stone, are very queer 'pictures' indeed. We excuse ourselves in using such language chiefly on the ground that since everyone knows what we mean when we talk about 'mental pictures' it does not matter if we use nonsensical language—language, that is to say, which leads to nonsense if we expect any of the ordinary implications of the word as more usually employed.

II.

In the light of this discussion, admittedly sketchy, of the ways of imagining, we are in a better position to inquire what it is that happens when we imagine what is going on in someone else's mind. Wisdom is clearly right in saying that there is something queer about this imagining. The problem is one of a pair of complementary problems, arising from the fact that I perceive Smith's mental states only from the 'outside' of Smith and my corresponding states only from the 'inside' of myself, whereas what I am interested in in both cases is something which has both an outside and an inside. When Smith is happy there is, we believe, an inward feeling with an outer radiance, or an outer radiance with an inward feeling—it does not matter which way we put it. When I perceive Smith's outer radiance I can, as a philosopher, doubt his inward feeling, and when I feel *my* inward feeling I can, as a philosopher, doubt my outer radiance. I can neither get inside Smith to feel his feeling nor outside myself to see my own smiling face. Smith tells me he is feeling happy, he tells me that I am smiling and he holds a mirror up before me. But as a philosopher I cannot accept evidence like this. Men are liars and mirrors distort. As a philosopher I want to see my smiling face for myself, like the man who wanted to take his own eyes out to see if they were really blue. The situation is one in which we have two philosophers sitting face to face, in their proverbial armchairs, wishing to change places without at the same time sacrificing any of the advantages of remaining where they are.

What perhaps brings out more than anything else the queerness of imagining the states of mind of others, is the fact that, in ordinary cases of imagining, when we imagine something *we imagine ourselves perceiving it.* To say that I imagine an ordinary Union Jack is very nearly (but not quite) to say that I imagine myself looking at an ordinary Union Jack. To say that I imagine the national anthem is very nearly the same as saying that I imagine hearing the anthem being sung or played. And so to say I imagine Smith seeing the Union Jack either in red, white and blue

or in black, green and yellow is very nearly the same as to say I imagine myself seeing, hearing, perceiving—what?

To imagine Smith seeing the Union Jack includes, of course, imagining a Union Jack. To imagine myself *seeing* the Union Jack includes imagining a Union Jack. What, then, are the differences between (i) imagining a Union Jack, (ii) imagining *myself* seeing a Union Jack, and (iii) imagining *Smith* seeing the Union Jack? Cases (ii) and (iii) include what is imagined in (i) but they include something more. It does not always consist in imagining pictures of a Union Jack with the words 'Smith' and 'Me' respectively written underneath.

I think we get a hint as to what more is involved by considering Galton's curious question: 'Where do you localize your images? In your head, at the back of your eyeballs or "at a distance comparable to reality?"' I know that each of these answers is given, often with expressions of great conviction; but the only answer I find it possible to understand at all is the third. When, in response to Galton's invitation I 'call up an image of my breakfast table,' I imagine myself to be in the room in which I had my breakfast. My 'image of my breakfast table' then appears to be at a distance which is the distance between the table and the place from which I imagine myself seeing it. Putting this into the language of 'mental pictures,' my mental picture is a complex, it is a visual-somatic complex. As in perceptual experience, some part of the presented field is visually presented, and another part—presented but not visually presented—is occupied by bodily feelings.

So, too, to imagine myself to be colour-blind is not just to imagine that everything is grey, for that would be to imagine only that everything is grey. It is at least to imagine myself *looking* at things and seeing them as grey while believing that other people are seeing them in colours.

This, I take it, is elementary; but does it help us to say what I am imagining when I imagine that Smith is colour-blind or seeing the Union Jack in red, white and blue or in black, green and yellow? Does it help us to

say what I am imagining when I imagine Smith is comfortable?

As Wisdom truly says, 'What I ordinarily call having an image of Smith comfortable and pleased *includes* an image of his smiling face'; but, as Wisdom also says, 'it is the image (or faint sensation) of comfort which is the *essential* image in imagining Smith comfortable.' But, we ask, how are these images connected?

I think Wisdom is mistaken in suggesting that the image of comfort is related to one's imagining Smith's being in comfort in very much the way that one's image of a leprechaun is related to what one is imagining when imagining that in one's watch is an *invisible* leprechaun. True enough, in the one case I am imagining an invisible leprechaun and in the other an unfelt feeling. But they differ in that the leprechaun is imagined to be invisible to everyone and under all circumstances, whereas the feeling of comfort is imagined to be felt by Smith, and it is imagined that it would be felt by me if I were Smith.

Again, Wisdom would, I think, be mistaken if he suggested (as at moments one might almost think him capable of suggesting) that to imagine Smith as comfortable is to have an image of Smith's smiling face plus an image of comfort to which is attached a label bearing Smith's name and address. That, at any rate, is not how we ordinarily imagine Smith's state of mind. How then *do* we do it?

We must hold on to the fact that we really do do it. We do use our imaginations in imagining other people's mental states. But what we seem to do is different in different cases.

The simplest situation is that in which we image ourselves literally in another man's *place*. I can imagine how a penny looks to Smith because I can imagine myself looking at the penny from his point of view. It is a small step from this to imagining oneself looking at things not only from Smith's peculiar point of view but also as looking at them through his peculiar spectacles. And from this it is another small step to imagine oneself looking at things through his peculiar eyes, or for that matter with his

peculiar optic nerves and cerebral cortex. At this point someone may say 'Stop!' since, though I can take up Smith's position and borrow his spectacles, I cannot borrow his eyes or his cortex.

Of course, it is not necessary to borrow Smith's eyes. It is not necessary even to imagine that one has done so. It would be sufficient to imagine that I have eyes like Smith's. No one would suppose that if my eyes were exactly like Smith's the mere numerical difference between the two pairs of eyes presents any difficulty here. And what applies to Smith's eyes applies to his glands. If I can imagine how the world looks to Smith's jaundiced eyes (for perhaps I have had jaundice, too) I can likewise imagine how I should feel if I had his prevailing melancholia. I imagine Smith's states of mind by imagining that I am, in fact, Smith. And when, it may then be asked, may I be said to have imagined that I am Smith? I can imagine myself in Smith's place, as having his eyes, his cortex, his glands, I can imagine being called by his name, having his parents, his memories, his ambitions and so on; but at what point have I imagined that I *am* Smith? The answer is, roughly speaking, at whatever point you like. I can go on imagining, and you can tell me to stop when you are satisfied that I really am imagining myself to be Smith.*

It is, of course, possible to place a construction upon the expression 'imagining oneself to be someone else," such that this expression would be self-contradictory. But that is not the only possible construction. I cannot imagine myself to be *other than* myself, but I can imagine myself to be otherwise than what I am. It is in this latter way that we interpret the statement that a lunatic imagines himself to be Napoleon. So, too, when we hear that Smith's son has 'got his wings' we may with good sense say, 'I should

* Of course, I must imagine these things in a certain order. I must not, on pain of circularity, explain how I imagine Smith's perceptions by saying that in order to do so I first imagine that I am Smith in the sense of 'having Smith's memories.' If I can satisfy you that I can imagine myself seeing Mr. Gladstone (when I have not in fact done so), I am on my way to explaining how I can imagine having Smith's memories, if in fact Smith does remember Mr. Gladstone.

feel very proud if I were Smith, but if I were Smith's wife my pride would be not unmixed with anxiety.'

As I successively imagine the feelings of Smith and of Smith's wife I, of course, imagine myself having those feelings, but not as I should imagine myself having them if I were imagining that my own son had achieved some honour carrying implications of danger. I must also imagine myself as changed in some way which sufficiently takes account of the differences between myself, Smith and Smith's wife. We must, that is to say, distinguish the ordinary exercise of imagination with regard to ourselves from the exercise of what *Adam* Smith described as 'that principle of our nature which leads us to enter into the situations of other men and to partake with them in the passions which these situations have a tendency to excite.'

The novelist, in the exercise of sympathetic imagination in regard to any of the characters in his novel, may perhaps imagine himself so changed as to be like the person imagined in every respect; but in the exercise of common sympathy a single trait or so may suffice in order to enable one to identify oneself with the owner of the imagined feeling. Which trait it is that functions in this way will vary according to the situation imagined. I am likely to imagine myself as having Smith's or his wife's bodily features only if I am trying to imagine for example what it feels like to be as corpulent as Smith or as fragile as his wife, and I am likely to imagine myself having Smith's memories only if I am trying to imagine, for example, Smith's state of remorse. There is no one component or trait of Smith which I must always imagine myself to possess whenever I imagine myself to be Smith.

One other point perhaps requires to be stressed. It is a truism that to sympathize with others one must forget oneself. If I am truly to imagine what it would be like to see and feel things as Smith sees and feels them I must include Smith's incapacity to see and feel things as *I* am actually seeing and feeling them, *i.e.*, I must exclude from what I am imagining what I am perceiving. Thus, if I have a toothache and Smith has a headache my own suffering may help me to imagine Smith's state of mind

in a way in which I could not imagine it if I were feeling gay. But truly to imagine Smith's state of mind it is just as important not to imagine my toothache as it is to imagine his headache. We get into difficulties when we try to combine what we are imagining with what we are perceiving. To imagine Smith feeling comfortable and happy I must not at the same time imagine Smith's smiling face. Smith in feeling happy is not looking at his own smiling face. We were in fact beginning to go wrong when we asked: How is the image of Smith's smiling face 'connected' with the image (or faint sensation) of comfort which is the essential image in imagining Smith comfortable and happy? The 'connection' lies in their disconnection. While it is true that when I imagine Smith's emotional life I am imagining these emotions happening to me, the 'me' to which I imagine that they happen is not C. A. Mace. Ex-hypothesi I am imagining them as happening to me—Smith. In order to imagine myself as Smith I have an imagination to divert myself of anything in virtue of which I can call myself 'Mace.' The fact that I cannot become Smith does not imply that I cannot imagine myself changing in ways, such that if I did change in those ways, I could be called Smith.

It is instructive to contrast the ease with which one can imagine oneself to be Smith with the difficulty of imagining oneself to be a disembodied spirit. Consider this variation of Galton's question concerning the situation in which one visualizes one's breakfast table: Can you imagine that you died in your sleep last night, but that this morning, while your body was lying dead in bed, your soul came down to see what you would have had for breakfast?

I can imagine my breakfast table as before. The bacon and eggs are clear and distinct; so are the patterns on the china. In fact we have been led to suppose that there are certain advantages in being a disembodied spirit. Perhaps, to a percipient not depending on eyes, there is no vague peripheral vision. Everything in the room, the four walls, the floor and the ceiling, are equally clear. But where in all this, am I? Even as a disembodied spirit I must, like a Leibnitzian monad, have a point of view.

Let this point of view be, then, the centre of the room, half-way between the ceiling and the floor. But I can observe nothing there. This place is not pervaded by somatic sensations, no feelings of hot or cold, no aches or pains, no feeling of the weight of limbs. If there were such sensations I could not describe myself as a disembodied soul. The place is in fact nothing but 'a point of view.' But if this be so what is the difference between imagining a disembodied spirit and imagining an uninhabited room?

Perhaps it will further elucidate the manner in which we imagine things to compare (i) the situations in which I simply suppose that Mount Everest is in the Himalayas, (ii) the situation in which I am supposing myself to be in the Himalayas enjoying a view of Mount Everest, and (iii) the situation in which I suppose that Smith is in the Himalayas enjoying this view. Now, it looks as if imagining oneself looking at Mount Everest in a Himalayan context is a part at least of what we are doing in all three cases.

To suppose myself in the Himalayas looking at Mount Everest I have only to picture Mount Everest in its Himalayan context as seen from a point of view which is occupied in the main by a crick in the neck. It is a crick in my neck, of course, and there are certain other familiar somatic sensations, through attention to which I can identify the observer as myself.

I have suggested that when I imagine Smith perceiving Mount Everest I imagine much the same thing—Mount Everest viewed from perhaps the same point of view occupied by a crick in the neck and certain other attendant sensations; and curiously it is again 'my' neck and 'my' attendant sensations. The puzzle disappears, however, when we notice that the words 'I,' 'my' and 'me' have changed their significance. Perhaps we can re-state the point by saying that although in both cases *I imagine that I am looking at Mount Everest* when I compare the 'I' that is imagining with the 'I' that is imagined, in the former case the second 'I' has marks through which I can identify it with the first 'I,' whereas in the latter case the second 'I' has lost its identity card—it has not the marks by which it can be called 'Mace' and has acquired some

marks through the possession of which I am induced to call it ' Smith.'

But again, rather curiously, when I merely suppose, with my eyes shut, that Mount Everest is in the Himalayas, and consider what I am supposing I find myself imagining that I am looking at Mount Everest in a Himalayan context. If then I open my eyes and now see exactly what a moment before I was imagining I say : ' So I was right, Mount Everest *is* in the Himalayas.' We thus appear to be involved in a sort of ego-centric predicament, a predicament arising from the discovery that on analysis any empirical statement, whether it be a statement explicitly about oneself, apparently about someone else or apparently not about any person whatever, is a statement about oneself after all. The view that such is indeed the case is a common associate if not strictly a consequence of the belief that in order to understand a statement we must think of what we must experience in order to know that it is true. It is thus that in order to understand the statement ' Mount Everest is in the Himalayas ' I must think that ' If I arrange to have such and such Himalayan sense data I shall have such and such sense data of the Mount Everest variety.' And so merely to suppose that ' Mount Everest is in the Himalayas ' I must imagine myself having the experiences which if I actually had them would contribute in the required way to the statement's verification. But what a colourless ego it is which thus enters into the analysis of the proposition ' Mount Everest is in the Himalayas.' How colourless one can readily realize by comparing it with the egos that enter into the analysis of the proposition ' I am seeing Mount Everest ' or ' Smith is seeing Mount Everest.' A crick in the neck forms no part of the analysis of the proposition in the school geography. Again, if the ego which enters into the analysis of the propositions of the school geography were not so colourless the following ridiculous situation would arise. When I remark to Smith ' Mount Everest is in the Himalayas ' Smith might retort : ' On the contrary Mount Everest is in the Himalayas.' Smith's retort would point out that what *I* had said was that if *I* went to the Himalayas *I* should see Mount Everest, whereas *his* assertion,

in the same words, was that if *he* went to the Himalayas *he* would see Mount Everest. Clearly the geography books are not concerned with *who* goes. It might even be better to say that the analysis of the proposition ' Mount Everest is in the Himalayas is " If a disembodied spirit has Himalayan sense-data it will have sense-data of Mount Everest,' a statement which at least stresses the irrelevance of somatic sensations at the point of view. But perhaps those who assert that ' physical-object-propositions ' are to be analysed in this way really want to stress the occupancy of the point of view. If they do, they surely do not want to stress the individual peculiarities of the occupant of that point of view. They could then express their point by saying that the analysis of the proposition in question is ' If anybody has Himalayan sense-data then he (that body) will have sense-data of Mount Everest.' If again the reference to the body is insufficiently non-committal there is the alternative formula : If ' *one* has Himalayan sense data then *one* will have sense data of Mount Everest.' Here the ego is colourless enough, in all conscience. Thus, when it is realized what a mutable, flexible and projectible an ego ' I ' can be, and how colourless and impersonal an ego ' one ' can be, the ego-centric predicament does not seem to be so desperate a predicament after all.

Meeting of the Aristotelian Society at the British Medical Association, Tavistock House, Tavistock Square, London, W.C., on Saturday, January 30th, 1943, at 2.30 p.m.

III.—IS THERE A HIGHER REASON?

By H. D. OAKELEY.

THE idea of two forms of reason, corresponding to two stages or orders of knowledge, is found in many of the principal metaphysical systems. According to Plato knowledge of the highest kind is only attained after the student or seeker has passed through the stages of opinion and preliminary knowledge. The highest division of the mind has in his analysis two subdivisions, understanding by means of hypotheses, and assured knowledge. The student of dialectic, or the philosophy of the forms or ideas, only reaches the highest truth when his knowledge rests on the idea of Good. Is this for Plato absolute knowledge in contrast to all those fields of mental activity, which lacking this standard belong to the province of opinion, or at best as expressed in the Theætetus—opinion with the reason for it? It is difficult to show close parallels between Plato's system of the intellectual world and the systems of later philosophers, but in so far as the Form of Good can become an object of knowledge it seems to have a certain correspondence with the Absolute of some modern philosophies. It is however declared to be beyond Being and Reality, ἐπέκεινα της οὐσίας. It would appear to transcend all that is human, and yet to be the source of both knowledge and truth even as the sun is the source both of vision and of light. Thus Plato introduced into European metaphysics the two audacious principles that it is possible in some sense to apprehend ultimate reality or being, and that this reality must be called good. He ascribes to the mind in its highest function, an insight into the nature of that which transcends all experience. The human idea of value is installed at the heart of the universe. In the Philebus it is pointed out that it is experience of the beauty

of the world which convinces us that mind orders all things. In the Symposium, progress to the knowledge of the Eternal Beauty is represented (in Diotima's quoted speech) as a continuous advance from the transitory objects which are beautiful towards that which is beauty itself. Here all the values of wisdom, knowledge and virtue are included in beauty and discovered in the ascent. Plato's peculiar genius for imputing to the universal idea the abundant wealth of meaning which our emotional life is more apt to confer on the individual and unique seems to break down the barrier which at other moments he sets up between the two worlds of illusory sense and of reality for the mind.

Here as in other Dialogues he might almost be included amongst those who hold that a special emotional endowment is necessary for insight into the ultimate reality. This point will come up again.

The main purpose of this paper is to examine the problem whether we are capable of knowledge of that which is

(1) Beyond what is revealed in experience.

(2) Superior to the relativity to which all experiential knowledge seems subject.

(3) Pointing to principles in the nature of things which substantiate or correspond to our ideas of value.

Attendant on these questions are the following which arise when we reflect on them.

(*a*) If there is such knowledge, of what nature is the act of the mind cognising it? Is it intuitive as in Spinoza's view, or the culminating result of a special discipline of the mental powers long sustained as in Plato's education of the philosophers? This also would appear to be a kind of intuition. Or is it achieved by a special dialectic forced upon our reason by all experience? In F. H. Bradley's view the basis of this dialectic seems to be the *a priori* logical principle that reality must be self-consistent. (*b*) Is this knowledge characterised for the knower by absolute certainty—or does it consist of principles which are not more than regulative ideals as in Kant's final view? Finally, is the organ, or the act of the mind in this higher order of

knowledge purely rational or ought we to regard feeling as the basis, if not in all acts of judgment as Professor Whitehead holds, at least in those concerned with objects of knowledge beyond experience? This would seem necessary if the realities known have the character of the great values, as in the Platonic philosophy.

The most general problem underlying these various questions is that of the relativity of knowledge to the special situation and constitution of the human mind and the possibility of transcending this by any means within these conditions. The greatest thinkers of the past who have believed in the possibility of absolute knowledge appear to have held that its attainment depended upon a special discipline and cultivation of our reasoning faculties which enabled a more perfect form of knowledge to be developed. The great advances of science, especially physics, in recent times have set the problem in a somewhat new light. As regards the philosophers, reference has already been made to Plato. In respect to the problem of relativity, whilst the illusory character of sense-experience is one of the main determinants of Plato's conception of knowledge, he does not doubt the possibility of knowledge of reality.

"The wholly real is the wholly knowable." This will be found true by those capable of undertaking the severe intellectual training required. He limits in the Republic the opportunity to a very small proportion of his citizens, but he does not assert that the rest are intrinsically incapable of it. He assumes moreover that the stage of knowledge over which the understanding διάνοια presides, passes in essential intellectual development into the further stage, the dialectical, and with the exercise of his mind at its highest stretch the student approaches knowledge of the first principle—the Form of Good. The points to be noticed on the present journey of thought, are firstly that though there are distinct orders of knowledge, the distinction is not hard and fixed, the transition from one to another stage is natural in the educational process. And secondly, a strictly and rigidly intellectual preparation is necessary to the attainment of the supreme source of all

value. Reason is for Plato not neutral, but on the side of the angels.

There are striking resemblances and differences of standpoint in regard to the issues here discussed, between the thinker who is pre-eminently the metaphysician's metaphysician, and Plato. In respect to the illusions of experience, Spinoza, when determining the question how to order his own life, was primarily concerned not with the deceptions of sense-knowledge but with the overwhelming evidence of the vanity of all the ordinary objects of pursuit and their failure to bring satisfaction. It was then his discovery of the all pervading illusion concerning what is good that, as he tells us*, led him to seek the true good. This he found to consist in a certain character, viz., the knowledge of the union between the mind and the whole of nature—" cognitionem unionis quam mens cum tota natura habet." Like Plato, in the education of the philosophers, Spinoza formulates a strictly rationalistic method of attaining the knowledge required for the supreme end.

This end was the highest human good†. Its attainment depended on knowledge of the absolutely perfect being. The method is to increase the knowledge we have by the comprehension of a greater number of objects. The full significance of this appears in the Ethics. It is in the knowledge of God or Substance, consisting in infinite attributes, that this perfection is to be found ; the approach to it is only by one way, increase of knowledge. In Spinoza's account of the three kinds of knowledge, the second may be said to correspond to scientific knowledge and is necessarily true. The third is beyond this and involves the highest certainty. Spinoza's conception of knowledge of this kind is that it is intuitive, and its truth impossible to doubt. No other thinker I believe has attributed to the human mind such an infallible instinct, but Spinoza appears to regard it as quite an ordinary ability. " To have a true idea is only another expression for knowing a thing per-

* De Intellectus Emendatione.

† " Ad summan humanam perfectionem perveniatur."

fectly, or as well as possible." "Deinde quid idea vera clarius et certius dari potest quod norma sit veritatis? Sane sicut lux seipsam et tenebras manifestat sic veritas norma sui et falsi est."*

More clearly than Plato, he speaks of the highest kind of knowledge as possible for all men to attain—"Ex ipsa natura Rationis oriri, ut hominis summum bonum omnibus sit commune, nimirium quia ex ipsa humana essentia, quatenus Ratione definitur, deducitur, et quia homo nec esse nec concipi posset, si potestatem non haberet gaudendi hoc summo bono. Pertinet namque ad mentis humanae essentiam, adequatam habere cognitionem aeternae et infinitiae essentiae Dei."

Knowledge of the true Good to Plato only theoretically attainable by all men thus appears to be in Spinoza's view even practically so. In what however that Good consists, whether as realised in the mind of the seeker or as apprehended in the eternal reality, Spinoza's doctrine seems farther removed from the notions of plain men than that of Plato. The reasons for the total ignorance of their high destiny displayed by these children of the metaphysical kingdom receive a more intelligible explanation in the Platonic philosphy if we consider its implications. There are limitations to rationalism in Plato. Knowledge of the supreme principle is not, as first appears, due to reason alone unallied with any emotional quality, and there is no uncertainty in regard to the presence in the object of value as humanly conceived. The admission that something contrary to the good cannot be excluded from the nature of things, if only as a negative factor, an element of disorder, seems to involve that the verdict of feeling has its truth. For Spinoza, the opposition of good and evil is only human or relative. Feeling has no place in the highest knowledge—the *amor intellectualis Dei* appears to be a purely intellectual activity, though a mystical motive has been found in it by some students.

* Ethices Pars II Prop XLIII Scholium.

Nevertheless I feel, though it is with great diffidence that I make the suggestion, that there is a certain ambiguity in Spinoza's system in regard to the place of emotion. I venture then to throw out the following possible interpretation of this ambiguity. First it must be admitted that our minds might have been endowed with a form of reason less dominated than is that with which they mainly work, by the method of abstraction and generalisation, with its developments of the universal, class, classification, etc.

On this hypothesis their method would be more fundamentally based on the constitution of things as individual and unique. A sign system different from that of languages as they are would correspondingly have been evolved, and would have enforced the individualising form of thought and its logic, as the existing types of language fix the established logic on our interpretation of experience. This different type would be closer to the world of our experience as feeling or based on feeling.

The influence of language on thought has of course often been discussed, but is too large a subject to enter upon here. As Mr. F. P. Ramsay observes: "The whole theory of particulars and universals is due to mistaking for a fundamental characteristic of reality, what is merely a characteristic of language."* The application to Spinoza is as follows. His philosophy shows at times a profound sense of the individuality of all things in nature which seems not wholly compatible with the tremendous results for his system of the universalistic, super-temporal, necessitarian conception of substance, God, or nature which predominates. I can only refer briefly to the individual mode with its "Conatus in suo esse perseverandi." Professor Hallett's explanation in his third article on "Some Recent Criticisms of Spinoza,"†, of the relation of the finite self to the real or God also if I have understood it rightly, brings out the

* Foundations of Mathematics.

† Mind, October 1942.

individuality of the mode, since it is a " microcosm " and not sector of the real ; and as having its own character as " self-reference " not merely constituting illusory appearance, though diminished in reality. Professor Hallett is dealing with the problem which has troubled many critics—how the human intellect with its " Imaginatio ", its false, partial, and inadequate ideas can be related to the divine intellect, the *Infinita Idea Dei.* He makes clear the " modes " are no mere " finite centres," somehow " distributed " within the whole and " resolved as undifferentiated feeling."

It is to be noticed that Spinoza regards the general idea, especially such universal notions as " Being," " Thing," as in the highest degree confused, similarly general notions, man, horse, etc. They arise because the mind is unable to imagine distinctly all the individuals.* He is far from subordinating the individual to the class, or with the scholastic realist regarding the class as real and primary. The greatest thinkers seem to have realised the necessity of admitting into the factors of their thought both of the fundamental conceptions of this problem. To do this adequately seems almost impossible for minds equipped with our organs of reasoning except perhaps the greatest. The more basic the truth the individuality of things becomes subordinate, because it is the more intractable to our instruments of reasoning. This is possibly why the giants of philosophy are too great to be wholly consistent. Consistency may suppress some truth.

Turning from Spinoza to Leibniz we may see that whilst Leibniz appears to come nearer to a reconciliation between the two opposed conceptions of the metaphysical basis, his system as it were rings hollow by comparison with Spinoza's. The principle that each Monad reflects the universe from its point of view seems at first to provide a satisfactory intellectual solution of the narrowly restricted human achievement in knowledge and life, until we attempt to estimate the significance of " point of view," with the reduction which

* Ethics, Part II-XL—Note 1.

seems involved of all that is contrary to value to intellectual confusion. We may then realise that the seemingly greater paradoxes of Spinoza's unmitigated Monism with the attribution of every act of the finite being to the infinite divine reality under limitations, are less than the paradox of the Monads as "fulgurations" of the Divine Monad. For the problem of good and evil activity in the Monad is thus met with a position which axiomatically involves that all is good. Spinoza more greatly consistent treats all human valuations as relative, and more greatly inconsistent makes the intellectual love of God the highest human experience. The Platonic quality in his thought makes clear that the *amor intellectualis* though essentially an intellectual experience is only possible for the mind which is perfected in feeling not less than in reason.

It may here be observed that the far-reaching scope of Spinoza's thought in the doctrine of the infinite attributes beyond our powers to conceive, is very strikingly exemplified in the magnificent prelude which this conception may be said to furnish to views of the limitation of our knowledge presented by modern physics, as referred to later in this paper.

To discuss with any adequacy the bearing on the present argument, of Kant's treatment of the respective functions of *Verstand* and *Vernunft* would make this paper far too lengthy. One or two questions raised by Kant's treatment of the position that knowledge beyond "experience" is impossible must however be referred to. The element of paradox or seeming logical contradiction cannot be wholly avoided in the attempt to formulate knowledge of an absolute order. The emergence of antinomies and paralogisms is not, I would suggest, to be ascribed as by Kant to the principle that we can have no knowledge beyond experience, or not subject to the forms of perception and the categories. The reason why we appear to be incapable of a knowledge of ultimate reality, certain and continuously advancing, as is presumed to be the case with the knowledge of the sciences is that though the possibility of knowledge is not intrinsically limited to the sphere of experience, it

is not possible to obtain for that which is beyond experience the criteria of universal agreement and verification. If without these we cannot speak of knowledge, then Kant is right. At least it cannot be known that there is knowledge, though the individual may have no doubt. If a Spinoza assures us that the truth has made itself manifest to him, we may hesitate to assert that he is without knowledge. Here we meet the question of what nature is the organ of the mind and its activity in knowledge. For Spinoza the stage at which there is intuition follows on that of the second kind of knowledge which seems to be its prerequisite. This kind of knowledge however cannot give us reality directly, but is based on the general characters or notions of properties common to a multiplicity of individuals whose inner nature is not known to us. Thus knowledge of this type though rational postulates something unknown as its ultimate basis, whereas intuitive knowledge based on immediate perception reaches the real being in its individuality.*

In the " Critique of Pure Reason " Kant in spite of his insistent limitation of knowledge to experience has great difficulty in finally convincing himself that forms of knowledge beyond experience have no objective credentials. He seems to stretch out a hand for the mantle of Plato. " Plato," he says, " knew that our reason (*Vernunft*) naturally exalts itself to forms of knowledge, which so far transcend the bounds of experience that no empirical object can ever coincide with them, but which none the less he recognised as having their own reality and which are by no means mere fictions of the brain."† The transcendental ideas " are imposed by the very nature of reason itself," but " no object adequate to the transcendental ideas can ever be found within experience." Although he asserts that our knowledge, which begins with the senses, ends with reason, he distinguishes *Vernunft* from *Verstand* as a faculty of principles,

* Cf.," La Doctrine Spinoziste de la Vérité," Louis Terrasse, Chronicon Spinozanum, Tomus III.

† Critique of Pure Reason, trans. by N. Kemp-Smith.

not rules, and finds that as it can have no empirical employment its principles must be transcendent. These principles are " regulative," not constitutive. They provide us with Ideals. In the Critique of Practical Reason, these ideals are of infinite importance for practice. The peculiar genius of Kant's reasoning is nowhere more strikingly illustrated than in his Titanic wrestling so to treat the " Ideas of Reason " as to satisfy the requirements of science that they should be excluded from knowledge whilst giving significance to the testimony of all human experience and history, as to their actual potency. For history is experience in its most concrete form. And Kant does not align himself with those who conceive the historic process as appearance or illusion, because it cannot pass the test of consistency. In the statement that " human reason contains not only ideas but ideals,"* he clearly indicates that reason is not neutral in the order of value. Yet in the Critique of Practical Reason although the self as having freedom is the noumenal or real self, informed by *Vernunft*, the attempt is made in the first form of the categorical imperative to derive the principle of moral action from the law of universality alone. " Act so that the maxim of thy will can always at the same time hold good as a principle of universal legislation."

But it seems clear that this maxim would be empty if the content were not present by implication. The agent will not apply the criterion of universalisation unless he already perceives the value of the maxim, as truth, mercy, courage, etc. His principle depends on his unique perception of the situation always unique for the individual, but conceived as possibly universal. That Kant realised the central importance of the whole personality in relation to the moral law, is evident in the second form of the categorical imperative (in the *Metaphysic of Morals*) with its injunction to treat every man as an end and never as a means. Yet in the abstraction of the rational activity from feeling, even in the sphere of conduct, he goes so far as to hold it an

* Transcendental Dialectic, Sec. I, trans. N. Kemp-Smith.

imperfection in the benevolent act if performed not solely from duty but from loving kindness.

The real or noumenal self acting from freedom is a purely rational principle. *A fortiori* in Kant's philosophy no element of feeling can enter into knowledge of the supersensible, if attainable.

Amongst present-day philosophers Professor Whitehead has emphasized the place of feeling in all activities of the mind. His theory of feeling is difficult and has been variously interpreted. Some commentators think Whitehead's conception of feeling to be identical with value.* " All value," he says, " is the gift of finitude which is . . . the necessary condition of activity."† This would seem to imply that there is no absolute value, but Whitehead is too much of a Platonist for this. In " Process and Reality " (III, Chap. II) he says, " The subjective form of a conceptual feeling has the character of a valuation. The valuation is dependent on the other feelings in its phase of operations." Objectively values like all universals are " eternal objects " in his philosophy. In his analysis of propositions and judgments, it seems clear that he is conceiving feeling to be an indispensable factor.

" A judgment is a synthetic feeling embracing two subordinate feelings in one unity of feeling."‡ Here feeling is given an essential place in the logical structure.

" The judgment is a decision of feeling. The proposition is what is felt, but it is only part of the datum felt." " The interest in logic dominating over-intellectualised philosophers has obscured the main function of propositions in the nature of things. They are not primarily for belief but for feeling."

Professor R. G. Collingwood's view of the place of feeling in mind, though it belongs to a quite different standpoint from that of Whitehead, resembles it in the importance

* The Philosophy of Alfred North Whitehead. Library of Living Philosophers. Whitehead's " Theory of Value," J. Goheen.

† Mathematics and The Good, A. N. Whitehead—Ibid.

‡ Process and Reality, II-IX.

for knowledge attached to feeling. He agrees with Plato that feeling is not knowledge because it is too indefinite, but he does not agree that knowledge cannot rest on a foundation of feeling but must be the work of pure thought, operating by itself. "A foundation," he observes, "needs strength, and strength is what feeling has."* Where Professor Collingwood emphasizes the strength of feeling, I should rather point to the heightening and intensification of the object by feeling in the activity and search for knowledge, as also in the practical field for action which is the effect of feeling or emotion. It is not merely strength contributed to the object of thought, it gives a positive quality otherwise lacking. The subjective emotions in their various modes are objectified and united with the objects of knowledge. They become—or may become under certain conditions—values. This is the creative function of the subject conferring value on experience. Under the operation of thought the force of feeling becomes definite as value. It is as though the mind meeting the value greets it as something familiar in its own nature, with an All Hail.

The light thrown on the problem from their different points of view by Whitehead and Collingwood as it appears to me points to the necessity of recognising the whole personality as the organ of knowledge. With our inadequate equipment for the attainment of truth we cannot afford to neglect or despise any of our mental instruments which can illuminate in any way the object we are seeking to know or understand. As regards the limitations of our equipment for knowledge, relativity (not in the technical scientific sense) appears to be a universal condition of all knowledge founded upon sense-experience. The organs of sense-awareness with which knowledge begins obviously vary in the nature of their testimony even within our own species and in respect to one and the same organ. These variations become much greater where different species are concerned, and it seems evident that no limit can be set to the possibilities of divergence in the character of the

* The New Leviathan.

data, according to the channels of sense-knowledge with which organic beings are endowed. Considerations belonging to physical science expand and intensify the notion of these limitations to an inconceivable degree. To quote a passage from Dr. Max Born's Introduction to "Einstein's Theory of Relativity": "The realm of audible tones has become a small province in the world of inaudible vibrations, distinguished physically from these solely by the accidental property of the human ear, which makes it react only to a definite interval of frequency numbers. Modern optics is a special chapter out of the theory of electricity and magnetism, and it treats of the electro-magnetic vibrations of all wave-lengths. . . In the flood of invisible light that is accessible to the mental eye of the physicist the material eye is almost blind, so small is the interval of vibrations which it converts into sensations." Thus conceptions are suggested to our imagination of the wholly different worlds of experience of which we should be aware if our organs for sound and sight were indefinitely more widely sensitive, whilst far greater transformations would be experienced, could we acquire senses now unimaginable. In a single comparatively elementary aspect there might seem here to be a minor image of the scope of Spinoza's infinite and for ever unknown attributes. But however confined, and in the light of immeasurable possibilities contemptible our organisation for sense-experience, it may be argued that at least for all beings possessed of reason the methods of thought must be the same and their knowledge or pattern of the world as revealed by the senses with which they are endowed must have a broadly similar character. Certain doubts on this point arise however when we reflect on the contrast if not incompatibility referred to above between the patterns of the objective world as constructed by the activity of our intellectual faculties, according as the individual and unique is the real and fundamental datum, or the universal.

The abstractive and generalising methods necessary to science are apt to ignore the individuality of things and processes in nature and man. These methods make possible

prediction and verification, which come to be regarded as the test of truth. So the dwellers in Plato's cave, observing on the wall the shadows of the original things they could not see, were able to predict in what order they would follow one another without knowing the ultimate cause, or whether this order would be permanent. As Sir James Jeans observes with reference to Plato's allegory, "There will be many different arrangements of the figures out in the sunshine which all produce the same arrangement of shadows on the wall; these many arrangements will be followed by new arrangements which will not only be different in themselves, but are likely to produce different shadows on the wall."* With regard to the *a priori* knowledge of rationalistic theory, it is in Jeans' view, so far as it relates to the province of science, only "empirical knowledge of the man-sized world." On account of the instrumental aids at its disposal science can now study phenomena in three worlds, the world of the electron, of man, and of the nebulae. "The world of man occupies only an excessively minute fraction of the whole range between electrons and nebulae. Modern scientific study has revealed that though at first sight the laws of nature seem wholly different in the three fields, actually the same laws prevail throughout, but different features of these laws are of preponderating importance in different parts." Thus certain of the 18th century rationalist "intuitions"—as for instance, "substance is permanent" or divisible, were only true for the man-sized world or did not hold for the world of atomic physics,† as has been discovered with the elaborate instrumental aid of the present age. Here Jeans appears to exempt the empirical laws of nature as conceived by science from this limitation to one field as he states that actually the same laws prevail throughout, different features preponderating in importance. It is only the *a priori* rationalism which was wholly at fault. He speaks however in a less certain and unambiguous voice in regard to the law of uniformity and

* Physics and Philosophy, Chapter VII, Appearance and Reality.

† Ibid, Chap. II—The three worlds of modern science.

causation, when referring to the more philosophical problems arising from Planck's " Theory of Quanta." As soon as the atomicity of radiation became established, he says, " this principle had to be discarded. The phenomena of nature are no longer governed by a causal law." Yet the success of science has been based on the assumption of the uniformity of nature. Jeans' explanation as we might expect is that " the indeterminism disclosed by the quantum theory is confined to the small-scale processes of nature——and in the second place even these indeterminate events are governed by statistical laws. These laws " take control of the situation " in all man-sized phenomena. It is to be noted that his previous statement that the same laws prevail in all the three worlds, appears to be discarded here. Also, no reason, as he himself points out*, has been disclosed by the new physics, why the statistical laws should be obeyed. He leaves us in some doubt in regard to his own views on causality and determinism. " Causality disappears from the world of phenomena. It comes back when we explore the substratum of reality, though in a strange new guise." The substratum is outside space and time. He does not make clear what this new guise is. Of the world of phenomena he says, " we only see a collection of blurs—wave disturbances, which we may regard as representatives of knowledge." These " waves of knowledge " represent complete determinism, although he had told us that causality disappears here. Yet his final conclusion, after a very sympathetic survey of a number of distinguished determinists (philosophers and physicists), and brief reference to a few defenders of freewill, is that " whilst the classical physicists seemed to bolt and bar the door " (to libertarianism) " the new physics almost suggests that the door may be unlocked."†

In regard to the question of the relation of reason in the scientific search, to reason attempting to know objects beyond experience, what is most remarkable in the scientific

* Chapter VI.

† Ibid. vii. The Problem of Freewill.

activity of physics is that the distinction seems almost to disappear and the scientist to employ his experimental methods at the very gates, so to speak, of the unknown. Sir James Jeans appears amongst the philosophers with his pick-axe and shovel, trusting that his tools will do more to destroy the everlasting-seeming barriers than the explosions of the *a priori* fires lighted by generations of philosophers, but never yet sufficiently powerful. When the physicist loses sight of causality amongst phenomena, he " explores the substratum of reality " and finds there something, certainly strange and new, but not far from the genuine thing. He may be said to follow the tradition of Lucretius the first great philosopher physicist and scorn to remain within *Flammantia moenia mundi.* If he cannot be certain that he has found determinism of the will, in the actual facts of human experience, and it is difficult to persuade the individual that in the inner consciousness of the self—a kind of knowledge nearer to him than all external experience—he is deceived, the physicist points to " waves of knowledge which exhibit complete determinism." The problems which he is facing are of a philosophic character, and it may be all to the advantage of clear thought, if the hard line drawn by Kant and others between the understanding as concerned with " experience " and the reason as concerned with realities beyond " experience " is overpassed. Experience in some sense cannot be dispensed with, though if nothing that cannot be verified by sense-perception is to be admitted as criterion of truth, it seems that neither philosophy nor modern physics can remain within experience. The difficulty of deciding to which province certain problems belong is remarkably exemplified by Jeans' attitude to the problem of freewill. For as noticed above, after pointing out that causality disappears from the world of phenomena, he reinstates it in the world of reality. He then proceeds to refer to many of the common objections to freedom as expressed by some eminent scientists and philosophers. But these objections, it should be noted, have to do for the most part with experience in the ordinary or " pheno-

menal" world.* Yet finally he pauses with the new physics before the door to freedom expectantly awaiting the key.

The old view of philosophy that its province is the whole of things, still has its place. One of its principal functions is to view as far as possible the totality of experience and bring into relation disciplines that may appear wholly unrelated to each other. Philosophy cannot be regarded as some nineteenth century thinkers regarded it, as the study which assembles indeed the results of all the sciences, whilst omitting human history or that phase of development which occurs at the most advanced or complex stage of evolution, as outside science. As the behaviour of the species of the organic order is studied by the biologist seeking for complete explanation of their nature, so the behaviour of man in history in all his creative activities must be examined when we are seeking to determine whether those worlds of idea and meaning which he constructs far beyond what sense-experience can suggest, those ideas of value and that thirst for knowledge by which he directs his life consciously or unconsciously, often denying the natural instincts of life for their sake, have an objective basis. Though these values may not have a basis in experience, as understood by science, beyond this basis not all is unkowable. History may furnish a form of proof, not capable of demonstration by scientific method. We may have ground for belief in other realities though we may not have grounds for knowledge whether the values we place highest are the more enduring, e.g. whether "good" is the all-dominating principle as it was for Plato. It is conceivable that the conflicts of value and primarily between good and evil as conceived by us throughout human experience manifest some fundamental opposition in the nature of things. It may however be objected that science is dealing with the nature of things universally, whilst history only concerns a span of existence inconceivably

* Ibid.

brief by comparison. The length of time between Palaeolithic man and the present human race is almost nothing in relation to the infinite aeons of the universe. The reply would be that time does not enter into the question. The infinite eventless ages which are the background of astronomy, bear no relation to time for man. The two conceptions are incommensurable. For philosophy it is not temporal distances that are relevant but the values only won through the temporal process, without which the worlds of scientific knowledge would not exist since there would be no search for knowledge or passion for truth.

From this standpoint the central problem for philosophy is the nature of mind in the subject of knowledge, and of practical life in history, that subject which may be said to create physics and all other rational interpretations of our experience, as the objects which constitute the world for the seeker after knowledge. In his explanation of the theory of quanta we learn from the physicist that we cannot make a sharp division between the observer and the observed. " Complete objectivity can only be regained by treating observer and observed as parts of a single system ; these must now be supposed to constitute an indivisible whole which we must now identify with nature the object of our studies. It now appears that this does not consist of something we perceive, but of our perceptions ; it is not the object of the subject-object relation, but the relation itself."* The subject as included in the subject-object relation has become part of the object. This it seems is the special result of the method belonging to the Theory of Quanta. But the passing of the subject into the object is characteristic of a great deal of the study of the self and its activities. It appears in psychology and also philosophy. The question however is not asked—What is it that constructs this object of knowledge? Is it this object-self which knows itself as related to an object of another order? or must there not be postulated a more ultimate subject which is never objectified, but is ceaselessly constituting an

* Ibid, Chapter V, Subject and Object.

object-world with its knower and knowledge as it might be for the mind of a being of another order of existence contemplating human experience? It is this more ultimate subject assumed, unconsciously for the most part, in a great deal of philosophic speculation in regard to the self, the principles of its knowledge, etc., which, as I think, would be the organ of a higher reason, if such there be, capable of conceiving reality beyond experience. It would not be capable of bringing this reality into experience as a clear and certain object of knowledge since knowledge within experience demands a different relation of subject and object. In this view objective knowledge of supersensible reality is not possible. But that there is such a reality may be regarded as more than probable, on account of the necessity of postulating a subject which is never itself object behind the ordinary subject of experience. This subject seems to demand a wider range of objects than is provided in the worlds accessible to our experience since its nature is to be subject. It demands also an objective order which under the limitations of the subject of experience cannot be brought into our ordinary existence. It is not Kant's noumenal self which appears to be simply a personification of reason. Here it may be noted that the tendency to personify the faculties or activities of the mind, as though they were distinct beings animating the individual has had unfavourable effects on philosophic speculation. Reason appears as a kind of personal being operating in the world apart from feeling. That which operates beyond the individual self can only be the personal principle, no abstraction of reason but the source alike of the rational and emotional aspects of self-hood. As soon as we attempt to analyse it, we objectify it, and lose the original subject. Or rather it becomes the principle which is analysing an object-self. That which makes knowledge possible cannot itself be known. Yet it is nothing mysterious, but is the principle from which proceed all the activities of mind in human experience, as reason, feeling, will, and therefore the process of history in civilization with the values that enter into it.

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This principle is not inseparable from human existence so that a kind of human life is inconceivable without it. In all that is known of the historic and pre-historic process it appears to have been at work, at least in some dim form, slowly through immense ages entering less incompletely into human experience. There has always been the *nisus* to a higher stage, to borrow S. Alexander's expression. But it is conceivable that development in the higher animals might have taken a different line, and never reached the form in which this principle or force which may be termed spiritual for lack of a less ambiguous word, could enter into it, or emerge from it, if that point of view is preferred. In this alien type of development which I have in mind, the brain with its intelligence might have developed to a high point, but without that urge for disinterested knowledge and the other values, without the aspiration to Plato's " good " which he takes as essential to the highest mental development. A sort of reverse picture of the state of the human mind on such a hypothesis is suggested in some modern speculations of the condition to which average humanity might be reduced by a clique of powerful and non-moral individuals. Such a group might conceive that it would be to their advantage to bring about the reduction of the majority to a lower mental stature by depriving them of all scope for using their initiative or the creative instincts, whilst leaving them an existence sufficiently pleasant to be endurable. Such a scheme seems for instance to be envisaged according to Hermann Rauschning " by a school of younger technicians in Germany."* As regards the economic basis these men look forward to a general standardisation of products, and renunciation of individual tastes, with decline of individuality. There should be a planned control of energy or " Technocracy." Social and economic planning of a radical nature would culminate in a planning of man himself. Todt (who constructed the Siegfried Line) appears in the conversations recorded by Rauschning as conceiving the canalisation of the social and economic

* Makers of Destruction.

impulses of the " masses." The future substitute for State, society and the economic system is to be " a network for the distribution of energy." The man " who is still inclined to individualism is faulty material to be eliminated." The end to which these young scientists look is a vast combination of the largest empires with the greatest natural resources, to control the new public order, abandoning all the old ideas of nationalism with all the ideological superstructure, homeland, freedom, socialism, the classless society, etc. All this is out of date. In Rauschning's words " The combination of technical knowledge with complete brutishness of spirit is the atmosphere in which the gospel of the new technical radicalism thrives and spreads."

In relation to the point of view for which I have been contending, this idea of a society of the future involves the reduction of the majority to an object type of existence, and elimination from their experience of the essential subject. It probably seems a fantasy like Aldous Huxley's " Brave New World." But it expresses in extravagant and monstrous form, possibilities which in these days are open to a speculation not wholly insane.

I am afraid that the questions stated at the beginning of this paper have not received anything but a dusty answer. The conclusion I have made some attempt to suggest is that definite answers are hardly possible since the true source of the belief in knowledge beyond experience, is the existence of a factor in all human experience which never seems to receive clear recognition, possibly because of its elusive character. Its recognition would reveal that the idea of a higher rational activity apprehending truths inaccessible to the lower is wrongly conceived. But there is a fundamental truth which this idea is struggling to adumbrate. The principle which makes possible all experience which is essentially human is expressed not in reason alone but in the whole personality. It cannot be known as object because as soon as we attempt to know it thus, another subject emerges beyond.

The chief metaphysical thinkers have given inestimable testimony to the need of our minds for some conception

of the nature of things which will make human experience more intelligible than a purely empirical philosophy or the results of the sciences in general can make it. Scientific thought has also furnished valuable evidence. Special reference has been made to Sir James Jeans' new book on "Physics and Philosophy," because it is particularly representative in this respect.

It is not the proper function of philosophy to demonstrate the greater reality of the greater values or seek for favourable answers to the larger problems which practical experience presents. But the postulate that whatever the outcome of the conflict of values the conflict has some meaning, seems necessary to it.

Joint Meeting of the Aristotelian Society and the Cambridge University Moral Science Club on Friday, February 26th, 1943, at 8.30 p.m., in Prof. C. D. Broad's rooms, at Trinity College, Cambridge.

IV.—IS THE NOTION OF DISEMBODIED EXISTENCE SELF-CONTRADICTORY?

By C. LEWY.

I.

I PROPOSE to discuss in this paper a claim which is made by some philosophers, namely, that the statement* that we, human beings, may survive the death of our present bodies and exist *without* bodies is self-contradictory. I shall endeavour to show that this claim is wrong; but I must confess that I find the whole problem extremely difficult and that I feel very uncertain about the truth of my conclusions.

There is, however, one thing which *does* seem to me quite certain: it is that the only *sort* of argument which can be given in support of the view that the hypothesis of disembodied survival is self-contradictory must be based on the analysis of the meaning of words like "I," "you," and "he," and of proper names like "Smith" and "Jones." That is to say, it must be shown that the word "I," for instance, is so used that it is self-contradictory to suppose that *I* may exist without a body, and it must be shown that the name "Smith," for instance, is so used that it is self-contradictory to suppose that *Smith* may exist without a body. It must be shown, in other words, that the word "I" always stands for, or refers to, my body, or at least a part of my body, and that the name "Smith" always

* In what follows I shall call this statement the hypothesis of disembodied survival.

stands for, or refers to, Smith's body, or at least a part of his body*. For if the word " I " does *not* always stand for, or refer to, my body, or at least a part of my body, then it *cannot* be self-contradictory to suppose that I may exist without a body; and similarly, if the name " Smith " does *not* always stand for, or refer to, his body, or at least a part of his body, then it *cannot* be self-contradictory to suppose that Smith may exist without a body.

Let us first consider the claim that the word " I " stands for, or refers to, my body, or at least a part of my body. What is meant by " stands for " and " refers to " ? I do not think that the meaning of these expressions is at all clear; they *might* be used to mean the same, but it seems to me that they would be understood, quite naturally, to mean something different. The statement that the word " I " *stands* for my body would, I think, be naturally understood to mean something *more* than the statement that the word " I " *refers* to my body. I think it would be natural to use these two expressions—" stands for " and " refers to " —in such a way that if the word " I " stood for my body it would *follow* that it referred to my body, but if the word " I " referred to my body it would *not* necessarily follow that it stood for my body.

Let us see first what can be meant by saying that the word " I " *stands* for my body or *stands* for a part of my body. The only clear meaning of it which I can see is that the phrase " my body," or a phrase denoting a part of my body can always be *substituted* for the word " I." That is to say, that in any sentence we can substitute the phrase " my body," or a phrase denoting a part of my body, for the word " I," and get a sentence having the same meaning.

If this is what is meant, there can, I think, be no doubt whatever that the word " I " does *not* stand for my body,

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* By saying this I do not mean that it must be shown that the word " I " stands for, or refers to, my *present* body, or that the name " Smith " stands for, or refers to, Smith's *present* body; all that needs to be shown is that " I " stands for, or refers to, *some* body which is mine, and that " Smith " stands for, or refers to, *some* body which is his.

or for a part of my body. Consider the following sentences : I saw a flash of light, I heard a sound, I remembered having seen him, I felt pain. Now consider the sentences which would result from the substitution of the phrase " my body " or the phrase " my brain " for the word " I " : My body saw a flash of light, My brain saw a flash of light, My body heard a sound, My brain heard a sound, My body remembered having seen him, My brain remembered having seen him, My body felt pain, My brain felt pain. I think all these sentences are plainly absurd ; that is, in none of the sentences of my first group can we substitute the phrase " my body," or a phrase denoting a part of my body, for the word " I " and get a sentence having the same meaning. In other words, there is at least *one* usage of the word " I," such that, in *this* usage, the word " I " cannot be replaced by any description of my body.

But there is *another* usage of the word " I " in which, it seems, this substitution *can* be performed. Consider the following sentences : (1) I am six feet high, (2) I am fat, (3) I am good-looking. It seems that in *these* sentences the word " I " does stand for my body. For it would be absurd to say (i) I am six feet high, but my body is only five feet high ; or (ii) I am fat, but my body is not ; or (iii) I am good-looking, but my body is not. These last three sentences are, I think, *self-contradictory*. That is to say, (1) *entails* that my body is six feet high, and (2) *entails* that my body is fat, and (3) *entails* that my body is good-looking. Similarly, it seems to me self-contradictory to say " My body is six feet high, but I am only five feet high," or " My body is fat but I am not," or " My body is good-looking but I am not." That is to say, (1) is *entailed* by " My body is six feet high," and (2) is *entailed* by " My body is fat," and (3) is *entailed* by " My body is good-looking." If we substitute the phrase " My body " for the word " I " in our first three sentences (1, 2, 3), the resulting sentences may seem *unnatural*, but they are certainly not absurd in the way in which " My body saw a flash of light " is absurd.

But what do I mean by the phrase " my body " ? This, I think, is a point of great importance. Now, by " my body " I mean " the body standing in a certain relation to *me* ". I cannot explain what I mean by " my body " without bringing in reference to *myself*, where the meaning of " myself " cannot be further explained in terms of a body. In other words, " my body " cannot be translated into any expression, or a set of expressions, which are purely " physical ". Suppose, for example, that you have before you a model of my present body ; does " my body " mean " the body of which this is a model " ? If it did, it would involve no reference to me in the way in which " the body standing in a certain relation to me " obviously *does* involve a reference to me. But " my body " does *not* mean " the body of which this is a model ". My reason for saying this is as follows. It is, I claim, perfectly conceivable that I might exist with a different body ; e.g. I might exist with the body which is at present *your* body, and you might exist with the body which is at present *my* body. And then the body of which this is a model would no longer be my body : it would be your body. The body of which this is a model is my body because it stands in a certain relation to me : at present I *own* this body, but it is quite conceivable that at some other time I shall own a different body. The proposition " My body is six feet high " does not, therefore, entail " The body of which this is a model is six feet high " : for my body might be six feet high and the body of which this is a model might not. Similarly, the proposition " The body of which this is a model is six feet high " does not entail " My body is six feet high " : for the body of which this is a model might be six feet high and my body might not. In other words, the proposition " The body of which this is a model is *my* body " is a *synthetic* proposition, and not an analytic one.

The word " I " does not, therefore, stand for my body : not merely my *present* body, but *any* body which is mine. Though *sometimes* the phrase " my body " can be substituted for the word " I ," this phrase itself involves a reference to me which cannot be further explained in terms of my body—

either my *present* body or any other body which I might own.*

Now let us see what can be meant by saying that the word " I " *refers* to my body though it does not *stand* for my body. The statement that the word " I " refers to my body is, as I have pointed out, weaker than the statement that the word " I " stands for my body ; and this weaker statement might, I think, be so used as to be compatible with the possibility that I may exist without a body. In this case, however, the view that the word " I " refers to my body would be irrelevant to our discussion. If it is to be relevant it must, of course, be *in*compatible with this possibility ; and to be incompatible it must at least claim that every proposition expressed by a sentence in which the word " I " is used *entails* some proposition about my body. That is to say, that every assertion about me *entails* some assertion about my body. For, if this were not the case, the statement that I may exist without a body could not be self-contradictory. Now, what *sort* of propositions are supposed to be entailed by every proposition about myself? I do not think that this has ever been clearly stated, but I suppose that an attempt to do so would be roughly as follows. Take any proposition of my first group (p. 61) : e.g. " I saw a flash of light." It would be claimed, I think, that this *entails* some propositions about the conditions of my eyes, my optic nerve, etc. Similarly, that " I remembered having seen him " *entails* some propositions about the conditions of my brain ; and, in general, that any proposition of my first group, and all other propositions which resemble these propositions in a certain very obvious respect

* Let me put the point in a slightly different way. There is *a* usage of the word " I," such that, in *this* usage, the word " I " cannot be replaced by the phrase " my body," or by a phrase denoting a part of my body, e.g., the phrase " my brain " ; and though there is *another* usage of the word " I ", in which " I " *can* be replaced by the phrase " my body," or by some phrase denoting a part of my body, yet all such phrases will involve a reference to the *first* usage of " I." That is, the analysis of sentences containing the word " I " in the second usage will consist, in part, of sentences containing the word " I " in the *first* usage. In other words, there is *no* usage of the word " I " in which " I " can be replaced by a phrase which does not involve a reference to the first usage of " I ", e.g. by the phrase " *this* body " (where the meaning of " this " is explained by pointing at my body).

in which these resemble each other, *entail* some propositions about the state and conditions of my body, or of a particular part of my body. And *a fortiori*, of course, that all such propositions entail that, at the time in question, I *had* a body. In other words, it would be claimed that the proposition " I saw a flash of light at *t* " *logically entails* that I had a body at *t*, that the proposition " I felt pain at *t* " *logically entails* that I had a body at *t*, and so on.

Perhaps this entailment *does* hold : but I certainly cannot see that it does. Perhaps it *is* self-contradictory to suppose that I might have felt pain at any given time without having a body at that time : but I certainly cannot see that it is.

Of course, we must distinguish between saying that a given proposition *p entails* another proposition *q*, and saying that *p causally implies q*. It may very well be the case that all propositions of my first group and all similar propositions (similar in that they all state a " psychological " fact about myself—namely, that they all entail that at a certain time I was *conscious*), *causally imply* some propositions about the state of my body at the time in question, and so causally imply that I *had* a body at that time. In other words, it may very well be the case that all such propositions *would* not have been true, unless, at the time in question, I had had a body, and my body had been in a certain state. For instance, it may very well be the case that the proposition " I saw a flash of light at *t* " *would* not have been true if I had had no body at *t*, and if my eyes, my optic nerve, etc., had not been stimulated in a certain way at *t*. Whether this is or is not the case is quite irrelevant for my present purpose : for all that it could show is that the facts expressed by the propositions of my first group are *causally* dependent on the existence of my body ; but it couldn't possibly show that they are *logically* dependent on it. And therefore it couldn't possibly show that the supposition that I might have been conscious at any given time without having a body at that time is self-contradictory.

I have, moreover, another reason for holding that the supposition that I may exist disembodied is not self-contradictory.

It is this: I can *imagine* myself existing without a body; I know, in other words, *what it would be like* to exist without a body. I can imagine that I see the same visual field as I am seeing now, but cannot see or touch anything which I could call "my body", and have no bodily sensations; at the same time I remember various events which happened in my "embodied" life, feel certain emotions, and have a continuous train of thought. I can, that is to say, imagine a situation which would *verify* that I have survived the death of my present body, and exist disembodied. It is true that *embodied* human beings might, under such circumstances, have no *evidence* for my "disembodied existence": for there might be no way in which I could communicate with them. But from the fact that there is no *evidence* for my continued existence it certainly does not follow that I do not continue to exist. I may exist, though *other* (embodied) people have no evidence for my existence: there is no contradiction whatever in supposing that I exist and that yet there is no evidence for my existence. I, though I alone, may know that I still exist.

It might be claimed, however, that even if it is not self-contradictory to suppose that *I* may exist disembodied, it *is* self-contradictory to suppose that Smith, or Jones, or Robinson may. For it might be maintained that even if the word "I" does not stand for my body, and does not refer to my body (in the sense required), the words "you" and "he," and personal names like "Smith," and "Jones," and "Robinson", do stand for particular bodies, or at least refer to particular bodies. This seems to me quite untrue. Let us take the name "Smith" as an instance. It is clearly *not* equivalent to any description of a body: "Smith felt pain" can no more be translated into "Smith's body felt pain" than "I felt pain" can be translated into "My body felt pain". That is to say, the name "Smith" and all other personal names do *not* stand for bodies. Nor is it true that every sentence about Smith can be replaced by *an equivalent set of sentences* about Smith's body. There are sentences in which the name "Smith" is used, and

which would ordinarily be said to be *about* Smith, but which are *not* equivalent to any set of sentences in which a description of a body is substituted for " Smith ". An example of such a sentence would be " Smith feels happy ". I cannot see that this is equivalent to *any* set of sentences in which the word " Smith " is replaced by a description of Smith's body.

It has been said that whereas the proposition " *I* feel happy " does *not* refer to my bodily behaviour, the proposition " Smith feels happy " *does* refer to Smith's bodily behaviour. That is to say, that although when I say " *I* feel happy " I am not referring to the behaviour of my body at all, yet when I say " Smith feels happy " I *am*, at least partly, referring to the behaviour of his body (including under the " behaviour of his body " his speech-behaviour). In other words, the behaviour of my body is no part of the meaning of " I feel happy ", but the behaviour of Smith's body *is*—it is alleged—a part of the meaning of " Smith feels happy ".* This view seems to me wrong : when I say " *I* feel happy " I am not, of course, referring to the behaviour of my body, but equally when I say " Smith feels happy " I am *not*, even partly, referring to the behaviour of his body ; that is to say, the behaviour of his body is not a part of the *meaning* of the statement " Smith feels happy ". His bodily behaviour is my *evidence* for this statement, but not a part of its meaning. Smith's entire bodily behaviour may be " happy-like ", and nevertheless Smith may *not* feel happy : he may be pretending. In this case it is obvious that though I should have good evidence for saying " Smith feels happy ", my statement would be *wholly* false. Whereas, if Smith's bodily behaviour were a part of what I *mean* by saying " Smith feels happy ", my statement would be *partially* true. Similarly, Smith's entire bodily behaviour may be " unhappy-like " (he moans, groans, says " I feel miserable ", etc.), and nevertheless he may feel happy : he may be simply shamming. In this case it is again quite

* To express this more exactly : the propositions stating Smith's bodily behaviour are, it is alleged, a part of the meaning of the proposition " Smith feels happy."

obvious that though I should have good evidence for saying " Smith feels unhappy ", my statement would be *wholly* false. But, if Smith's bodily behaviour were a part of what I *mean* by saying " Smith feels unhappy ", my statement would be *partially* true. I am not merely thinking of a case in which Smith's behaviour is *at first* " unhappy-like ", but then he confesses to us that he was shamming. For in this case we might say that it isn't true that *all* Smith's behaviour was " unhappy-like " : for his confession would, of course, be a part of his behaviour. And it might be said that the statement " Smith feels unhappy " means the same as the story about his behaviour only if we take his *whole* behaviour. But it seems to me that even then the statement does *not* mean the same as the behaviour-story, and that the behaviour-story is not even as much as a *part* of its meaning. For it is conceivable that at a certain time Smith felt happy, though he exhibited all signs of *un*happiness, and never confessed that he was shamming, never will confess, and never would confess. On the contrary, until the end of his life he claims that on June 1, 1930 he was most unhappy. Furthermore, we don't in the least expect to find this contradicted in his diaries, and we may find that they confirm it. In this case, though we should have every reason to suppose that the statement " On June 1, 1930 Smith felt unhappy " is true, yet the statement would be false ; and not only partially false, but *wholly* false. Though, *ex hypothesi*, we should never find it out.

Now all this does *not* show, and is not meant to show, that we can never *know for certain* that Smith feels unhappy, and that we can never *know for certain* that he is not shamming. But it does show (and this is all that it is meant to show) that the statement " Smith feels unhappy " does *not* mean the same as the story about his behaviour, and that the story about his behaviour is not even a *part* of its meaning. For it shows that it is not self-contradictory to suppose that *all* the behaviour statements are wholly true, and that yet the " psychological " statement is wholly false.

There is no doubt that usually we do know for certain that the psychological statement is true. But this is not

because the behaviour statements entail it, but because they provide, in conjunction with the statements about Smith's past behaviour, evidence of such a kind that it is correct to say that we *know* that Smith feels unhappy, and incorrect to say that we merely believe it, or that it is merely very probable.* But to say that the statements about Smith's bodily behaviour mean the same as, or form a part of the meaning of, the statement " Smith feels happy " is to confuse the *meaning* of this latter statement with the *evidence* for it.

Of course there is an important difference between the statement " I feel happy " and the statement " Smith feels happy." It is a difference between two ways of *verification*, or to put it differently, between two sorts of *evidence :* I know, when I do know it, that Smith feels happy through observing his bodily behaviour (including his speech-behaviour), whereas this is certainly *not* how I know that *I* feel happy. This difference can be expressed, perhaps somewhat misleadingly, by saying that I know that I feel happy *directly*, whereas I know that Smith feels happy *indirectly*. But although the way I *verify* the statement " Smith feels happy " is different from the way I verify the statement " I feel happy ", yet what I *mean* by the two statements is exactly the same : what I assert of Smith when I say " Smith feels happy " is exactly the same as what I assert of myself when I say " I feel happy ". In neither case am I asserting anything about the bodily behaviour. The methods of verification are different, but the meaning of the two statements, apart from the fact that in one case I am saying something about myself and in the other case about Smith, is exactly the same.†

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* And it is correct to say that we know it—in a perfectly " strict " sense of " knowing," though not in that which is appropriate to propositions of logic and mathematics, or that appropriate to statements descriptive of one's sensations.

† This formulation is not quite accurate ; but to express it accurately would involve further considerations of no importance for our discussion. These considerations are, however, important in themselves, and I shall now state them very briefly. I say in the text that the way in which I verify the statement " I feel happy " is different from the way in which I verify the statement " Smith feels happy." Now, though it is no doubt perfectly correct to speak of *verifying* the statement " Smith feels happy," it does not seem to me correct to speak of *verifying* the statement " I feel happy." It makes perfectly

Let us return to the main point. The name " Smith " is *not* used as logically equivalent to the phrase " Smith's body " ; and although *sometimes* the phrase " Smith's body " *can* be substituted for the name " Smith " (e.g. in the sentence " Smith is five feet high ", and in other sentences which express propositions stating, with regard to some particular time, a *physical* fact about Smith, *not* a psychological fact ; that is, which are such that none of the propositions which they express entails a further proposition to the effect that Smith was conscious at the time in question), yet the phrase " Smith's body " itself involves a reference to Smith, where the meaning of " Smith " cannot be further explained in terms of a body. In other words, " Smith's body," like " my body ", cannot be translated into any expression which is purely " physical ". " Smith's body " does not mean " *this* body " (when I point at a body which is in fact his) : for Smith might exist with what is at present Jones's body and Jones might exist with *this* body : " this body is Smith's " is thus a synthetic proposition, not an analytic one.

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good sense to ask " How do you know that Smith feels happy ? " or " What are your reasons for saying that Smith feels happy ? " but it does not seem to me to make sense to ask " How do you know that *you* feel happy ? " or " What are your reasons for saying that you feel happy ? " These last two questions could only be answered by saying " I know that I feel happy because I feel happy," or " I know that I feel happy because I have a certain feeling," or " My reason for saying that I feel happy is that I feel happy." And these answers do not seem to me to make sense. Or at least it seems to me that the fact that I feel happy is a *reason* for saying that I feel happy in a *very* different sense of " being a reason for " from that in which certain facts about Smith's behaviour are *reasons* for saying " Smith feels happy." If someone says to me " Smith feels happy " I can verify this statement by making certain observations. And by doing so I gain some knowledge which I did not previously possess. It seems to me that it is correct to say that I can verify p only if it makes sense to say that before I make the observations to verify it I am in ignorance as to whether p is true, and that after having verified it I gain some knowledge which I did not previously possess. In the case of " I feel happy " it seems to me that it doesn't make sense to say either. This, however, does not invalidate my main point. The difference between the statement " I feel happy " and the statement " Smith feels happy " can now be expressed by saying that there *is* a verification of the second statement but there is *no* verification of the first. Or, more exactly, that it is correct to speak of verification in the case of the second statement, but incorrect to do so in the case of the first. But although there *is* a method of verifying the statement " Smith feels happy," while there is *no* method of verifying the statement " I feel happy," yet what I *mean* by the two statements is, in the relevant respect, exactly the same.

Is it the case that the name " Smith " *refers* to a body, though it may not *stand* for a body? To say that it does so refer seems to me just as untrue as to say that the word " I " refers to a body. Smith saw a flash of light at *t*, Smith heard a sound at *t*, Smith felt pain at *t*; none of these propositions seems to me to *entail* that Smith had a body at *t*. None of them seems to me to *entail* anything about the conditions of Smith's body, his brain, his eyes, etc. That is, the name " Smith " does not refer to a body *in the sense of " refer " which is relevant to the present discussion*, viz., in the sense of " refer " in which *if* the name Smith did refer to a body, not only would *every* proposition about Smith entail a proposition asserting the existence of a body *at some time or other*, but also every proposition which entails that Smith was conscious at a certain time, would entail the proposition that Smith had a body at *that* time. And it is only in *this* sense of " refer " that if the name " Smith " referred to a body, the supposition that Smith may exist without a body would be self-contradictory.*

It has been maintained, however, that personal names do refer to bodies, though in a sense different from this. It has been maintained that the name " Smith ", for instance, refers to a body in the sense that it is really a *descriptive phrase* involving reference to a body. That is, that the name " Smith " is logically equivalent to (i.e. entails and is entailed by) some descriptive phrase involving reference to a body. I do not think that this is the case. For instance, it is sometimes suggested that the name " Smith " is logically equivalent to the descriptive phrase " the person who owns this body " (where the meaning of " this " is explained by pointing at Smith's body). This seems to me untrue for the following reason. If the name " Smith " were logically equivalent to the descriptive phrase " the person who owns this body ", then it would obviously follow that, under all circumstances, what is true

* And similarly, of course, the supposition that *I* may exist without a body would be self-contradictory only if the word " I " referred to my body in *the same sense* of " refer." That is, if every proposition entailing that I was conscious at a certain time entailed the proposition that I had a body at *that* time.

of the person who owns this body must be true of Smith, and also that what is true of Smith must be true of the person who owns this body. It seems to me that this is *not* the case. For it is conceivable that I, or any other human being, may at some time in the future own the body which is at present owned by Smith. And then many propositions which will be true of the person who owns *this* body will not necessarily be true of Smith, and many propositions true of Smith will not necessarily be true of the person who owns *this* body.

Another suggestion is that the name " Smith " is logically equivalent to the descriptive phrase " the person who owned this body at some time in the past ". If this were so, the proposition " Smith is the person who owned this body in the past " would be equivalent to the proposition " the person who owned this body in the past is the person who owned this body in the past ". Now the first proposition is a synthetic one, whereas the second is a tautology ; hence they cannot be logically equivalent.

I think that these two suggestions are the only ones which possess any plausibility, and both are now seen to be wrong. It seems to me, therefore, that the name " Smith " is not used as logically equivalent to any descriptive phrase of the required kind. But at the same time I wish to emphasize that whether or not personal names are logically equivalent to some descriptive phrases involving reference to bodies is really quite irrelevant for our purpose. For the sense of " refer " in which, on this view, personal names would refer to bodies is *not* the sense of " refer " which is required to make the supposition of disembodied survival self-contradictory. If the name ".Smith " were equivalent to a descriptive phrase involving reference to a body, it would indeed follow that every proposition about Smith entailed that a particular body had existed *at some time or another ;* but it would *not* follow that every proposition stating (or entailing) that Smith was conscious at a certain time entailed that Smith had a body at *that* time.

There certainly *are* differences between the use of the word " I " and the use of the name " Smith ". For example,

I recognize Smith by seeing his body, hearing him speak, etc., whereas I do *not* " recognize myself " in such ways. (Indeed, to speak of " recognizing myself " or of " identifying myself " does not seem to make sense at all). But I do not think that these differences are important in the present connexion. For just as I understand the supposition that *I* may exist without a body, so I also understand the supposition that Smith may exist without a body. Similarly, I understand the hypothesis that Jones *does* exist without a body—whether or not I have any *evidence* for his existence. The lack of evidence cannot make this hypothesis meaningless. It can only make me doubt its *truth.*

Furthermore, even if it were physically impossible for me to obtain any evidence for Jones's continued existence, I should still understand what would be *meant* by saying that he existed : for it is perfectly conceivable that Jones should continue to exist though for some (physical) reason or other no living human being can obtain any *evidence* for his existence.

To sum up. It seems to me that it is not a logically necessary condition for my existence that I should have a body, and that it is not a logically necessary condition for Smith's existence that Smith should have a body. And this, of course, is a different way of saying that the statement " I may exist without a body " and the statement " Smith may exist without a body " are not self-contradictory.

II.

Had I been wiser I should have left the matter at this stage. But I still feel rather puzzled about one of the most crucial things which I said in the first part of this paper, and I should like now to discuss it a little further.

According to what I have said, the proposition " I felt pain at t " does not entail the proposition " I had a body at t ", and the proposition " Lewy felt pain at t " does not entail the proposition " Lewy had a body at t ". Now, I can express this claim in different words, namely, by saying that

neither " I felt pain at *t* " nor " Lewy felt pain at *t* " entails " A body existed at *t* ". Of course the propositions " I had a body at *t* " and " A body existed at *t* " are not identical : the first entails the second, but the second does not entail the first. Hence it might be said that while it is true that if " I felt pain at *t* " entails " I had a body at *t* " it follows that it entails " A body existed at *t* ", it is *not* true that if " I felt pain at *t* " does *not* entail " I had a body at *t* " it follows that it does not entail " A body existed at *t* ". It seems to me, however, quite obvious that " I felt pain at *t* " could entail " A body existed at *t* " only if it entailed " I had a body at *t* ". In other words, it seems to me that the proposition " ' I felt pain at *t* ' entails ' A body existed at *t* ' " entails the proposition " ' I felt pain at *t* ' entails ' I had a body at *t* ' ". And if this is so, then " ' I felt pain at *t* ' does not entail ' I had a body at *t* ' " entails " ' I felt pain at *t* ' does not entail ' A body existed at *t* ' ". And the same seems to me to apply also to " Lewy felt pain at *t* ", " Lewy had a body at *t* " and " A body existed at *t* ".

In this respect, then, these two propositions—" I felt pain at *t* " and " Lewy felt pain at *t* "—seem to me to be exactly analogous : neither of them entails the proposition " A body existed at *t* ".

But it seems to me that, in another respect, these two propositions are not analogous. It seems to me that while " Lewy felt pain at *t* " entails " A body has existed at some time or other ", " I felt pain at *t* " does *not* entail " A body has existed at some time or other ". For I think that while " Lewy felt pain at *t* " entails " Lewy has had a body at some time or other ", " I felt pain at *t* " does not entail " I have had a body at some time or other ".* In other words, it seems to me that while the compound propositions " Lewy felt pain at *t*, but Lewy has never had a body " and " Lewy felt pain at *t*, but there has never existed a body " are self-contradictory, the compound pro-

* And I think that " I felt pain at *t* " could entail " A body has existed at some time or other " only if it entailed " I have had a body at some time or other," and that " Lewy felt pain at *t* " could entail " A body has existed at some time or other " only if it entailed " Lewy has had a body at some time or other."

positions " I felt pain at *t*, but I have never had a body " and " I felt pain at *t*, but there has never existed a body " are not self-contradictory. Now, this seems to me very puzzling. For I think that the proposition which I express by using the sentence " I felt pain at *t* " and the proposition which you express by using the sentence " Lewy felt pain at *t* " (when by " Lewy " you are referring to me and not to some other man of the same name) are logically equivalent.* And if this is so, it follows, of course, that what is entailed by the one must also be entailed by the other. My reason for thinking that these two propositions are logically equivalent is this. It seems to me that when I say " I felt pain at *t* " and you say " Lewy felt pain at *t* ", you are simply *repeating* what I said, we are both saying the same thing. Similarly, it seems to me that when I say " I felt pain at *t* " and you say " Lewy didn't feel pain at *t* ", you are *contradicting* me. And if this is right, does it not follow that the proposition which I express by using the sentence " I felt pain at *t* " and the proposition which you express by using the sentence " Lewy felt pain at *t* " are logically equivalent? So far as I can see this does follow, and I think we can prove it in the following way. (1) If " Lewy didn't feel pain at *t* " contradicts " I felt pain at *t* ", then " I felt pain at *t* " entails " Lewy felt pain at *t* ". For if *not-q* contradicts *p* it follows that *p* entails *q*. (2) If " I didn't feel pain at *t* " contradicts " Lewy felt pain at *t* " (and that it does seems to me as clear as that " Lewy didn't feel pain at *t* " contradicts " I felt pain at *t* "), it follows that " Lewy felt pain at *t* " entails " I felt pain at *t* ". For if *not-p* contradicts *q*, it follows that *q* entails *p*. Now, this is a dilemma. For we have here three propositions, each of which seems to be true, and yet their conjunction is self-contradictory. These three propositions are : (1) " I felt pain at *t* " does not entail " A body has existed at some time or other " ; (2) " Lewy felt pain at *t* " entails " A body has existed at some time or other " ; and (3) " I felt pain at *t* " (when said by me) is logically equivalent to " Lewy felt pain at *t* ". These three propositions cannot all be true ; yet all of them do seem to me to be true.

* Provided, of course, that *t* stands for the same time in both cases.

Now, it may be said that this dilemma, however it may be solved, is irrelevant to my discussion in the first part of this paper. For suppose that we accept both (3) and (2), and therefore deny (1) : that is, suppose we agree that both " Lewy felt pain at *t* " and " I felt pain at *t* " entail " A body has existed at some time or other ". Even then—one might say—it wouldn't follow that the hypothesis of disembodied survival is self-contradictory : for, as I have said previously (p. 70), even if every proposition about me, or about Smith, entailed a proposition to the effect that a body had existed at some time or other, it still wouldn't follow that the hypothesis of disembodied survival is self-contradictory ; in order that the hypothesis should be self-contradictory it must be the case that " I felt pain at *t* " entails " I had a body *at t* ", and that " Lewy felt pain at *t* " entails " Lewy had a body *at t* ". And we have agreed that these entailments do not hold. I think, however, that the matter is more complicated, and that it is more complicated in a way which does make the above dilemma relevant to our problem. For I must confess that my reason for claiming that " I felt pain at *t* " does not entail " I had a body at *t* " was that it seemed to me that " I felt pain at *t* " does not entail that I have had a body at any time *at all.* Hence, if it can be shown that this latter entailment does hold, I should have no reason for claiming that the former doesn't. More than this. I think that if " I felt pain at *t* " does entail " I have had a body at some time or other ", it *follows* that it entails " I had a body at *t* ". For it seems to me that " I felt pain at *t* " could entail " I have had a body at some time or other " only if it entailed " I had a body at *t* ". I do not see how " I had a body at some time or other " could possibly follow from " I felt pain at *t* " unless " I felt pain at *t* " entails " I had a body *at t* ". In other words, I think that " ' I felt pain at *t* ' entails ' I had a body at some time or other ' " entails " ' I felt pain at *t* ' entails ' I had a body at *t* ' ". And if this is so, it is clear that the dilemma I have just stated is highly relevant to the view put forward in the first part of this paper.

What, then, is the solution of that dilemma? If we accept (2) and (3) we shall have to deny (1), that is, we shall have to say that "I felt pain at *t*" does entail "A body has existed at some time or other". This seems to me evidently false. And moreover, as I have just said, to accept this entailment would mean accepting also a further entailment, namely, that "I felt pain at *t*" entails "A body existed at *t*", which seems to me also evidently false, and which is the very entailment which I denied in the first part of this paper. Now, I do not know what is the right solution of the dilemma; perhaps the solution *is* to deny (1); and if so, what I said in the first part of the paper is wrong. But yet I think that to deny (1) is the least plausible way of dealing with the difficulty. It seems to me that we should, perhaps, deny (3). For in spite of what I said about it I do *not* find (3) quite undeniable. In other words, I do not find it quite undeniable that "Lewy felt pain at *t*" is logically equivalent to "I felt pain at *t*" (when said by me). To say that it is seems extremely plausible, and indeed I seem to have *proved* it; but yet I feel great doubt about it. What makes me so doubtful is this. It seems to me that "I felt pain at *t*" (when said by me) could entail "Lewy felt pain at *t*" only if it entailed "I am Lewy". And so far as I can see "I felt pain at *t*" does *not* entail "I am Lewy". For "I felt pain at *t*, but I am not Lewy" does not seem to me in the least self-contradictory. I do not see how from the proposition "I felt pain at *t*" we could deduce the proposition "I am Lewy". Thus, it seems to me that what entails "Lewy felt pain at *t*" is not the proposition "I felt pain at *t*" alone, but the conjunction of this proposition with the proposition "I am Lewy". Of course, this amounts to saying that "I am Lewy" is a synthetic proposition and not an analytic one. But I think this is right: for I think that "I am not Lewy" is false but not self-contradictory. Perhaps I can show this by giving an example. Suppose I have committed a crime and am wanted by the police. A detective comes to my rooms and asks me "Are you Lewy?" Suppose I reply "I am not Lewy". Surely, we should say that I was lying, trying

to deceive, saying something false, but *not* that I was contradicting myself, that what I said was self-contradictory. And it seems to me that the use of " Lewy " in " I am Lewy " and in " I am not Lewy " is precisely the same as the use of " Lewy " in " Lewy felt pain at *t* ", and that therefore " Lewy " in " I am Lewy " and in " I am not Lewy " is not logically equivalent to " the person *called* ' Lewy ' ", or to " the person called ' Lewy ' by certain people at a certain time," or to any other phrase of this kind.

If all this is right, that is, if I am right in thinking that " I felt pain at *t* " does not entail " Lewy felt pain at *t* ", and that therefore the two are not logically equivalent, it means of course that the argument which I gave to prove that they were, must involve a fallacy. But I am afraid I cannot see what this fallacy consists in.

There is, of course, another way of dealing with our dilemma : we can deny the proposition (2) ; that is, we can deny that " Lewy felt pain at *t* " entails " A body has existed at some time or other ". Obviously, if (2) is false we can maintain both (1) and (3)—we can maintain both that " I felt pain at *t* " does not entail " A body has existed at some time or other " and that " I felt pain at *t* " (when said by me) is logically equivalent to " Lewy felt pain at *t* ".

Now, was I right in supposing that " Lewy felt pain at *t* " entails " A body has existed at some time or other " ? That is to say, was I right in supposing that " Lewy felt pain at *t*, but there has never existed a body " is self-contradictory ? I am now inclined to think that I was not; and that what I said was due to a confusion. I think that I confused the proposition " Lewy felt pain at *t*, but there has never existed a body ", which is *not* self-contradictory, with *another* proposition which *is* self-contradictory. Let me explain this. It seems to me that the sentence " Lewy felt pain at *t* " cannot express a proposition (i.e. cannot make sense) unless the name " Lewy " *applies* to something. And I do not see how it can be said that the name " Lewy " applies to something unless there has existed, at some time or other, a body such that one might have pointed at it and said truly " This is Lewy " ; in other words, unless

there has existed, at some time or other, a body such that if a man had pointed at it and uttered the words " This is Lewy ", he would have expressed, by the combination of the words with the gesture, a true proposition. (Of course the word " this ", in " This is Lewy ", is not used in such a way that " This is Lewy " is logically equivalent to " The body at which I am pointing is Lewy ", or to any other proposition involving a descriptive phrase of this kind. And I do not see how to explain this use of " this ", except by saying that though you can't substitute for it " the body at which I am pointing " or " this body ", yet to express the proposition in question it is necessary to point at a body and utter the words " This is Lewy " or some equivalent words.) It seems to me that this is the sense in which it can be said that personal names (like " Lewy ") involve reference to bodies.

But now, does all this show that " Lewy felt pain at t " entails " A body has existed at some time or other " ? I do not think it does. I think that what it shows is that " the sentence ' Lewy felt pain at t ' expresses a proposition " entails " A body has existed at some time or other ". In other words, it seems to me that what entails " A body has existed at some time or other " is not the proposition expressed by the sentence " Lewy felt pain at t " , but the proposition expressed by the sentence " the sentence ' Lewy felt pain at t ' expresses a proposition ". That is to say, what is self-contradictory is not the proposition " Lewy felt pain at t, but there has never existed a body ", but the proposition " the sentence ' Lewy felt pain at t ' expresses a proposition, but there has never existed a body ". And perhaps I can express the point more clearly still by saying that the proposition " Lewy felt pain at t " *might* have been true even if Lewy has never had a body, but unless Lewy has had a body at some time or other, the sentence " Lewy felt pain at t " could not express a proposition.

If this suggestion is right, and if, therefore, the proposition (2) of our dilemma is false, we can, of course, maintain both the proposition (1) and the proposition (3).

V.—WORLD-POLITICS AND THE PHILOSOPHER

By H. F. HALLETT

> The common problem, yours, mine, everyone's
> Is—not to fancy what were fair in life
> Provided it could be—but, finding first
> What may be, then find how to make it fair
> Up to our means : a very different thing !
> No abstract intellectual plan of life
> Quite irrespective of life's plainest laws,
> But one, a man, who is man and nothing more,
> May lead within a world which (by your leave)
> Is Rome, or London, not Fool's-paradise.
>
> (R. BROWNING, *Bishop Blougram's Apology*.)

PLATO's dream of a Philosopher-King has always seemed slightly ridiculous to self-conceived political " realists " and to the common man. So far as their estimate has been based upon the observed futility of extant philosophers, it involves a plain *ignoratio elenchi*, as readers of the *Republic* are well aware. But something might be said in its defence on the ground that one who has devoted his best years to the search for truth is likely to retain but little margin of vigour for the onerous tasks that must fall to the statesman, and even more notably in the modern world. Plato himself realized the probable disinclination of the true philosopher to become a prophet among transient shadows, but not that good government could hardly be expected from one whose interests lie beyond the Cave, and who, moreover, is unwilling, senescent, and somewhat impatient of human folly, vice, and ignorance. Vigorous and sympathetic prosecution of the legislative and executive duties that national and international statesmanship involve, require not the margin of a life concentrated upon intellectual interests, but the best energies of one devoted to this specific task.

Nevertheless, there can be no doubt that national and international government ought to be intelligently based upon principles that fall under the purview of philosophy ; and thus that it is among the functions of the philosopher

to lay bare and clarify these for the enlightenment of the statesman, and of the practical statesman to be willing to learn from the philosopher. It has often been contended that the philosopher is the reflective interpreter of the actual rather than the prophet urgently prefiguring its development: that the owl of Minerva takes her flight in the evening when the day's work of practical men is over. The disjunction cannot be defended if we recall that the philosopher's interpretation of the actual and temporal is in terms of its relation to the real and eternal, and that it is the function of the prophet to reveal the incidence of eternal principle in the constitution and emendation of the actual. The nocturnal flight of the owl of Minerva is not only the consummation of the day that is done, but the herald of the day that is to come; the Evening Star is the Morning Star. Philosophy is not merely reflective, but also normative; and though its essential *prius* is the eternal *civitas Dei*, the "pattern laid up in heaven," this central interest cannot but seek expression in the effort towards the increasing, if asymptotic, approximation of the actual world to that supra-temporal reality. The philosopher is, after all, himself a temporal pilgrim. Because the eternal is the source of the temporal it is also its norm, and in discovering the nature of the emanation of the temporal the philosopher at the same time discovers the principles governing its salvation. Emanation of the temporal and its durational salvation are but "moments" in the dialectic of finite creation.

If statescraft is to be effective, therefore, the statesman must be willing to learn from the philosopher, and the philosopher willing to amplify his vision of the eternal *civitas Dei* by setting forth its dialectical expression *sub specie temporis*, showing the mode of its actual pseudexpression at this or that time and place, and also the mode of its effective emendation. For the *civitas Dei* as eternal does not lie at the distant end of a linear temporal process or "kingdom of God upon earth"; it expresses itself in all time, *sub specie temporis*, in the dialectic of actual and ideal; it is at once the origin of the actual and its *nisus* to improvement. To think

of it as merely ideal is to miss its incidence in the actual ; to think of it as merely actual in the future is to miss its primordiality. If the world is to be saved from its ever recurrent, and ever more desperate, crises—if, indeed, it is to be saved from final barbarization, statesmen must learn from philosophers, if they can find them, for barbarism is the *nemesis* of ignorance (learned or otherwise), of compromise, appeasement, and *laissez faire.*

The British are not a philosophical people : " they have never been much affected by what their philosophers were saying or thinking ", treating them for the most part with " kindly contempt ". Under the special temporal advantages conferred by the industrial revolution we have managed, as one of our recent Prime Ministers has boasted, to get along very well without much theory " through the work of ordinary people who have adapted the government of the country in order to meet the environment of the age in which they lived." " One of the reasons why our people are alive and flourishing, and have avoided many of the troubles that have fallen to less happy nations, is because we have never been guided by logic in anything we have done." I am not among those (if there are any such) who suppose that formal logic alone can provide philosophical insight into the origin and nature of things, or political insight sufficient for national and international salvation ; but I am sure that a mere process of otherwise unenlightened trial and error will be equally ineffective. Nor would many be disposed to-day to imagine that we can safely pursue such unintelligent ways as when these foolish words were uttered. What is needed is a clear grasp of principles, and the resolute application of them in national and international affairs. We must not leave everything to " Providence " and human good nature ; for powerful men and nations are often not good, and human intelligence is a not-unimportant instrument of divine providence in its shaping of human destiny. This country, in the course of world-development, has lost the extrinsic advantages that it has enjoyed for a century or more, and it has lost its " splendid isolation " ; it can no longer with safety depend, in either

national or international affairs, upon commonsense and rule of thumb. It must look to its ways with an intelligent grasp of the conditions of individual, national, and international life, and of the principles that govern all social life among temporal men. In the international sphere the disasters that follow upon intellectual indolence can no longer be hidden from even the least observant and discerning, and in national life, where our resources must now be measured and distributed in accordance with demands for survival rather than for luxury for the few, or even the comfort of the many, the awakening cannot be long delayed. That our statesmen have learnt something from bitter experience in international affairs seems vaguely to be matter for hope ; that they, or the country at large, have yet done so in the national sphere, there is more reason to question and doubt. It is not, in these days, that the ends to which our people are sentimentally attached are not good, but that they are disorganized ; for it is not enough that good purposes should be pursued : they must be pursued in proper co-ordination and subordination if they are to be effectively and permanently achieved. And the root-purpose on which all are dependent—the maintenance of civility and the control of barbarians, individual, national and international—must take priority of all else if the achievements of which we are so proud are not to suffer total eclipse. And this can only be accomplished in the light of the fundamental principles of social order in a world in which not all individuals, nations, or alliances are permanently civil.

Some such feeling or perception was doubtless at the root of the effort during the last war, under the Scheme for Imperial Studies in the University of London, to present in a couple of courses of lectures delivered at Bedford College the views of a dozen of our most prominent philosophers on " The International Crisis " in its ethical, psychological and political aspects,* an effort beyond all praise in its intention, though in the issue singularly ineffective save as exhibiting

* *The International Crisis in Its Ethical and Psychological Aspects*, Oxford, 1915 ; *The International Crisis : The Theory of the State*, Oxford, 1916.

the incapacity of British philosophy at that time to provide clear guidance to the practical statesman, or even to elucidate the elementary principles governing the constitution and relations of States in a world no longer pacified by distance, isolation, and the concentration of power among peoples sentimentally attached to humanitarian ideals. The present war has produced no such corporate effort among our philosophers ; indeed, the only philosophical production of genuine importance, attempting to go to the roots of our discontents, and to lay bare the fundamental principles that are at work, is the late Professor Collingwood's important volume.* The present article is a modest attempt in the same direction, necessarily more restricted, in lieu of a more ample treatment that must await the cessation of hostilities.

(1) *The Radical Essence and the Developed Actuality of the State*

One of the main sources of the ineffectiveness of the principles elaborated in the courses of lectures to which I have referred was undoubtedly the failure to distinguish, or the positive refusal to admit the essential importance of the distinction, between the primordial and continuing purpose for which the State is founded and maintained, and the positively cultural purposes which it subserves ; between its radical essence and its developed actuality. This is undoubtedly traceable to the influence of the idealistic political philosophy which at that time held the field among British philosophers. For that theory " The State " is at once *ideally* identical with the *civitas Dei*, and *actually* expressed in this or that State without recognition of the distinctions necessarily involved in the temporal expression of an eternal order. In the *civitas Dei* the distinction of radical essence and developed actuality cannot be maintained, whereas in the temporal State it is crucial. The eternal community of all rational beings expresses itself *sub specie temporis* in a dialectic of emanation and

* *The New Leviathan*, Oxford, 1942.

emendation under which the individual and partial progressively discovers its true life in strife and co-operation with its other within the bounds of a fundamental order established, with the consent of the rational and the compulsion or guidance of the irrational, by the limitation of the licence of the " state of nature " in accordance with laws resolutely administered. The distinction emphasized by Dr Lindsay, in his contribution to the series of lectures, between the " State " and " Society " does not make good this defect, and the opposing schools of thought that issue from that distinction, *viz.*, that which makes the State the Society of societies, supreme and all-embracing, and that which finds it to be one society among others, though *primus inter pares*, serve only further to conceal the essential distinction to which I am calling attention. Dr Lindsay comes nearer to the heart of the matter in his description of what he calls " the traditional English view " that " the State is an indispensable rampart within which alone the life of the community can develop," but that " the non-political life of Society somehow comes first in our consideration "," it is the real life of the community."* The question is whether it ought so to " come first in our consideration " as political philosophers as to make us apt to forget the " indispensable rampart ", though it is natural in a settled State for the citizens to think more of their positive interests—economic, cultural and moral—than of the policeman and legal sanctions.

We are familiar enough in these days with an international condition that is a near approach to an historical " state of nature "—the " war of all against all "—the historicity of which idealists have for long agreed to discredit. It may be that to Hobbes and Spinoza, too, it was not so incredible. No one, of course, supposes that the State has historically arisen from an original " state of nature " among absolutely isolated individuals. Human nature demands at least the civility of the family if there is to be survival at all, and the family soon grows into the

* *The International Crisis*, 1916, pp. 96–97.

clan. Nevertheless, the principles that older political theorists illustrated by this mythical account must not be taken as discredited merely because they were absolutely rather than relatively presented. What distinguishes a political society from all others is its original protective function expressed as an application of united power—either that of temporary associations of individuals, or that of an appointed State-executive—to the defence of traditional customs and ways of life, or of positive laws. A political organization exists for the ordering and protection of civic or pseudocivic life among individuals or existing societies occupying a relatively isolable territory or otherwise brought into ineluctable relation. Other societies may exist for the development and pursuit of their specific economic, cultural, or moral ends ; *it* exists as such as the essential basis of civility among individuals or societies not naturally civil. It exists not because *all* men are by nature barbarians at all times and in all relations (for so it could never have been actualized), but because at all times and in all places and relations *some* men are barbarians ; or, perhaps, because *most* men are sometimes barbarians. If all men were always rational, the State would be unnecessary, or, if it is preferred, it would lose its radical function and become identical with Society. The radical essence of the State *qua* State is the organization of might in the defence of law, whereby the barbaric impulses of individuals and societies are checked or guided into harmony with their civic impulses ; and the radical function of the State *qua* State is the foundation and maintenance of that condition of civic order in which alone Society or societies or individuals can survive and develop and achieve cultural and moral values. In this sense the family, if it is to survive, must be a primitive political society ; and certainly the State exists for these ends as the temporal foundation and *sine qua non* of all the further ends of Society. In a barbarous or barbarized society morality among the civil elements must take the form either of the barbaric defence of civic or pseudocivic customs (thus instituting a pseudo-State or incipient political society), or of passive

non-resistance and inoffensiveness where such defence is impracticable from lack of adequate might. In such a State the civil are as sheep among wolves, finding their sole hope of survival in unobtrusive attempts to " overcome evil with good," in living as if members of the *civitas Dei* in the mystical assurance that thus it is possible to evoke the potential divine civility that lies deeply buried at the heart of the most barbarous of men. But such non-resistance is but the *pis aller* of the weak civilian living in the midst of barbarians or barbarizers, and powerless to gain adequate protection from associates, or to constitute a political order.

In the State, then, might is right as the sole foundation of the effective actualization and preservation of right in the temporal order, as the offset of the " original sin " by which the eternal is emanated in time. To refuse to establish and administer this fundamental might is to rest content with barbarity. For not only is aggression barbarous, but also pacificism—the one positively, the other negatively. Pacificism is only justifiable when no other course is possible. Willing refusal to defend the laws is barbarity cloaking itself under a mystical civility—admitting the principles of the eternal *civitas Dei*, but refusing to accept its expression under the temporal dialectic. Contrariwise, to make of the might of the State a world-absolute is to preclude world-civility, and militarism is a positive form of barbarity cloaking itself with a self-sufficient patriotism.

That the radical function of the State or political organization is the foundation and administration of justice or civic law can hardly be denied so far as the internal affairs of a society are concerned. But because this end has been tolerably achieved there is a natural but dangerous tendency for the attention of the unreflective citizen, and even of reflective thinkers, lulled into a false security, to be directed rather to the superstructure of cultural, economic, and moral life erected upon this essential basis, and to forget the foundations. The result is that when men are faced, as we are once more to-day, by international problems of analogous form, they suppose that a superstructure of world-civilization can be established without political

foundations ; that right alone, supported only by humanitarian sentiments, will prevail without the essential substructure of might, and that in spite of the repeated experience of the collapse of international society without that foundation " like a house of cards." For States, like individuals, are subject to barbarizing impulses and tendencies that must be kept in check and guided into the ways of civility by the powerful administration of laws. What passion is to the individual, mass-hysteria is to the State, and political order can only be founded and maintained by the might of those willing and able to defend humanitarian customs, or, more adequately, upon legislative and executive organization sufficient to preserve justice in accordance with positive law. A legislative League of Nations without executive might and resolution, or with sanctions that are either not imposed, or when imposed condemned as leading to war, will no more establish permanent civility among States than a State-parliament without an executive will for long maintain civic order among citizens. Nor could it ever have been supposed that it could, but for the tendency of uncritical minds to regard as of secondary importance, or to forget—nay, even to deprecate—what has for long been more or less customarily enjoyed within the national civic order—the firm administration of justice under the executive power of the State.* On this radical basis of the rightness of

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* I do not deny that the futile League of Nations may have been a necessary step in the education by trial and error of a world that holds rational analysis in contempt. What is now important is that its error should be recognized and corrected, and that the sponsors and supporters of the old League should not be allowed, as several of them are attempting to do, to re-assert their sentimental influence over the public conscience.

It is noteworthy, also, that it is often precisely those who deprecate the use of might in the fundamental work of establishing and maintaining civic order who are readiest to make use of it in the guidance and development of the cultural and moral life of the community. The *nemesis* of the decanalization of rightful might is thus the submergence of social life under a marsh of bureaucratic regimentation. But might is right most notably in the sphere of government, and most notably *not* right in the spheres of culture and morality. Between these extremes admittedly, *e.g.*, in the economic sphere, there is need for a most careful association of control and independence, for a compromise between *laissez faire* and bureaucratic control.

pacifying might alone can right become temporally mighty. In a " state of nature " might would be the sole right ; in the eternal *civitas Dei* right is the sole might ; but in the descent into duration that defines this present life, might and right are involved in an ordered dialectic under which the increasing might of right is founded upon a fundamental exercise of pacifying might, on the efficacy of which civilization wholly depends, and which in relation to this superstructure of culture and morality is justified.

(2) *Civilization and Barbarization.*

The pure barbarity of a " state of nature " nowhere and at no time has historical actuality. The pure civility of the *civitas Dei* is an eternal community in which the part lives in the whole, and is constituted by its community with its complement and source. Thus in the temporal world we have to deal not with barbarity and civility, but with barbarization and civilization—the struggle of civilism with barbarism. In this process we can distinguish various ranges determined by biological, geographical, economic, national, and other factors. There is the civilism of the family, the clan, the nation, the class, the continent, the human race, and opposed to each is a congruent barbarism tending towards disruption. Furthermore, as each individual and society is partial, it is subject to barbarous relation with extrinsic individuals and societies.

Now human societies have effective actuality only in so far as they are ordered or constituted, and the mode of ordering or constitution varies with the nature of the society. The primordial society on which all others depend in the actual civilized world is the political society, which may be either firmly or loosely knit. Briefly, broadly and roughly, we may distinguish between a state of pseudo-civility in which customary " law " is semi-barbarously administered by self-appointed guardians, and a state of civility in which positive law is constitutionally administered. The one is exemplified in certain primitive peoples

in certain periods of history, the other in the characteristic modern State.*

In human development the process of civilization has now resulted in the formation of a number of separate national civic States, limited in scope by isolating factors such as geographical remoteness and lack of communication, ethnological distinction, variety of cultural, moral, and religious ideas, and so forth. But for these limitations a single civic State might have pacified the whole of mankind. So long as they remain, however (and they show distinct signs of breaking down, especially among western peoples), such an ideal must remain a mere idea. The political philosopher must therefore meet the challenge of a world of sovereign States standing to one another in relations of pure barbarity, save in so far as the *intrinsic* civilism of each facilitates the development of a humanitarianism capable in some measure of modifying this " lawless state of nature " in the direction of a pseudocivility analogous to that of a primitive political society governed by customary " law " enforced by public-spirited individuals—a state in which international " law ", contract, and custom are more or less barbarously administered, if at all, by States or alliances of States which recognize it as their private interest so to do, or, more rarely, from motives of humanitarian " public-spirit " reinforced by private interest. War, and the threat of war, *so founded and justified*, is the modest beginning of world-civility.

The concentration of the minds of political philosophers in the past on the constitution of the national civic State has undoubtedly led to an undue insistence upon its

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* Similarly, in the international sphere we can distinguish from the " state of nature " or universal aggression two broad conditions : (i) that which is at present extant, in which international " laws " and contracts are defended, if at all, by individual States and alliances whose private interest and " public-spirit " provide a sufficient motive for humanitarian crusade, and whose power is sufficient to check and punish barbarizers ; and (ii) a constituted federation of States with a federal legislative and executive variously exemplified by the United States of America and the Soviet Union, and, less distinctly from lack of overt political organization, by the British Empire and Commonwealth.

absolutism, not merely with respect to its own citizens beyond the legitimate range of internal pacification (an imperfection that has often enough been criticized), but also with respect to alien States conceived as beyond the range of all pacification save by war or the threat of war. It now behoves the political philosopher to reconsider the application of sound political principles in a world in which isolation is breaking down. World-civilization is fast becoming—nay, has already become—a desperate practical problem and no mere dream. What is needed is a new, ampler, and suitably modified application of the principles governing the establishment and preservation of the national State to the relations of the many States thus established, but so far remaining in an unofficially modified "state of nature" with respect to one another.

Further, we must beware of the Utopian error of supposing that no form of international relation is worth consideration save that of a fully articulated single world-State directly related to individuals, without the mediation of suitably guided and limited national States. Like the national State, the State of States will have a history—is already embarked upon that history. Just as the national State has developed through a condition of pseudocivility, or sectional semi-barbarous sodality among individuals, minor societies, and classes, so the world-State is already *in utero*, and will be born and develop through conditions of increasing sodality among more or less independent States recognizing and sectionally administering in semi-barbaric fashion an imperfectly constituted international "law" with greater or less recognition of common advantage, and greater or less political or sentimental agreement, alliance, or even federation. But though the world-State has "leapt in the womb" in every war for civilization, it will be dead-born, or a mere dream-child, unless we recognize from the start that legislation without sanction and resolute execution, constitutional or independently public-spirited, is absolutely futile in the "crooked ways of Time". For time is an emanation of "original sin", *i.e.*, of the eccentricity that originates it,

and the temporal can be emended only by harnessing its rational, in the work of guiding its irrational, might.*

This principle (though not its metaphysical source) is vigorously enunciated by Collingwood : " ' How can there be a genuine international law,' people say, ' without a properly constituted legislature to enact it, and a properly constituted executive to enforce it? No wonder, lacking these things, the state of international law is pitiable. Let us see to their provision ; then we shall have a proper international law.' This is folly, and wicked folly. It is because people talk like this that the condition of international law is so pitiable. They are ' sabotaging ' international law under the pretence of succouring it. They are like a householder who should have said, some time under the Heptarchy, ' I won't keep the peace in my own house. The police ought to do it.' If people had talked that way every man's house would have been a bear-garden, and there would never have been any police. International law in the modern European world is the customary law of a very ancient, international, non-social community. Its condition resembles the condition of law in the Iceland of the sagas, where men were to be found who knew, and would tell an inquirer, what the law was, but where there was no person or class of persons professionally charged with the business of enforcing it ; where most men for the most part obeyed it . . . ; but where the only way of enforcing it was for men who wanted it obeyed to get together and smash a man notoriously given to breaking it. All these conditions are fulfilled (some more than fulfilled) in the twentieth century with regard to international law except the last. We seem to prefer that international law should not be respected rather than that we should do anything so crude as to smash notorious offenders against it."† This, in the

* " Rational might " is centric and mutual *actio* ; " irrational might " is eccentric or unilateral *conatus*. It is thus that in the *civitas Dei* virtue is the sole power, and in a " state of nature " power is the sole virtue. In our actual state of semi-civility virtue is based upon effective power, and power is at once stabilized and developed by increasing virtue, and pulverized by vice.

† *The New Leviathan, 28, 77–79.*

main, is very well said (though, perhaps, with a somewhat unphilosophical vehemence); for though international "law" cannot be constitutionally defended or administered in the absence of a constituted international order, it is the plain duty of those who recognize its basic humanitarian validity to get together and enforce it, so far as their power extends, using semi-barbarous means congruent with our condition of semi-barbarity in international affairs. Doubtless, an alliance of "law"-abiding national States with an international police-force would be a better, because a more effective, method of procedure; a federation of States with a federal legislature and executive better still, because less barbarous; and a world-State of a unified humanity best of all, because more fully civil; but in the absence of these better means it is of little avail—nay, of positive disavail—to insist on the non-legality of international "law," and to deprecate the practical imposition of theoretical sanctions by a League of Nations upon the resolutely "law"-less, and to rest content with a deliberative assembly from which dissenting States are free, without danger, to withdraw and plot against the peace of the world. For this, however idealistic and "Christian" it may seem to the sentimental, is no more than a return to barbarism, both by the "law"-less and by the would-be "law"-abiding: by the former positively and directly; by the latter privatively and by default.*

(3) *The Analogy of National and International Politics*

I have said that there is something more than an accidental parallelism between the individual "state of nature", the state of customary pseudocivility, and the

* From this standpoint it is clear that pure pacificism in an incompletely organized world is a negative form of barbarism, defensible only as a *pis aller* where humanitarian spirit is hopelessly overridden by powerful barbarizers. Peace is *priceless;* but it is a *gift* only in the *civitas Dei.* In time, from the very nature of time, it must be won and sustained on a basis of might. This is the price of the "original sin" through which time emanates from eternity.

national civic State, on the one hand, and the condition of "total war", of international "law" and partial State-sodality, and of the federation of States (or a world-State) on the other. Let me now briefly indicate some of the *differences* under which this analogy must labour if it is to be judiciously applied to the problems of world-politics.

(*a*) The *number* of States in the world is much smaller than the number of citizens in even the smallest State: about a score in Europe, and I suppose not more than a hundred or two in the whole world. Imagine what is not fully conceivable: a neighbourhood containing so few men as a hundred or two, without civic constitution and executive, living at best under the rule of ancient custom supported by the casual public-spirit of those intent upon the maintenance of this normal order. Such a society could hardly attain the stability of the ancient communities instanced by Collingwood, where the numbers involved were much greater, and the presence of adequate public-spirit more dependable. True, when present it might be much more effective, for barbarizers would be more easily identified and dealt with; but in its more probable absence or weakness the society would rapidly suffer barbarian pulverization. Hence we may judge that the international society of States existing under the loose *aegis* of international "law", supported only by States interested in its maintenance and strong enough to act, is not likely to remain stable for any long period, and the less so because the life of States is rarely so brief as that of individuals, so that the conditions of survival are less urgently present to their rulers. Furthermore, public-spirit is less likely to take possession of States, which have no well-defined and integrated "soul", than of individuals with moral interests based upon psychical integration. The superiority of world-interests to national interest in States is less vigorous even than that of rational "exertions" to passions in the individual soul.

(*b*) Again, among States there is greater *inequality of power* than among the individuals forming a society, and in consequence there is a greater element of chance in the

concurrence of power and civility to ensure the maintenance and increase of civilization. The barbarism of a powerful State may rapidly issue in the destruction of the civil society of States, just as the public-spirited civilism of such a State might ensure civilization over a long period. There is nothing in such a society of States to *ensure* the civilism of the powerful, or the power of the civil—nothing intrinsic to make it even *probable*. A world of numerous small States, all more or less equal in power, would be more likely to settle down under sectionally-enforced international "law" than one of relatively few States widely differing in power, such as, in fact, we have in the modern world. I need not emphazise the danger to civilization of a very powerful barbarian State, though it is well to remember that barbarism is not the unique possession of any one people, but a constant threat in the life of all, and particularly with those States that are at once powerful and patriotically State-conscious. "There, but for the grace of God, goes Richard Baxter"!

(*c*) On the other hand, it must be remembered that the members of a society of individuals, and those of a society of States, differ in that even the barbarian State is composed of individuals *so far civilized* as to constitute a civic State, and thus, on this basis, subject to moral development. The individuals forming a society, though they too may enjoy the subordinate civility of the family, or tribe, or class, in the main possess only the civility that is evoked with their civic relations. International civility can draw upon this source: it is not merely evoked by world-order, but is an *extension* under the influence of *moral* principles already developed under the protection of the internal social order that every civic State provides. I have suggested that this is a distinction of degree rather than of kind (since the State also draws upon the civility of the family, class, or cultural society); but it is of so great a degree as to be in practice equivalent to a difference in kind. Humanitarianism achieves effective development mainly under the stable conditions provided by the civic State, whether internationally barbarous or not.

(*d*) Lastly, the nearer we approach to a world-society the greater is the *natural interdependence* of the members over broad areas of human interest—economic, intellectual, aesthetic, moral, and religious. In a society of individuals very great disparity of economic well-being, intellectual capacity, aesthetic development, moral practice and religious observance are actually, if not morally, tolerable ; but in a world-society of national States this is far from being the case : the poverty and degradation of one State makes for the poverty and degradation of all ; the ignorance and stupidity of one makes for the recrudescence of ignorance and stupidity in the counsels of even the more enlightened who are called upon to lead, and are tempted to do so superciliously or even tyrannically ; the moral crudity of one renders inevitable a pseudomoral reaction on the part of the more highly developed as it harnesses might in the support of right, and is apt to lose the end in the means ; superstition, persecution and priestcraft in the one breeds hatred, intolerance, and a sort of political Manicheeism in the naturally urbane.*

I have attempted to give no exhaustive list of reasons why the application of the analogy of the relations of the citizen and his civic State to the inter-relations of States in the world-order must be judiciously subjected to the modifications dictated by variant conditions. Nor must these be allowed to overcloud the fundamental principle that governs both the wider and the narrower synthesis, *viz.*, the necessary correction of unreason, of individual passion and social mass-hysteria by the imposition of compensatory sanctions in all temporal social organization : the enfranchisement of right by rationally-directed might. For such might, adequate to maintain the peace, is the essential pre-requisite in the temporal dialectic of creation

* I say nothing of the *internal* ills thus developed ; where there is poverty ignorance, crudity—in a word, *vacuity*—men will take sides with gods of their own making—demagogues who promise riches, sophists who pretend to teach, dictators who will storm their way to a new pseudomorality, false prophets who claim to govern eternal necessity by temporal occultisms.

of all moral and cultural development, and is thus itself right as the basic form of temporal pseudocommunity. For the *civitas Dei* in which full community is constitutive is eternal, and in it alone is the intrinsic might of right assured.

(4) *Might and Right*

Moralistic political thinkers and undiscerning interpreters of the letter of Christian teaching have often emphasized the absolute disjunction of conduct that is moral and that which makes use of power, sanction, and violence in the interests of objective ends. In so far as they have also conceived moral conduct as aimed at objective ends, they are involved in a plain contradiction, for evidently such conduct must always involve the use of power, though not perhaps in a form commonly felt as morally objectionable. For them the disjunction is thus not that of right and might, but of two forms of *might*. On the other hand, in so far as morality is conceived as inward, as an attitude of mind and heart that recognizes and feels the community of all things and persons in the eternal *civitas Dei*, and the demand imposed by this upon the temporal moral agent, the disjunction is seen once more to be not that of might and right but of two forms of *right*—the eternal demand and the temporal expression under the conditions of this present life. In the former case they are right in asserting the moral pre-eminence of right over might, but wrong in supposing that no exercize of might is right ; in the latter case they are right in distinguishing morality from the forceful pursuit of objective ends, but wrong in supposing that the perfect community of the eternal *civitas Dei* is here and now realizable under the conditions of temporal life in which individuals are not always men of good will. Non-resistance to evil may be the best available means of overcoming evil with good where there is no administration of civic justice, but it is not *identical* with effective temporal morality over the whole area of the moral life where civic justice is attainable.

This principle is concealed from those who make an absolute distinction of right and might by their habitual enjoyment and tacit acceptance of the conditions established by the civic State, involving the powerful administration of positive law. It is in the civic State alone that there can be satisfactory confidence in the effective applicability of the principles of ideal community and non-resistance, but only because the State is tacitly resisting the efforts of barbarizers. The principle is true even with the pulverulent State, where non-resistance to evil is commended by Jesus of Nazareth as an effective *pis aller.* In a " state of nature " there would be no pacifists—or not for long. On the contrary, in the *civitas Dei* there are none, for right is the only might. In the temporal world, however, effective morality means the right harnessing of might, its moralization on the essential basis of a peace established by corporate might. To accept the extant advantages of established might, of the administration of civic justice, in the civic State, and in the favourable conditions thus ensured to proceed to a moral depreciation of the use of power as such, as the negation of true morality, is a patent contradiction. Yet this is the way of those who would have us avoid the use of might in the ordering of international relations. There is no deed, however violent, that may not be justified in " the crooked ways of Time " ; no refusal of resistance, however pacific, that may not be barbarous. There is little ground for believing that the morality developed under the conditions ensured by the internal power of civic States will be adequate in a world of sovereign States without that further use of might by which alone these can be ordered and their relations civilized. On the contrary, there is plenty of evidence that humanitarianism in the citizens of isolated States is wholly insufficient to ensure the elimination of State-barbarism under the influence of mass-hysteria. But even if it were sufficient, it would constitute no defence of the moral doctrine of pacificism, for humanitarianism develops under the protection of the civic State founded on corporate might, and not in a " state of nature ". The " original sin " from which time emanates entails the necessity under

which morality lies to " make friends of the mammon of unrighteousness " (and so far to justify it, for the might that is necessary to right is itself right), so far as to achieve by might, nay, even by violence, that ordered temporal life in which alone morality can be actualized. In the temporal dialectic of creation right must be made mighty, and might must be justified : the true disjunction is not of right and might, but of civilizing and barbarizing might, or again of futile and effective right.

(5) *The Legality of International " Law " and Contract*

Much has been made by moralistic thinkers and humanitarian optimists of the " wickedness " of the theory that international " law ", treaties, and contracts between sovereign states are valid only so long as it is for the self-interest of States to observe them ; that a treaty no longer beneficial to any participant State ceases thereby to be binding, becomes " a mere scrap of paper ", and may, without treachery or perfidy, be ignored. It is the constantly recurrent complaint of the contributors to the courses of lectures on *The International Crisis*, to which I have referred, that this " German theory " is the root of our twentieth-century discontents and strife. It would have been more reasonable to recognize that in essence the theory is but a statement of the actual condition of non-moral barbarity in which, for the most part, sovereign states have allowed themselves to remain. Treaties have no sanctity, save in so far as they are sanct*ified* by power and resolution to defend them, either as the positive laws of a federal legislature and executive, or as the agreements of States powerful enough and willing to see that they are observed. War, or the threat of war, in our present state of international disorganization is itself the sanctification of treaties when undertaken with a view to ensure their observance or to punish their non-observance. Apart from this ultimate sanction, no treaty has sanctity when it has ceased to subserve the interest of both its parties. War for the sanctity

of a treaty is in reality war for its *sanctification;* it is the sanction that makes of the treaty something more than " a mere scrap of paper". Thus the observance of international " law " and contract is not justified by any mystical or moral quality that it possesses in itself; but its sanctity is a function of the resolution with which its sanctions are willed by a sufficient appointed, or self-elected, power. In a just war for the defence of such international political order as actually exists, or can be achieved, the justified party acts as an unofficial executive, and its justification is the absence of an appointed international executive in presence of an attainable ordered community of international interest.

This principal that international " law " and contract is " a mere scrap of paper " in the absence of official or unofficial sanction has usually been derided or blamed for its lack of moral principle. Much indignation has been expended in the condemnation of philosophers and statesmen who have ventured to defend it. In my view the only effective way of dealing with it is first to recognize its *truth* in relation to the non-moral condition of barbarity in which independent sovereign States allow themselves to remain, and then to proceed to fashion an international order in which it would *not* be true. To rest content with vilifying those who advance it as defining the *status quo* is to dissipate as moral indignation what should be a motive to emendation, instead of canalizing it in the task of correcting our international barbarism. Is it not " clear as the mid-day sun " that the principle that describes a state of barbarism between sovereign States is justified and rendered effective by maintaining that barbarism (either positively by aggression or negatively by appeasement and pacificism), and is invalidated and rendered ineffective by abolishing, or at least modifying, it (either by international constitution or by willingness to sanctify the contract or " law " by war or the resolute threat of war) ? War so justified between sovereign States is the *pis aller* of the strong defender of international order; pacificism is the *pis aller* of its weak, would-be defender, justified only by his weakness. Contrariwise,

war without this justification, and pacificism without this excuse, are forms of barbarism.

As the pseudolegality of international "law" is now dependent upon the powerful self-interest and humane spirit of independent States, so its full legality awaits the institution of a world-federation of States, or a world-State, powerful enough, resolute enough, and united enough to prevent or punish its breach. The sanctity of international order is based upon the might of those who believe in it. To suppose that the humanitarianism that has developed under the *aegis* of national civility constitutes an adequate foundation for world-order is either to suppose what is plainly untrue—that all men, save for a *negligible* minority, are rational, so that no extrinsic might is required to establish human fellowship—or that the moral principles of humanitarianism alone are sufficient to control powerful irrational barbarists—a vain hope that could only be based upon a mistaken theory of divine transcendence. In the temporal order eternal principles must find temporal vicegerents, which are thereby sanctified. The passions of individuals and the mass-hysteria of peoples must be offset by civic might embodied in political order in the State and in the world of States. For always there is the barbarist seeking to trade upon the civility of his associates, to enjoy the advantages of the "state of nature" under the more favourable conditions of an easy-going civility, and becoming more barbarous with each success.*

The British people have often been charged with the sin of hypocrisy—unjustly, as we think: the error to which, it seems to me, we are chiefly prone is sentimental moralism, which in practice is easily mistaken for the more contemptible quality. We are sufficiently attached to moral principles, but we are unwilling to recognize the essential temporal basis upon which the effectiveness of such principles must be based in the world with which we have to do. Conse-

* Criminals are not reformed by success in crime, nor predatory States by appeasement. If the crop-full aggressor becomes more civil under his *pax Romana*, his aggression is not thereby justified. It is self-condemned.

quently, when in practice we discover their ineffectiveness, we are driven to action in opposition to the principles that we praise, saving our face by expressions of moral indignation against those who oppose us. If our thinkers and statesmen could be brought clearly to recognize the *analytic* character of the "German" identification of might and right in a world of absolute States confining themselves to the tasks for which such States exist, *viz.*, national interests, and thus to set their minds and hearts to the creation of conditions under which diversity of national interest would be justly subordinated to the unity of world-civility in a constituted and resolutely administered League, or Federation, or world-State; and if moralistic politicians and pacificists could be brought to a more inward conception of morality, and of the derivative rightness of power rationally directed to rational objective ends, they would, one and all, be better occupied than in deriding and blaming the actions of those who, with greater consistency, and believing in their superior power and worth, act upon the formal truth of the principle that, in the absence of assured international justice, agreement between barbarians is dependent upon mutual advantage, and ceases when the advantage becomes unilateral.* Certainly they would better deserve the names of "thinkers", "statesmen", "moralists", and even "pacificists". We suffer from the results of the "scrap of paper" theory of international "law" and contract only in so far as we remain barbarians, taking insufficient care to defend the principle of international civility; in short, because we do not sufficiently realize its *truth* in the existing barbarity of our international relations; because we blind ourselves to our formal State-barbarity with the blinkers of national civility and individual humanitarianism. We leave world-civilization to the more

† Moral praise may be due to States that, lacking the confidence of power, or (for I will not deny it) sometimes even in spite of their known power, prefer to follow the lead of "very egregious good nature" without much thought of international right. But such moral goodness is politically Utopian, and thus likely to lead to disaster, especially when reliance is placed upon equal good nature in other States with other historical roots.

or less chance-support of self-interest and humane spirit; we divorce the morality that we desiderate from the essential conditions of its temporal actualization, and make of it a *chimaera.* But *nemesis* is at our heels: again and again such political moralism has proved its impotence in the face of barbarizing might, and the would-be humanitarian is forced either to do violence to his ideals by fighting, or to retreat into the *pis aller* of non-resistance, and to hope for the best. True morality in the sphere of politics, whether national or international, is neither to feign that the temporal is the eternal, nor merely to postpone eternal principle to a problematic future; it is to face the actual structure of temporal human society, and to plan its development towards ever greater temporal efficiency. Doubtless, if all men were rational the State would be superfluous, for blind desire and mass-hysteria would no longer prey upon divine civility. The function of political organization is to render temporal life among " all sorts and conditions of men " the pacified field of moral and cultural development: to secure this *even while human nature suffers from temporal imperfection,* by off-setting its passions by the sanctions of law administered by the united power of men of rational good-will; to sustain reason in spite of—nay, even by means of—human passion, by a structure of rationality capable of defending civility in face of opposing barbarism.

True political theory thus requires the investigation of the nature of political union as it must be under the actual and possible temporal conditions of human nature, with its ineradicable tendency to passion and mental perturbation; and to do so not with a view to the estimation or execration of human nature, but in order to understand the nature and principles of social organization and the application of these to " present discontents ". By what arrangements can imperfectly and unequally rational temporal individuals and societies most surely achieve civility? We must not begin with an essentially Utopian moralism foolishly applied to extant *concives* and States and their relations. The means whereby civility may be established and developed and stabilized must be adjusted to the actual and foreseeable

natures of men and States. Just as morality among individuals depends on mutual civility, and this upon the constitutional administration of civic justice in the State (or the public-spirited defence of customary order in the primitive community), so to be content with non-infraction of international " law " and contract in a world where these are not sanctified by powerful defence would be, not morality but insanity. Take away the disposition of powerful self-interested and humane-spirited States to defend international order, and the world lapses into a " state of nature " in which " laws " and contracts are " mere scraps of paper " without sanctity. Non-resistance to evil cannot sanctify them, though it may be the *pis aller* of the wholly undefended victim ; they are sanctified only by the constitutional or public-spirited defence that they receive, by the might with which they are succoured. The broad way to world-civility is founded not upon pacificism or moral idealism or humanitarian sentiment, but upon political constitution resolutely defended by might.*

(6) " *Idealistic* " *and* " *Realistic* ", " *Utopian* " *and* " *Practical* " *Politics*

Political idealists have been wont to take refuge from the actual and its conditions and principles in the ideal : yet, as themselves ineluctably involved in the actual, they have been driven either to pacificism or to a mystical confusion of " The State " with this or that State. Political realists, on

* Christianity, as a way of life, has suffered gravely from the conditions of its historical origin in a pulverulent State lacking the power to administer justice. As a result, maxims well suited to such a condition have been misinterpreted, and raised into prominence as universal rules of conduct, and the well-intentioned efforts of more happily placed interpreters of Christian morality conceived as unfaithful to the prime principles of their religion. Doubtless the best that the undefended " saint " can do is to live as if a member of the eternal *civitas Dei*, and to take his chance of survival—in " sure and certain hope of a resurrection to eternal life " at the end. But where civility is within reach, his duties are quite other, and the application of the principles of the *civitas Dei* to temporal life must have regard to the improved circumstances of temporal life in a well-governed State. For his ability to " overcome evil with good " is much enhanced by the establishment of political order.

the other hand, have been apt to conceive the actual and its conditions and principles as a balance of powers without moral transcendence. The true political philosopher realizes the immanence of the ideal in the actual as at once the basis of all extant community (whose might is thereby and so far justified as right), and as the *nisus* to the emendation of all disruption, and the redemption of its own pulverulent actuality. In the temporal world right is not necessarily mighty, nor is might necessarily rightful; but the might that establishes the field for right is thereby, and so far, justified. The same principle governs also the *moral* life in time: the perfect community of the *civitas Dei* demands temporal expression not merely as co-operation, complaisance, and toleration, but more often as resistance, opposition, and strife for the sake of ideal ends. To eliminate might from the temporal moral life is to expect to find eternal community *sub specie temporis*; to eliminate right by identifying it with temporal might *sans phrase* is to resign all hope of discovering a redemptive process in time. Might is right in so far as it gives might to right: in the political sphere by establishing the field of moral and cultural improvement; in the moral sphere by expressing under the limitations of time the constitutive community of the eternal *civitas Dei*, in which hierarchical perfection is reality. The divorce of right and might is the product of the "original sin" from which time emanates; their appropriate re-integration is the political basis and moral expression of the redemption of the temporal. To exclude either is to deny or foreshorten that redemption.

Speaking broadly, and with no nice attention to the ambiguity of the terms "idealism" and "realism", the idealistic theory of the State makes of it a super-person transcending and realizing the individual citizen, while the realistic theory regards it as an artificial society of singularly real individuals. It is in relation to ethical theory, however, that these opposed doctrines are of interest; for the idealistic theory the State is the repository of morality in relation to its citizens; for the realistic theory the individual citizen is the channel of morality. It follows that moral relation is

confined by the idealists to the State and its citizens, so that idealism in politics is apt to be associated with moral and political nihilism in the international sphere. With the realistic theory, on the contrary, moral relation is not thus limited in principle : the citizen is morally related to all men in the same way as he is related to his *concives*, though the difference of political relation may affect actual conduct as *expressing* moral principle. It is thus that we have the curious spectacle of idealistic philosophers defending Nietzschean ethics in the international sphere, and realistic philosophers expressing sentimental attachment to humanitarian principles.* Intellectual *nemesis* pursues each by reason of an original error or confusion : that of the idealist in (*a*) identifying " The State " with this or that State, and (*b*) applying to this temporal entity without accommodation the principles that belong to the eternal *civitas Dei* ; and that of the realist in conceiving the State as a moral luxury rather than as the original *sine qua non* of effective moral relation. Humanitarian ethics demand world-political order, just as national ethics demand national political order, and family ethics family " political " order, not as *constituting* morality but as its essential foundation under temporally prevalent conditions of ineluctable passion and mass-hysteria.

Now the *fons et origo* of these inconsistencies—of the association of political idealism with moral nihilism, and of political realism with ineffective moral universalism—is the lack of a satisfactory metaphysical theory of the relations of temporal individuals and societies with the eternal *civis Naturae* in the *civitas Dei.* Idealistic politics and humanitarian ethics are direct derivatives *sub specie temporis* of the principles governing the latter, *viz.*, the *civitas Dei* ; realistic politics and Nietzschean ethics are expressions of the principles governing the former, *viz.*, temporal entities, conceived as historical emergents from a " state of nature ". What is required is a theory of the temporal relations of

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* *Cf.* Stace, " The Philosophical Issues Involved in the War " (*Philosophy XVI*, 1941, pp. 242–256).

individuals and States as expressing, *under the essential limitations of temporal appearance*, the eternal community of individuals in the *civitas Dei*. For their relation is not participation but emanation. Only thus can we reach a valid synthesis of a reasonable idealism and an effective realism in both politics and morals. Only thus can the common disjunction between those who hold that socal and political order determined by might is the source of all moral principle (which must therefore be inapplicable beyond the confines of the civic State), and those who hold that ideal moral principle is the sufficient guardian of social and political order without the use of might, be duly subordinated in an effective identity of doctrine. For ethical and political principles are simply identical only in the " state of nature " (where both are evanescent), or in the *civitas Dei* (where both are transcended). In the actual temporal life of men and societies they are distinct, but inter-related and ordinated : political order is the temporal basis of all moral and cultural development ; moral principle the *nisus* that justifies political might as the basis of ethical community.

One of the results of the tendency, on the one hand, for specialist-political thinkers to adopt the doctrine of political idealism, and for " plain men " to rebel against it on grounds of pure morality, and, on the other hand, for moralists to adopt a humanitarian attitude which is rejected by " plain men " on this or that ground of actual historical necessity, is to bring political theory into disrepute, and to conceive practical statescraft as the sphere of commonsense without theory, and the study of political and moral principles as *practically* mischievous. Political theory is judged to be either immoral or impracticable, moral theory as mischievous or Utopian. But the truly " practical " is the embodiment of sound theory : nothing can be truly practical that does not conform to the nature of things, which nature can only be grasped through " fundamental brain-work ". So long as our rulers, relying on " commonsense ", are content with a peddling policy of minimum adjustment in matters that require clear vision and firm

resolution ; so long as the rank and file of citizens, and the spokesmen of political parties, confining themselves to personal, class-, or even national wants, are content to press these upon the government without subordination to the basic needs of civic order and survival ; so long we shall be content to risk everything for the sake of a superstructure of advantage which must collapse upon the first vigorous assault of a well-prepared barbarism. It is not a State but a Fool's Paradise that takes no thought for the defence of world-civilization ; nay, it is a negative barbarism that excuses itself from the duty to " police the world ". Great evils demand well-conceived remedies—that is, a prophylaxis based on a real understanding of the disease, its etiology, and the principles governing national and international health. No true theory is " Utopian " : it is the sole effective way to satisfactory practice. Nothing could be more mischievously Utopian than to place reliance on unenlightened " commonsense ". The true statesman must " conceive men as they are, and not as they would like them to be " ; he must not presuppose the actuality of a morality that is in no more than painful process of development under the protection of extant, sectional, political order. For " such as persuade themselves that the multitude, or men distracted by politics, can ever be induced to live according to the bare dictate of reason, must be dreaming of the golden age of the poets, or of a stage-play."* Nothing but the clearest possible understanding of the nature of political order and its relation to individual moral development, with a resolute will to order practice and institution accordingly, is adequate to meet the needs of a world pulverized by insistent barbarism from one quarter or another. Defeat of the Germans, however necessary, is but an incident in the struggle for civilization.

Nor are the signs of the times notably reassuring when eminent politicians look mainly to the continuance of the excited loyalties of wartime, to the idealisms of youth, to

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* Spinoza, *Tractatus Politicus, i, 1 et 5.*

the intuitions of women, to accomplish what the " common-sense " of " the old men " has so signally failed to do. The sole panacea for " our present discontents " is understanding and resolution. Only in so far as the vague idealisms of youth, and its pseudowisdom of second-hand ideas culled from newspaper, club, debating society and lecture-room, give place with maturity to a genuine wisdom exceeding that of " the old men " (as it is to be *hoped* they will), can youth be the hope of the world. What youth as callow youth can do is sufficiently evident from the record of our modern barbarizers. And the same principles apply to the hopes of those who look for aid to the increased influence of women in world- and national affairs. The same examples are before us. The world will not be better organized, nor will moral improvement be advanced, by enthusiasm, whether of youth, of women, or of war-time loyalty, but by clear thinking and fearless resolution on the part of statesmen capable of leading public opinion and determining public action towards rational ends under rational motives. For the problems that face us are no easy ones susceptible of solution by casual good-nature, by an increased sentimental attachment to religious observances, by the military defeat of this or that notably barbarian State, by changes of sovereignty or constitution in this or that territory; they demand fundamental integrity of intellectual and political action in the statesmen of powerful peoples, and the intelligent and sympathetic co-operation of the mass of those peoples. Though men will do almost anything but think, nothing else can assure the advance of human civilization in the national State and in the world of States. For even a world-State, if it were established, would soon crumble into barbarism, be disrupted by world-civil war, or give place to world-tyranny, if it were not founded on, and sustained by, intelligent legislation and resolute administration. Severe as are " our present discontents ", so that no more than a modest beginning is likely to result in our time by way of cure, it is the more essential that it shall be a *real* beginning, putting first things first in the temporal order, *viz.*, the enfranchizement of right by the adequate

provision of international might, and the cultivation of the will to exert that might in the defence of civility.

And perhaps no more promising opportunity is likely to occur in the life of the present and succeeding generation to make a beginning in the formal institution of a positive civilization of national States such as I have desiderated than the end of the present world-conflict, provided that a freed humanity is so fortunate as to survive the general collapse into the worst excesses of a "state of nature" of what we have been pleased to regard as "world-'civilization'", but which has been little more than an armistice in the mitigated "state of nature" of barbaric States. How far we have learned our lesson I know not; but it is to be hoped that the *nemesis* that has overtaken our sentimental moralism may have done for us what the analysis of seventeenth-century political theorists, faced with similar problems *within* the State, has been powerless to achieve in the international sphere.

I will add one final word of warning, addressed chiefly to those in whom my argument may have produced, or re-inforced, some measure of conviction: the civic State has never been initiated as a democracy, but always as a semi-barbaric order. It has moved with no sure or regular steps towards a condition of more amply distributed civility and consent. It is therefore intrinsically improbable that world-order will be established with the willing consent of all extant States. It may well be that our present condition of the more or less casual sanctification of international "law" by individual and allied self- and public-interested States by war or the threat of war, must next be modified in the direction of a formal constitution with an appointed international executive through the considered agency of such States as have the mind and power, undertaking the clarification and administration of world-order, without waiting for the general consent even of all States that have achieved *national* civility in considerable measure. But no such venture is likely to be permanently effective without some sacrifice of isolated sovereignty where international relations are affected, and certainly not without power

sufficient, and more than sufficient, to enforce their joint will upon dissentients. To seek for too much is often to lose all. The civilizing might that enfranchizes right is thereby justified; the Utopian right that defeats its own actualization is thereby invalidated. *Quantula sapientia mundus regitur*—but by how little more it might really be ruled, guided, and civilized!

Meeting of the Aristotelian Society at the British Medical Association, Tavistock House, Tavistock Square, London, W.C., on Saturday, June 19th, at 2.30 p.m.

VI.—REASON AND LAW.

By G. H. LANGLEY.

THERE are two important senses in which we use the term "law." First it is applied to the uniformities of nature, formulated after scientific inquiry, by which we endeavour to interpret experience ; and secondly to the rules recognised by communities* as binding and imposed by their authorities for the purpose of bringing order into community life. The function of reason as it operates in scientific procedure has frequently received the attention of philosophers, but very few speculative thinkers have examined the characteristic rational functioning employed in legislation and the administration of law. Although this is the case, however, this form of reasoning was present very early in the history of human civilization, and has been a potent influence in building and conserving community life.

I.

The making and the administration of laws is a natural function of community life, and the laws when made derive their authority and support from the members of the communities whose ways of life they regulate and guide. This view has been accepted by most British jurists and statesmen, and it is held by many other legal authorities. There are, we are convinced, strong grounds for its acceptance, and in a large part of this paper we shall try to indicate the essential nature of the connection.

* The term "community" has a wide connotation. It may refer to comparatively small groups of persons such as the family, to persons inhabiting a particular locality, or to larger groups such as tribes or states. The term may also be applied to groups of persons holding a common faith, or otherwise associated for the promotion of some common interest. Thus it may imply many types of human association, but these are similar in that they lead to the recognition—conscious or unconscious—of principles and rules that are necessary for safeguarding the human relations and ways of life by which communal purposes are furthered.

Two main conceptions of the source* of law have been put forward by jurists. There is the view that law is created by a central dominant authority, and consists of codes and general rules by which the authority—secure above society—issues its behests ; and over against this is another view that law is a spontaneous growth, springing naturally from the activity and purpose of individuals as members of communities. Historically, the former view found expression in the conception of law as deriving its authority from the sovereign, and it was frequently sought to strengthen such authority by the doctrine of the sovereign's divine right. It is doubtful whether this view was ever fully accepted by competent authorities, and whenever English jurists were insisting on the power of the ruler to make laws they were accustomed to add that he himself is under law (*sub lege*). Among democratic peoples the view is now practically abandoned and authorities generally agree that all sovereign power is vested in the community. They are convinced that the power which rulers possess is " committed to them by the people in trust," and that the " supremacy of the law " which they administer and enforce " resides in the people."

We assume then that law has its source, not in any formal rules, but in customs which grow up within the common life of communities. It is probable that in primitive communities relations between the members were governed by customary rules, and that these were not the results of conscious reflection but of prolonged experience. While carrying on their natural activities members of such communities would learn how some of these were useful and enjoyable, and were approved by their fellow members ; but that others were unpleasant, or led them into difficulties. They would naturally wish to repeat actions of the former kind and to avoid further experience of actions that were

* The term " source " is used in legal writings with several meanings. It may be used, as here, to refer to the community life from which law springs ; to reason, as the instrument employed in legislation and in arriving at the interpretations of the Courts ; to legal records, as proofs of legislation and as evidence for precedents ; or to divine authority, claimed for ecclesiastical law, and formerly sometimes for the law of the state.

unpleasant or disapproved, and in course of time customs would be formed. There would thus be a recognised ordering of community life apart altogether from the idea of law as a system of formal rules, and the knowledge of primitive communities which we possess confirms the assumption that any such conception is wholly lacking. At the same time customs of primitive communities have a significance vitally connected with what afterwards becomes the general aim of systems of law. For customs are a product of ways in which members of communities are obliged to adjust their relations and conduct so as to be able to live together and to satisfy their essential needs. Customs embody a good for each member of the community in that, by following them, he is able to satisfy his own needs without offending other members; and in addition a good for the community as a whole, since their influence tends to eliminate strife between the members by ensuring that the needs of individuals are gratified in a manner generally approved.*

As communities become larger and community life more complex and organised, law as systems of formal rules sanctioned by some central authority appears. It is clear that this development is promoted by conscious reflection upon problems affecting human relations within the community, and that it is therefore a consequence of rational activity; but at the same time it seems also clear that the rational activity employed is a natural development from more primitive human activity which finds expression in the customs of the community. These have been sanctioned because experience has shown that the modes of behaviour they imply contribute to the general welfare of the community, and conscious reflection enables the members to

* There is a further character of custom which connects it with the rational processes subsequently expressed in law. In the growth of custom there is a gradual discrimination in practice between the general and the particular. There is no evidence of any awareness of this discrimination, but apart from the growth of a discriminating habit successful repetition would not be possible. For actions as performed are unique and so also are the circumstances which condition them. Such actions can never be repeated, but actions of the same general character can take place in other circumstances, and this is what happens through the influence of custom.

pursue this general purpose more effectively and to overcome many difficulties by which it might otherwise be frustrated.

Even if it be admitted, however, that systems of law are a natural development from more primitive forms of community experience expressed in custom, it may be argued that the numerous and elaborate systems of formal legal rules sanctioned by governments in modern times have long ceased to bear any mark of their origin, and that there is now a wide gulf between community or national life and many of the laws which their governing authorities enforce. Many may hold that these are imposed for purposes which the governing authorities deem to be of value but are not directly related to essential needs of a majority of the members ; or again, they may contend that, since the enacting of many existing laws, there has been such fundamental social change that the social conditions which gave rise to these laws no longer exist. Undoubtedly, there is much truth in these assumptions, but it seems to me they do not disprove the vital character of the relation between law and community life. For " law is essentially a human affair, and when it loses touch with human needs it is to that extent a failure."* As soon as a majority of the governed become aware of such loss of touch, law loses its authority and can only be imposed by force against the sanction of the community ; in other words, law loses its rational character and represents a purpose arbitrarily imposed.

In the latter half of the 18th century, Edmund Burke wrote : " Political authority is the authority of a living, growing thing, that is, the political community, living in the present, and looking forward to the future." By this statement, Burke implies the kind of relation between law and community life which is here assumed, and the probable source of which I have tried to explain. The relation is so important that I will endeavour to illustrate the manner in which it has been preserved by reference to various spheres of British legal administration.

* Foundations and Future of International Law—P. H. Winfield.

II.

First, it is clear that what is described as Common Law has its roots deep in the customs of the community. Blackstone, a judge of the King's Bench and Common Pleas and well known for his Commentaries, wrote in the latter half of the 18th century: "This unwritten or Common Law is properly distinguishable into three kinds: (1) General customs; which are the universal rule of the whole kingdom, and form the Common Law in its stricter and more usual significance. (2) Particular customs; which affect only the inhabitants of particular districts. (3) Certain particular laws; which by custom are adapted and used by some particular courts." The particular laws included in the third category are the result of legal interpretations by the Courts, but these interpretations are given after deliberation on legal difficulties arising out of specific human relations or actions, and hence are based in the existing nature of community life. The function of the judge in deciding cases of Common Law is that of considering the evidence for the existence of the custom in question and of elucidating its precise nature. He recognises that he cannot create customs and that he should not deliberately endeavour to change customs which exist. At the same time the act of adjudicating exemplifies an important form of rational activity. Before declaring his judgement as to whether a particular custom under deliberation is legally binding. a judge must examine the evidence for its existence and nature, consider whether it is compatible with the fundamental principles of common law, and further consider whether it is reasonable and in accordance with his trained sense of what is just and fair. Thus it happens that the judge, when passing judgement on cases pertaining to particular customs, may impress his personality upon them, and hence may contribute to the development of these customs as belonging to an organised social order. By his trained and impartial examination he may do much to formulate conceptions of the kind of actions and conduct that should be accepted as in the interest of the

community. But despite the influence of the deliberations of the judge, the essential nature of customs remains objectively determined by actual human needs and the manner in which members of a community must co-operate to satisfy these needs.

Secondly, the growth of the importance given to " precedents " in English law is evidence of the conviction that the principles of justice embodied in formal legal rules must be exemplified in decisions on actual cases, and hence in actual human relations. Importance is attached not so much to the formal rules as such, but to their application. Since the 13th century, it has been recognised that precedents might be followed when cases arose which are not covered by existing laws, or when their rigid application would cause exceptional hardship or might even frustrate the intention of the enacting authority. In course of time this practice led to the acceptance of the view that " it is the duty of a judge to abide by precedent," and it became recognised that each court is bound by decisions of the court above it, and that the ultimate courts of appeal are bound by their own decision. The attitude of legal authorities towards precedent is illuminating for what it reveals in regard to the nature of their reasoning. Among them we find a sense of responsibility when adjudicating particular cases arising from a conviction that the judgement on a specific case must exemplify a general principle or rule which is capable of being applied in future to all similar cases. Thus as early as the 14th century we find a leading Counsel reminding the Court that the judgement about to be given by them would " hereafter be an authority," or again, that by a particular decision the Court would " make law throughout the land." For the same reason British legal authorities have not been prepared to follow precedent blindly, but only to accept its guidance on the assumption that precedents must exemplify general principles. Their attitude towards the matter was expressed by Lord Mansfield when he wrote : " The law of England would be a strange science, if indeed it were decided on precedents only. Precedents serve to illustrate

principles, and to give them a fixed certainty."* In adjudicating cases which become precedents the judge must bring to bear his knowledge of law and his trained sense of right, and it is assumed that the judgement expresses his insight into the operation of the relevant legal principle or principles under certain specified conditions.

The third field of legal administration by which I would illustrate the demand for preserving a vital connection between law and actual human conditions is that of "equity." In English law this connection may have become obscured by the practice of administering cases included under "equity" in a separate Court, or a separate division of the Supreme Court; and it has been said that "Equity has developed a region and artificiality of its own, which has often resulted in the denial rather than the furtherance of natural justice"; but, despite this fact, the history of the concept reveals how it springs from the endeavour to bring the principles of justice into relation with actual human conditions. Equity was originally a principle or set of principles which supplemented the law, in order that justice might be done in individual cases. In Greek thought Plato insisted that any perfectly simple and formal rule can never be applied to a state of things which is the reverse of simple; and Aristotle defined equity as a correction of the law where it is defective owing to its universality. He explained that equity is different from abstract justice, but that it is just and that both equity and justice are good. Further, he insisted that equity is better than abstract justice, since the latter is universal and it is not possible to make an abstract

* In October last the Court of Appeal annulled the decision of a lower Court which had thought itself bound to follow an old case. There had been subsequent legislation which, in the opinion of the Court of Appeal, had made the old case irrelevant; but, in passing judgement, the following comment was made by Lord Justice Scott: "I cannot myself understand the earlier cases dealing with lump-sum bills, which are not enforceable as such on some principle which I find great difficulty in following because it does not seem to me to be wholly consistent with *natural justice*." L. J. Goddard, in confirming the judgement of L. J. Scott, remarked that this judgement seemed to him to establish a reasonable and *just* position.

statement which is absolutely true. For Aristotle equity corrected the over simplicity of abstract rules, and made the necessary supplementation to meet actual cases. The influence of the Greek conception appeared in Roman law, and it was continued in English law. We are told that in the time of Henry I it was the prerogative of the King to defend the poor and the defenceless and to dispense mercy and equity ; and, according to Maitland, it was recognised in the reign of Henry III that the King's Chancellor wielded discretionary powers and used them with equity. The Chancellor was not bound by *rigor juris*. Later " equity " passed to the special cognisance of the Chancellor, who was an ecclesiastic and the keeper of the King's conscience ; and in the 18th century equity, as opposed to common and criminal law, became regarded as a self-contained system of law, ceasing to be regarded as a procedure whereby general legal principles were made applicable to special cases. The subjects included under equity were things of confidence, such as trusteeships, guardianships, partnerships and contracts, as well as questions affecting the ownership and tenure of land. We conclude then that in English law equity first implied a sense of the inadequacy of formal legal rules when rigorously applied to particular cases, and that it eventually became a separate system of law owing to the failure of common law to find solutions to the many new problems that were constantly arising as a result of fundamental changes in our social system. The separate Chancery Court was discontinued on the assumption that the general rules of equity which were enforced in this Court are applicable in every Court.

III.

Turning to the consideration of legislation, it may at first sight appear that in this sphere the relation of law to the life of the community is reversed. The existence of law as legislation is not possible save where the political community is organised under some central authority by which legal rules are formulated and imposed. The functions of these legislative authorities differ fundamentally from

those of purely judicial bodies, in that legislatures are empowered to make and to change laws and not merely to interpret and apply such as are already made. At times it may appear that the central authority is able to impose law at will, and can disregard the view that law should grow from its own strength out of the life of the community. But, if law is to retain its authority, it is necessary to maintain this essential connection with community life; otherwise political authorities will have no assurance that law can be enforced. In modern states the connection is most effectively preserved through the influence of public opinion, and the position cannot be better described than in words by Professor Dicey. "There exists at any given time," he writes, "a body of beliefs and convictions, sentiments, accepted principles, or firmly rooted prejudices, which, taken together, make up the reigning or fundamental opinion; and, as regards at any rate the last three or four centuries, and especially the 19th century, the influence of this dominant current of opinion has, in England, if we look at the matter broadly, determined directly or indirectly the course of legislation." Professor Dicey further points out that the influence is not only in one direction. "Legislation and opinion are so mixed that it is difficult to say whether opinion has done most to produce legislation, or laws to create opinion." As rational and fair legal interpretation contributes to the development of custom and the growth of law, so wise and just legislation, inspired by conditions in the life of a people and moulded by their opinion, must at the same time stimulate and guide the growth of this opinion.

It is not possible in this paper to explain in detail the relation between legislation and community life, but I will illustrate different forms in which this relation is present by reference to three kinds of legislation.

The first of these is "Criminal Law." The fundamental object of Criminal Law is the vindication of wrong done to the community. Under this law certain types of action and conduct are forbidden on pain of punishment, and such

prohibition takes place, not because crimes are regarded as morally wrong, but because they are offences against the community. The procedure of Criminal Law makes explicit the character present in primitive communities, where breaches of customary rules are regarded as acts against the community and the punishment imposed is supported by a majority of its members.

Crimes punished under this law include offences of a public nature against Government or public justice, and offences against persons such as murder or theft. It is presumed that the actions are performed with conscious intention, for no punishment is imposed when it can be proved that the accused persons were not aware of the consequences when their actions were performed. Under such circumstances punishment would not contribute to safeguarding community interests and rights.

I have chosen Criminal Law as the first example of the connection between law and community life because of the indirect character of the connection in this instance. Criminal Law pre-supposes the existence of community members who commit offences against the general welfare, and it represents the purpose of political authorities to deter criminal activities by making the consequences painful. It is clear that so long as members of the community are convinced that their interests are safeguarded by this procedure they will support the law ; but the law is enacted, not directly to promote community welfare but to protect the community from those by which it is menaced.

The second form of the relation between law and community life to which I would refer is that illustrated by Company Law. In this sphere the relation is direct in that the activities which it regulates arise naturally within community life, but the relation assumes its distinctive form because of the special character of the interests from which these activities spring.

Judge Dowdall, in a paper read before the Aristotelian Society in 1938, endeavours to explain the psychological principles leading to the growth of such institutions as

Companies and Associations, where groups of persons co-operate for the realisation of some purpose which they have in common. "It is," he says, "the persistence of men's interests in relation to one another that alone constitutes and gives stability . . . to every human institution." For every such institution has been instituted through the acts of individuals, who have "either dropped into the habit or invented a scheme of co-ordinated action," and who, in course of time, have formed societies by the integration of their individual interests.

Some of these personal interests are fundamental for men as rational beings, and the process of integration is not likely to lead to social conflict. But there are other interests that are restricted to groups of individuals, and when the individuals possessing these integrate them into group interests so as to pursue their purposes more effectively, their co-ordinated activities may bring them into conflict with other groups pursuing similar aims, or with the more general interests of the community.

Among groups that have arisen through the integration of interests of this kind are the companies and associations that have been formed for the general purpose of profit-making. An important characteristic of these is the fact that the interests integrated are limited personal interests. The persons affected may possess many other interests beside those which are integrated in the group interest, and some of these may be much more fundamental. Thus community life is much more comprehensive than the subordinate units represented by these companies and associations. It follows that the unity resulting from the integration of the interests involved is only one of many of the kind included within community life; and since any member may possess many interests, he may be a member of many different groups, for each of his separate interests may be integrated with similar interests possessed by other persons. We have then the picture of a community as a most complex society, including many subordinate units; and of members of the community entering into these subordinate units as responsible persons, yet not with their entire personalities but only as possessing some interest.

Regarding persons as essential elements of community life, we find that these subordinate units may intersect in an indefinite number of ways, the bounds of the intersections being determined by the nature and limits of the interests.

Companies and associations of this kind serve a useful purpose in modern life and are present in every state. In Britain they have a long history, but it was not until the 19th century that the necessary legislation was passed for the purpose of regulating their activities. This lays down the conditions under which members of any company may combine for the purpose of pursuing their special interest, and regulates the rights of individual members within the company as well as the relation of the company to other members of the community. Thus Company Law is designed to further and protect the welfare of the community as a whole. While it permits groups of persons to pursue for the acquisition of gain interests which they have naturally acquired, it regulates the activities of these individuals and groups with a view to preventing them from interfering with the rights and liberties of other members of the community and of becoming a menace to the general good.

The third illustration I have chosen is that of general social legislation, which differs from the above in that it is related to fundamental human needs. At the present time we are fortunate in having in the Beveridge Report a glimpse into such legislation in the making. The proposals for social security in the report are put forward as a basis for future legislation, and indicate principles which should be accepted by Parliament when making the necessary laws. They may be used, therefore, to explicate the kind of relation that should exist between this class of legislation and community life.

It is clear from the Report that the human needs and social and economic conditions which have occasioned the proposals it contains, as well as the economic consequences which might follow from their adoption, have been made the subject of purely scientific inquiry. The inquiry

includes a diagnosis of want, and of the circumstances in which families and individuals lack the means of healthy subsistence, as these have been revealed by social surveys. It includes also an examination of the manner in which a minimum standard of satisfaction for essential human needs can be assured under existing social and economic conditions, as well as an examination of the probable consequences of proposals made on the general economic and social life of the community. The procedure throughout is by objective and impartial examination of facts and conditions which must contribute to the determination of any possible solution of the problem involved, and these facts and conditions are central to the life of the community. The purpose of the inquiry is to ensure that there will be rational and well grounded relation between human and social needs and such legislation as may be enacted to provide against these needs.

But while it is true that the Beveridge proposals are based on the available knowledge of relevant conditions, they are not exclusively an outcome of such knowledge, but further clearly imply a certain speculative outlook regarding the value of the individual citizen and his place in the state. It is assumed that the state is responsible for guaranteeing an equal measure of security to every citizen, and also that, while organising security, it should not stifle incentive or the sense of responsibility. For this reason it is held that the state should guarantee only a minimum of security, so as to leave room for individual initiative and action; and that the assured persons should contribute, so that they might receive the benefits due, not as charity, but as a right. In like manner the proposals assume a definite conception of the general purpose of government. It is laid down that the object of government is " the happiness of the common man," and that group interests—however powerful—should not be allowed to interfere with the achievement of this object. While recognising the contribution which the great insurance companies have made to social security, the report explains the need for transferring life assurance among persons of limited means " from the sphere of commercial undertaking to that of public service " : and

further, that Government, while using to the full experience gathered in the past, should not permit its purpose to be frustrated by sectional interests established in obtaining that experience. Thus, throughout the Report, a general speculative outlook is maintained, and it is assumed that this outlook should guide social legislation. We may or may not agree with the speculative position implied, but the fact that it is assumed does show how such speculative conceptions affect the character of actual legislation.

The Report also suggests the criterion by which the validity and worth of proposals for practical legislation must be judged. It is claimed that " principles underlying any practical reform must be judged by seeing how they work in practice." It is not enough that these principles be theoretically consistent and interpret accurately the experience to which they apply, but since their peculiar function is that of ordering and directing living experience, they must be judged by the success or failure with which they fulfil this function.

We conclude therefore that in the case of this form of legislation the relation with community life is more direct and positive than that which holds for the other forms discussed, since it aims at so ordering this common life that ordinary citizens may have reasonable assurance that their essential needs will be met whatever their changing fortunes may be. This form of legislation is an expression of a government's purpose to promote community welfare.

Some further light may be thrown on our problem by a reference to international law. The existence of international law is evidence of the recognition of the essential inter-dependence, for certain purposes, of sovereign states. Its aim is to regulate their mutual dealings and to prevent war, or in case of failure to regulate the methods of warfare.

Basing opinion on the failure of international law* to

* Some legal authorities divide international law into (1) private and (2) public international law. Private international law is incorporated in state law and can be enforced in the appropriate Courts. Public international law, on the other hand, is the result of international agreements the provisions of which are not embodied in the actual legislation of the countries entering into the agreements, and which cannot therefore be enforced in their Courts.

prevent war in recent years, some would argue that it is of little importance since there is no authority by which it can be enforced. There is a measure of truth in this view, but at the same time it is well to remember that there is a large field of international law which has continued for very long periods to be accepted and to operate, despite the absence of such enforcing authority. To give but one instance, the International Postal Union, inaugurated by agreement between the Great Powers in 1874, has promoted the assimilation of postal customs and regulations in different countries, and has continued in effective operation because of the obvious benefits which these countries derive. These benefits satisfy needs present among the communities represented by the ruling authorities which entered into the agreement.

International law, being wider in its application than state law, is naturally a much later development. The Peace of Westphalia in 1648 is the first evidence of a recognition that states are units in an international society with natural rights and obligations. It is clear also that, since international law is the result of agreement between governments of sovereign states, such law must be the outcome of deliberation and consultation. Because of this it may appear that international law has its source in reason, and the view was very early expressed that "law between nations is a dictate of reason" and that its agreement with reason gives it moral authority.† But, while admitting that consultation must precede the formulation of international law, we find that much of this law, like the law of the state, has its roots in established custom. Maritime law, for example, is a natural outcome of relations which grew up between the merchants of various countries, and the customs which in course of time they came to observe, as they pursued their legitimate purposes over the seas to other lands; and this branch of law derives its support

Strictly these agreements do not exist as law, and the question arises: How can they be enforced? If the argument of this paper be valid, the power to enforce them effectively must depend ultimately upon the growth of an international community sense from which they can derive support and authority.

† Hugo Grotius, 17th century.

from the national needs from which it springs and the necessity for international co-operation which these imply.

It may be interesting to compare international law with company law to which we have referred. Both these types of law are similar in respect of the fact that the formal rules in which they are embodied are the result of interests which people possess in common, but there is an important character in which they differ. In the case of company law the interests that are regulated are included within the more comprehensive community life, and the central authority which imposes the law derives support from the manner in which it defends the welfare of the community as a whole. But this is not the case with international law, at least not at the present stage in the growth of international relations. Here the common interests and activities which law regulates form a kind of bridge between separate communities, and receive what support they obtain from appreciation of the advantages derived from orderly international co-operation, and of the benefits to the communities concerned from the special agreements sanctioned. It is for this reason that international law may from time to time be most violently assailed as a result of the intensification of antagonistic community emotions within the sovereign states that are parties to international agreements.

IV.

Although there is an essential connection between law and community life, there is at the same time danger that it may become inadequately adjusted to the "living, growing thing" from which it derives authority, and we shall refer to two of the ways in which this may take place.

First, the mind of the jurist may be obsessed with respect for the law as purely formal. Legal rules and codes may be regarded as in themselves having authority in view of the political status of the governments which promulgate and recognize them. But laws are often negative, and some competent to form an opinion have held that they are "cooled and stationary deposit, while the will on which they are based is fluid and energetic: possibly still shapeless, but alive and positive." Laws are necessarily an

outcome of experience which is past, and excessive concern for their rigid application may become an obstacle preventing adequate adjustment to conditions that are new. For this reason the external authority of law is frequently contrasted with the inner springs of personal action, and it is urged that the only hope for mankind is in the renewal of these inner springs. It is true that most members of a community have no direct part in the making of the laws to which they are subject, and that frequently therefore law appears to act as a purely external influence. Nevertheless consideration of the source of law has shown that formal externality is not its essential character. On the contrary this character is found in the vital part law plays in the development and ordering of community life. Law has sprung from the need, inherent in persons, of co-operating for general welfare, and it represents something of the rational structure which human relations must have if they are to be fruitful in personal and social good.

The second danger comes from the limitations of law-making bodies. In past times in Britain the people were not represented in the legislature as they are to-day, and the members of governments were likely to be drawn from privileged groups rather than from the community as a whole. It frequently happened therefore that governments were reluctant to move forward with growing social needs, their reluctance being due partly to self-interest and partly also to sheer ignorance and lack of insight, for the bulk of the people were inarticulate and unconscious of their needs. Trades Union legislation in its various stages may be taken as an example of a class of legislation which has been forced upon reluctant governments gradually as the workers have become conscious of their disabilities and rights, and which has not been a consequence of the prevision of governments in power.*

Political authorities may also be subject to another kind of limitation, leading to lack of adjustment between legislation and social change. Such limitation may be due to a certain rigidity in their general conceptions of life.

* At the same time governments may legislate ahead of public opinion : a possibility exemplified by some factory acts, and health acts.

Much British law, for example, is the result of accepting certain doctrines of the Church embodying orthodox Christian belief. The conception of marriage as a sacrament undoubtedly delayed legislation on problems such as divorce, and tended to prevent the adequate adjustment of divorce law to social need. This kind of influence is even more marked in countries where religious belief has been less modified by rational reflection, as is exemplified in Hindu law by the difficulty with which legislation against such social evils as suttee and child-marriage have been passed. Even to-day the Hindu law of inheritance is consequent on the religious belief that the prayer and sacrifice of the eldest son alone is effectual for ensuring the welfare of the father's spirit after death.

We infer therefore that, for reasons such as these, there may be a considerable time-lag between legislation and social change.* At the same time it is obvious that any political authority which persistently ignored the rightful demands of a politically self-conscious people, would eventually lose its power, and that the laws it might enact would not receive the support of its people. "General opinion is (and must remain) the vehicle and origin of legislative omnipotence."

V.

But what can be inferred regarding the nature of the rational activity employed in legislative and judicial procedure?

Primarily the activity is a form of practical reason which is essentially related to community life. It arises naturally out of the more simple ways in which men find it possible to live together in communities, and its proper function is that of ministering to the needs of the community from which it springs. The aims of law are the maintenance of order, and the regulation and guidance of the personal activities of community members so that these do not interfere with the legitimate activities of fellow members.

* The interval of nearly seven centuries between the proposal for legislation to legitimise children born prior to marriage made for the consideration of Parliament by Bishop Grosseteste in 1236, and the passing of a law giving effect to this proposal in 1926, is a striking example of this time-lag.

It lays down conditions on which they are able to co-operate for a common good. Law should therefore derive support from the general conviction and opinion of the community so that its authority can be enforced to suppress the activities of persons who reject the guidance which it provides.

'But while the rational activity in legal procedure is primarily practical, it exemplifies a necessary co-operation between speculative and practical reason. When administering justice the passing of judgements on particular cases must be preceded by investigation of the facts and conditions that are relevant; and the procedure of the judge in making this investigation is akin to that of the scientist, for the examination must be impartially undertaken with a view to ascertaining precisely what has taken place. Throughout the inquiry the aim of the judge is to interpret and not to change. In like manner legislation, if it is to be fruitful, must be based on accurate knowledge of the human, social and other conditions that would be affected by the enactment of proposed laws, and such knowledge can only be obtained by impartial and scientific inquiry. It is true that in legal procedure the cognitive employment of reason is subsidiary to its practical purpose, but the examination of evidence and facts would be useless if the cognitive activity implied were not carried on according to its own rigid standards. Further, the relation between the two modes of rational activity is necessary, for no adjudication can be right and no legislation appropriate if these are based on mistaken knowledge of relevant conditions and facts.

Nevertheless, the legal employment of practical reason is not merely a practical application of its cognitive use. The latter is a necessary instrument for determining the precise nature of the facts and conditions relevant to legal decisions and enactments, but such knowledge does not in itself form the complete ground for the decisions or the legislation. If this were the case legal procedure could not fulfil its primary purpose of regulating human relations and actions. To satisfy this purpose judge and legislator must find answers to questions of an order quite different from those which pertain to purely cognitive inquiry. After impartial examination of the evidence the judge must ask: Are the

facts and conditions disclosed right and in accordance with law? Are they just? Should such conditions continue to exist? Or, should they be changed? And the legislator must find answers to similar questions after he has examined facts relevant to proposed legislation. Where, then, can we find that part of the ground for legal judgements which provides the answer to these questions? Lord Justice Scott, in the comment to which we have referred,* described a previous judgement as not being consistent with "natural justice." What did he imply by the use of this term? For he was obviously referring to a conviction or conception affecting his decision. It seems to me that His Lordship implied that he was influenced by a conviction—similar to that expressed in the Beveridge Report—that individual citizens are of value in themselves and should be treated as sharing equally certain fundamental responsibilities and rights. The conviction gives rise to a general assumption underlying the whole of the law administered. It is moral in character and is reminiscent of Kant, for it entails the demand that any legal rule used to determine a particular case should be such as can be generalised so as to apply to any other member of the community in circumstances that are similar. Connected with this sense of "natural justice," and affecting it very closely, is what may be described as a general outlook on life. Such an outlook is usually assumed to be a consequence of reflection arising from man's desire to find meaning in his experience; but it is frequently not an outcome of knowledge, and it fulfils the practical function of contributing to the regulation and guidance of human relations and social change. From these considerations then we infer that the complete ground of legal judgements and decisions includes both knowledge of relevant conditions and facts and the acceptance of regulative principles and ideals; and that legal procedure exemplifies an integration of two forms of rational activity in the function of ordering and directing living experience. The procedure contributes to change, but the change is related to existing conditions that are explored by pure cognition.

* *See* Note, p. 117.

VII.—KANT'S DISTINCTION BETWEEN CATEGORICAL AND HYPOTHETICAL IMPERATIVES.

By REGINALD JACKSON.

THE sentence is commonly distinguished as indicative, interrogative, imperative, according as its office is to make a statement, ask a question, issue a command. This presupposes that statement, question, command are not forms of sentence. And they are not. For translation is faithful only if it preserves identity of statement, question, command, but is translation only if it does not preserve identity of sentence. The difference is rather between vocally and graphically determinate and indeterminate forms of speech than between forms of speech and of thought. The corresponding forms of thought are judgment, wonder, decision.

These forms of thought correspond to those forms of speech not as their efficient, but as their final, causes, and are forms not of the speaker's, but of the hearer's, thought. The purpose is always the speaker's. But his purpose is to influence the hearer; and he speaks in this way rather than that in order to influence the hearer in this way rather than that. Statements are made not because the speaker judges, questions are asked not because the speaker wonders, commands are issued not because the speaker decides, but in order that the hearer may.

The speaker's purpose is usually more ambitious. The hearer's judgment, wonder, decision is only a means to an end. Not always even a means. We ask for information; and we suppose ourselves more likely to get it where our questions do not produce wonder. Nevertheless, one rather than another form of speech in virtue of its office

subserves one rather than another purpose. Production of judgment, wonder, decision is the office of statement, question, command.

Thus derived, the threefold division of forms of speech is as good as the threefold division of forms of thought. It is no better ; and neither division is good enough. As the one obscures the kinship of judgment and decision, so the other obscures the kinship of statement and command. The difference between statement and command is no greater than that between the questions to which they are the answers. For the difference between judgment and decision is no greater than that between the problems of which they are the solutions. Not only solutions but also problems, not only answers but also questions, are divisible into theoretical and practical.

The moral problem is practical. Its solution is decision, not judgment. The ethical problem, just as much as the logical problem, is theoretical. Judgment and statement are as much, decision and command are as little, the business of the moralist as of the logician. But the logical problem, besides being theoretical, is about theoretical problems ; and judgments, statements, indicatives play in logic, besides the part they play in every, a part they play in no, other science. The ethical problem is about practical problems ; and the part played only in logic by judgments, statements, indicatives is exactly that played in ethics by decisions, commands, imperatives.

The ethical problem is that of the content of moral law. Moral law is practical law (law of conduct, decision). The logical problem, I may be told, is that of the content not of theoretical law (law of judgment), in general, but only of law of inference. But not all judgment is amenable to law. And inference is so only through the intuition it involves. Logic can be restricted to inference only as ethics can be restricted to choice.

Laws are principles of reasoning, and the division of law follows that of reasoning into theoretical and practical. Reasoning is reasoned assent and is theoretical or practical

according as it is inference (reasoned judgment) or choice (reasoned decision).

Inference of *q* from *p* is the judgment *q because p*. You make this judgment only where, besides the judgment *p*, you make the judgment *if p then q*. This is not a premiss. Nor is it a principle. It is a specification of a principle. Only where S and P are constants can you judge *that every S is P because every M is P and every S is M*. But you make this judgment only where, besides the judgment *that if every M is P and every S is M then every S is P*, where S and P are *constants*, you make the judgment *that if every M is P and every S is M then every S is P*, where S and P are *variables*. This is the principle of your inference.

Choice is decision to do an action because the action is of a certain kind. You decide *to do S because S is P* only where, besides the judgment *that S is P*, you make the decision *if S is P to do S*. This is neither ground nor principle, but specification of principle. Only when S as well as P is a constant can you decide *to do S because S is P*. But you make this decision only where, besides the decision *if S is P to do S*, where S as well as P is a constant, you make the decision *if S is P to do S*, where S unlike P is a variable, the decision, in other words, *to do whatever is P*. The principle of your choice is : *Do P**.

Not every principle is a law. All reasoning, not only whether theoretical or practical, but also whether valid or invalid, proceeds on a principle. And invalid just as much as valid reasoning involves assent to the principle on which it proceeds. Profligacy is not incontinence. What principles are to reasoning, laws are to valid reasoning. May we then define law as principle of valid reasoning ?

Rather we must define validity through law, law through necessity, necessity through obligation. To be

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* The kind of action commanded by a practical principle is the predicate of the ground of every choice proceeding on the principle. It is the *motive*, that for the sake of which the agent chooses. It is not the *end*. The subject of the ground of any choice is the action which the choice is the decision to do. To act is to realise something. The *end* of any choice is that which the choice is the decision to realise.

necessary is to oblige assent. That fact is theoretically necessary, to judge which the case is obligatory. That kind of action is practically necessary, to decide to do which is obligatory. Theoretical law states what is theoretically necessary. Practical law commands what is practically necessary.*

Only because preoccupied with judgments, statements, indicatives to the exclusion of decisions, commands, imperatives do logicians divide the former, without dividing the latter, into categorical and hypothetical. The objection that commands are as such *not*, may be matched by the objection that statements† as such *are*, categorical. The defensive definition of "categorical" as contradictory of "hypothetical" is not less open to the novel than to the familiar division. Is it not for the rest obvious that in exactly the same meaning of "hypothetical" some judgments and some decisions are, other judgments and other decisions are not, hypothetical?

Gratification at the news that the novel division is beset by only the same difficulties as the familiar division must be tempered by the recollection that these difficulties are formidable.

We may mean "if" without saying "if." "In universal judgments we never mean 'all.' What we mean is 'any,' and 'whatever,' and 'whenever.' But these involve 'if.'"‡ And Bradley does not shrink from the obvious adjustment: "The universal judgment is thus always hypothetical. It says '*Given* one thing you will *then* have another,' and it says no more." But perhaps we may say "if" without meaning "if." Or perhaps "if" has more meanings than one. Dr. J. N. Keynes,§

* My article on *Practical Reason* (PHILOSOPHY, 1942) misrepresents (pp. 364-5) as principles what are really logical or ethical theories. Instead of distinguishing true and false moral laws, true and false principles of valid choice (p. 351, p. 365 note), I ought to have distinguished principles that are, and principles that are not, laws.

† Cook Wilson, *Statement and Inference*, Vol. I, p. 236.

‡ Bradley, *Principles of Logic*, Book I, Chap. II, §6.

§ *Formal Logic*, §173.

remarking that for " if " can sometimes but not always be substituted " when " or " where," proposes to distinguish only those propositions as hypothetical whose " antecedent and consequent are propositions of independent import, whose meaning will not be impaired if they are considered apart from one another."

Generalising this proposal, we may distinguish principles, whether of theoretical or of practical reasoning, from their specifications as categorical from hypothetical. The formula " If every M is P and every S is M, then every S is P " is, where " S " and " P " are constants, a hypothetical, but, where they are variables, a categorical, indicative. The formula " If S is P, do S " is, where " S " is a constant, a hypothetical, but where " S " is a variable, a categorical, imperative. " Do P " is a categorical imperative.

Much more obviously, either all or no principles are categorical. Still more obviously, the distinction between valid and invalid reasoning, between principles that are and those that are not laws, has nothing to do with the distinction between categorical and hypothetical. Obviously, moreover, by no means every categorical formula is the formula of a principle. And, as not every categorical indicative is the formula of a theoretical principle, so not every categorical imperative is the formula of a practical principle. Unlike " If S is P, do S," where " S " is a constant, " Because S is P, do S " is a categorical imperative. Time to turn to Kant.

How does Kant distinguish imperatives from indicatives ? He does not. At least as unquestionably as by the formula " Handle so," Kant's definition of Imperativ through Nötigung* would be satisfied by such indicatives as " Du bist zu derjenigen Handlung genötigt, verbunden," " Diejenige Handlung ist Ihre Pflicht," " Du sollst so handeln." Kant even declares that all imperatives are durch ein Sollen ausgedrückt. Thus disregarding the difference between preaching and teaching, between moral and ethical answers, Kant is far from insisting that the formula of moral law

* *Grundlegung* (Vorländer), p. 34.

must be imperative as distinguished from indicative. But does Kant insist that the formula of moral law must satisfy even his definition of Imperativ? On the contrary, while moral laws gelten for every rational being*, no imperatives gelten for a holy will†. For, in accordance with his definition of Nötigung, Kant insists that "imperatives are only formulæ to express the relation of objective laws des Wollens überhaupt to the subjective imperfection des Willens of this or that rational being."‡

This conception, at once too wide and too narrow, of the office of the imperative must disappoint those who have not already been warned, by Kant's habitual indulgence in such expressions as "practical knowledge," "practical judgment," "practical use of reason," against a strict interpretation of the adjective "practical." But how, without a strict interpretation of this adjective, are we to interpret the arresting claim that the will is nichts anderes als§ practical reason? The distinction which Kant at once proceeds to draw between infallible and fallible will must anyway be interpreted as between will that is nothing but practical reason and will that is much besides. The undisguised contradiction Kant would no doubt resolve by insisting that only infallible will is nothing but will.|| But perhaps Kant's will that is nothing but practical reason is anything but will.

Why is the will nothing but practical reason? Because reason is required for Ableitung of actions from laws.¶ This could mean: in accordance with laws deciding to act. So it looks promising until we see what it does mean.

As Leibniz misconceives appetition as causality of perceptions,** so Kant misconceives Begehrungsvermögen,

* P. 33.
† P. 35.
‡ Pp. 35-36.
§ P. 34.
|| May we so interpret the distinction (*Metaphysik der Sitten*, pp. 13-14) between Wille and Willkür?
¶ We must not, with Abbott, specify "Ableitung" as "deduction." And Kant's previous sentence plainly forbids us to render "Gesetzen" as "principles."
** *Monadology*, §15.

including will, as causality of Vorstellungen.* Conformity to law, Kant thinks, may be conscious or unconscious. Nature proceeds simply nach Gesetzen; its conformity to law is unconscious. The will proceeds nach der Vorstellung der Gesetze; its conformity to law is conscious. Accordingly, Kant's Ableitung of actions from laws is nothing more than causation of actions by knowledge that they are practically necessary. And reason is required only because such knowledge is reason. Kant's practical reason is active, efficient, productive reason. And his "nur dasjenige zu wählen" means no more than "nur dasjenige hervorzubringen."

Taking such knowledge for practical reason, what does Kant take for the practically necessary? That which practical reason produces. Instead of the necessary to be done, the necessarily done.† And because the practically necessary is so conspicuously far from necessarily done, Kant is driven to admit that actions known as objectively necessary are, though where the will is infallible also subjectively necessary, where the will is fallible, subjectively contingent.

The distinction between infallible and fallible will deserves in ethics only such notice as the distinction between infallible and fallible intellect deserves in logic. Neither the definition nor the content of law, whether theoretical or practical, is to be reached through either distinction. Both distinctions, rightly understood, are between necessity and contingency of obligatory‡ assent. The relation of practical law to infallible will is fundamentally the same as its relation to fallible will and, while fundamentally the same also as the relation of theoretical law to intellect,

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* *Metaphysik der Sitten*, p. 11, p. 14; *Kritik der praktischen Vernunft*, p. 18. This misconception is the root of the conflict between freedom and causality.

† Cf. Moore, *Principia Ethica*, §75.

‡ Without denying that "obligatory" is ordinarily restricted to assent of the fallible, I deny that we can conveniently acquiesce in the restriction. For what word not thus restricted are we to use instead? "Necessary" will not serve. For that is necessary, *assent to which* is obligatory. "Right" will not serve. For all assent *that is not wrong* is right, while only that assent is obligatory *whose omission is wrong*.

whether fallible or infallible, is fundamentally different from the relation of natural law to nature. For natural law* is not practical, but theoretical, and what the agent is to moral law not nature but the natural scientist is to natural law. Now *his* conformity to natural law is just as conscious as that of the agent to moral law. He just as much as the agent proceeds nach der Vorstellung der Gesetze. And fallibility of the agent's decisions is matched by fallibility of the scientist's judgments.

Conceding that commands cannot be purposefully issued to an infallible will, I add that statements cannot be purposefully made to an infallible intellect. God needs to be told neither what to do nor what is the case. But commands are more unmistakably than statements addressed to someone. For, while verbs in the indicative may be in any person, verbs in the imperative, whatever grammarians may say, must be in the second person. Why? That my purpose is to influence your decision accounts only for my speaking *to* you. "Do this" no more means "Decide to do this," than "This is so" means "Judge that this is so." Why, where my purpose is to influence your decision, do I speak not only *to* you but *about* you? Because only your actions are within range of your decisions. It is partly because deliberation, practical wonder, can be about nothing but one's own actions that practical problems have eluded philosophers. If, then, we were driven to defend against Kant the unrestricted formulation of moral laws as imperatives by pleading that the moralist no more than the logician expects God to be among his readers, we should be in danger of ruling beyond the scope of ethics, in company with God's decisions, God's actions. But we are driven to no such defence. The questions asked and answered by the moralist are not practical questions, but theoretical questions about practice. Not preaching, but only teaching, the moralist should be under no suspicion of preaching to God.

* Natural law is not strictly law. For what it states has at best only derivative necessity.

Misconceiving will as causality, what can Kant say of moral obligation? Only assent and dissent are obligatory. Only decision, not action, is morally obligatory. And what office can Kant find for the imperative? You obey a command not by *doing*, but by *deciding to do*, what you are commanded to do. But we say of a horse, even of a watch, though not of the sun, that it ought to make certain movements. And what, if not an imperative, is "Gee up"? In *Metaphysik der Sitten** Kant defines the imperative as "a practical rule through which the in itself contingent action is made necessary." You command a fallible will as you shake a fallible thermometer. Imperatives are moral laws shouted.

How does Kant divide imperatives into categorical and hypothetical? By saying of all imperatives not that they are, but that they command, either hypothetisch or kategorisch.† Only after thus occurring as adverbs do these words occur as adjectives. We shall grasp the adjectival meanings when, but not until, we grasp the adverbial meanings. To command categorically is to represent as categorically practically necessary: to command hypothetically is to represent as hypothetically practically necessary.

Of a necessary hypothetical the protasis is ordinarily said to necessitate the apodosis,‡ and the apodosis is ordinarily said to be necessary to the protasis. Conformably to this usage, the hypothetically, conditionally, relatively necessary may be defined as the apodosis of a (categorically, unconditionally, absolutely) necessary hypothetical. Nobody imagines that what is only hypothetically necessary is necessary. Everybody sees that only that is necessary which is categorically necessary. But linguistic analogy countenances the claim that what is hypothetically necessary would on a hypothesis, that what is conditionally

* P. 24.

† *Grundlegung*, p. 36.

‡ I use the words "protasis" and "apodosis" rather than "antecedent" and "consequent" only in order less harshly to cover the imperative as well as the indicative "then."

necessary would under a condition, be necessary. Nobody denies that what would only on a hypothesis be necessary would even on the hypothesis be only derivatively and not fundamentally necessary. Not everybody sees that only that is categorically, which is fundamentally, necessary, that derivative (conditioned) necessity is not categorical but hypothetical necessity.

As that is *necessary*, assent to which is *obligatory*, so that is *derivatively necessary*, assent to which is *derivatively obligatory*. Derivatively obligatory assent I define as *assent necessary* to obligatory assent.*

We more easily see that, than how, there is such. You cannot (without violating obligation) assent to each without assenting to all. Is the parenthesis required? Different minds can at the same time, the same mind can at different times, assent to each though no mind at any time assents to all. But can the same mind at the same time assent to each without assenting to all? Again, you cannot (without violating obligation) assent to the conjunction of any hypothetical with its protasis without assenting to its apodosis. Is the parenthesis required?

Without resolving these and kindred perplexities, I insist that you can assent to the protasis without assenting to the apodosis of a necessary hypothetical. This you can do, if in no other way, by omission of assent to the hypothetical. But not without violating obligation. Again, if in no other ways than by omission of assent either to the hypothetical or to its protasis, you can omit assent to the apodosis of a necessary hypothetical whose protasis is also necessary. But not without violating obligation.

To the apodosis of a necessary hypothetical, assent on the part of those who assent to the protasis is derivatively obligatory. But, without assent to the hypothetical, they would discharge no obligation by assent to its apodosis. To the apodosis of a necessary hypothetical whose protasis is also necessary, assent on the part of all is derivatively obligatory. But nobody, without assent both to such a

* This necessity is hypothetical theoretical necessity.

hypothetical and to its protasis, would discharge any obligation by assent to its apodosis. The derivatively obligatory is not obligatory. The derivatively necessary is not necessary.

Not everybody sees this. But Kant sees it. And his disconcerting subdivision of the hypothetical imperative into *problematic* and *assertive* is an expression of his insight. The difference being between *if* and *because*, the logical meaning of the adjectives "categorical" and "hypothetical" would be preserved only by ranking Kant's assertive hypothetical imperative, if as an imperative at all, not as a hypothetical but as a categorical imperative. For it differs from Kant's problematic hypothetical imperative as inference differs from hypothetical judgment; and it differs from Kant's categorical imperative not as hypothetical differs from categorical judgment, but as inference differs from intuition. That what the problematic hypothetical imperative represents hypothetically the assertive hypothetical imperative represents categorically is, indeed, just what Kant means by the distinction. But that which they represent, whether hypothetically or categorically, is only derivative necessity. And Kant ranks both as hypothetical imperatives because he sees that only that is categorically, which is fundamentally, necessary.

May Kant then be credited with the following scheme? Representing a kind of action as fundamentally practically necessary, Kant's categorical imperative is the formula of *a principle of choice*. Hypothetically representing either a kind of action or a particular action as derivatively practically necessary, Kant's problematic hypothetical imperative is the formula of *a specification of a principle of choice*. Categorically representing either a kind of action or a particular action as derivatively practically necessary, Kant's assertive hypothetical imperative is the formula of *a choice*. "Do P"; "If S is P, do S"; "Because S is P, do S."

Let Kant again speak for himself. Hypothetical imperatives "represent the practical necessity of a possible

action as means." "The categorical imperative would be that which represented an action as per se . . . objectively necessary."* The arbitrary variation of construction favours a confusion which Kant perhaps escapes. Uniformity of construction could be achieved either by saying that hypothetical imperatives represent an action as necessary as means, where "as" occurs twice, or by saying that categorical imperatives represent the per se necessity of an action, where "as" occurs not even once.

Because the kind of action commanded by a practical principle is the predicate of the ground of every choice proceeding on the principle, the derivatively practically necessary may be distinguished as the per accidens necessary, that whose accidens is necessary, from the fundamentally practically necessary as the per se necessary. The distinction is not between the *necessary as this* and the *necessary as that*, but between the *necessary as* and the *necessary*. For the per se necessary is not necessary as anything. Only confusedly could it be said to be necessary as itself. "S is necessary as P" means "S is P, and P is necessary." "P is necessary as itself" would mean "P is P, and P is necessary."

Even if Kant were guilty of this confusion, the confusion might not be malignant. The *necessary as itself* would be opposable, though not to the whole of the *necessary as*, still to the whole of the *necessary as anything other than itself*. But Kant opposes the *per se necessary* only to the *necessary as means*. Yet his division is plainly proclaimed exhaustive. "*All* imperatives command either hypothetically or categorically." Kant takes for granted that the derivatively practically necessary is always the necessary as means.

Only those who misconceive will as causality, only those who mistake motive for end and end for means, can fail to see that the derivatively practically necessary is at least sometimes not the necessary as means. Suppose the fulfilment of a promise to be a fundamentally practically

* *Grundlegung*, p. 36.

necessary kind of action. Then the payment to his tailor of ten pounds by one who has promised to pay his tailor ten pounds is derivatively practically necessary without being necessary as means. But what I hope to establish is that, so far from always, the derivatively practically necessary is never the necessary as means. The necessary as means, instead of being derivatively *practically*, is derivatively *theoretically* necessary.

The formula " If O is your end, realise O^1," fashionably interpreted as a way of saying that realisation of O^1 is necessary to realisation of O, really is a way of hinting this and is, moreover, frequently used barely for the sake of what it hints. But to interpret the formula as saying what it hints is to miss what it says. It is an imperative, and is more than verbally different from the indicative " Realisation of O^1 is necessary to realisation of O." What the indicative states is a suppressed reason for what the imperative commands. The formula " If every M is P, every S is P " is a way of hinting that every S is M. And this formula too may be used barely for the sake of what it hints. But, as this formula may be less archly used to lead the hearer, if he judges that every M is P, to judge that every S is P, so may the formula " If O is your end, realise O^1 " be used to lead the hearer, if O is his end, to realise O^1. And this straightforward use of either formula is the key to its use as an innuendo. The office of the imperative mood in the formula " If O is your end, realise O^1 " is exactly the same as in the formula " Because realisation of O^1 is necessary to realisation of O, if O is your end realise O^1."

Once satisfied that " *If* O is your end, realise O^1 " differs from " Because realisation of O^1 is necessary to realisation of O, *if* O is your end realise O^1 " only as a less from a more explicit formula, we are easily satisfied that only in the same way does " *Because* O is your end, realise O^1 " differ from " Because realisation of O^1 is necessary to realisation of O and *because* O is your end, realise O^1." But we can hardly glance at the two explicit formulæ

without adding a third and abandoning Kant's twofold in favour of a threefold division of the hypothetical imperative. Kant's assertive is pure. His problematic is mixed*. And he overlooks the pure problematic. He overlooks the formula "*If* realisation of O^1 is necessary to realisation of O and *if* O is your end, realise O^1."

Perhaps I am taking Kant's subdivision of the hypothetical imperative too seriously. Kant does not mean what he says. And even what he does mean is nothing to the purpose The distinction between problematic and assertive is only the premature birth of the distinction between skill and prudence. "The hypothetical imperative that represents the practical necessity of an action as means to the advancement of happiness is assertive."† Why? Simply because happiness *is* actually an end. Not because the hypothetical imperative so *represents* it. The assertive hypothetical seems after all to be in the logical meaning hypothetical, though only by after all not being assertive.

Instead, moreover, of pressing the relevance of what he takes for the fact that happiness is actually an end, Kant becomes preoccupied with the difficulty or impossibility of ascertaining the means to happiness and of giving a bestimmten Begriff of happiness. How to *define* happiness Kant might have learned from Butler. Distinguishing happiness from its objects, Kant might then have sought *determinate* concepts only of the latter. The supposed difference between skill and prudence has anyway nothing to do with the difference between problematic and assertive. The difficulty or impossibility of establishing the means to O affects the formula "*Because* O is your end, realise O^1," only as it affects the formula "*If* O is your end, realise O^1."

Working with a threefold division of imperatives into those of skill, those of prudence, those of morality, Kant claims that the Wollen according to these three kinds of principles is clearly distinguished through the Ungleichheit

* One of two species of mixed, the other being "Because O is your end, if realisation of O^1 is necessary to realisation of O realise O^1."

† *Grundlegung*, p. 37.

der Nötigung des Willens.* That the obligation represented by an imperative of morality is dissimilar to that represented by either an imperative of skill or an imperative of prudence is at least plausible. That the obligation represented by an assertive, is dissimilar to that represented by a problematic, hypothetical is also plausible. That the obligation represented by an imperative of prudence is dissimilar to that represented by an imperative of skill is not even plausible.

Nor is this claim resolutely pressed. The question " how are all these imperatives possible? " identified with the question " wie bloss die Nötigung des Willens . . . gedacht werden könne,"† is indeed asked seriatim concerning imperatives of skill, prudence, morality. But, though Kant has raised the expectation that each of three kinds of imperative will prove to be in a different way possible, that each of three kinds of obligation of the will must be in a different way thought, and though he so far satisfies this expectation as to distinguish hypothetical imperatives as analytic from categorical imperatives as synthetic, his answer to the question concerning imperatives of prudence differs from his answer to the question concerning imperatives of skill only in the hesitation with which he gives it.

That the obligation represented by an assertive, is dissimilar to that represented by a problematic, hypothetical is plausible. Actual, might be plausibly said to be dissimilar to possible, obligation. And the possibility of an imperative might, according as the imperative represents actual or possible necessity as means, be plausibly held a more or less formidable problem. For various values of " O," among others for " happiness," the formula " O is your end " might be held synthetic. To this formula, the formulæ " *Because* O is your end, realise O^1 " and " *If* O is your end, realise O^1 " stand in obviously different relations. The difference, moreover, is obviously relevant.

* *Grundlegung*, p. 38.
† *Grundlegung*, p. 39.

There obviously is a special impediment to the diagnosis of the assertive hypothetical as analytic.

From this obviously relevant difference Kant has turned to an obviously irrelevant difference. The means to O may indeed be more difficult to establish for some than for other values of " O." Let the means to happiness be difficult or impossible, the means to every other end easy, to establish. Imperatives of prudence would then be less reliable than imperatives of skill. But the difference between skill and prudence, taken as Kant takes it independently of the difference between problematic and assertive, has nothing to do with the difference between analytic and synthetic.

Ought Kant, then, as he without hesitation declares imperatives of skill, so without hesitation to declare imperatives of prudence, analytic? He ought, rather, as he hesitates to declare imperatives of prudence, so to hesitate to declare imperatives of skill, analytic. Only indeed by manifest inaccuracy does Kant avoid the admission that imperatives of skill are synthetic. " Dieser Satz ist, was das Wollen betrifft, analytisch."* But that which is only so far as it concerns less than all it concerns analytic is synthetic. What the formula besides the obligation of the will concerns may be beyond the scope of Kant's inquiry. Instead of therefore venturing to declare the formula analytic, we must turn from it to another formula concerning the will in the same way, but concerning nothing besides. Nor is such a formula hard to find. From " *Because* the realisation of O^1 is necessary to the realisation of O, if O is your end realise O^1," we must turn to " *If* the realisation of O^1 is necessary to the realisation of O and if O is your end, realise O^1." From the mixed, we must turn to the pure, problematic. And this is what Kant by implication does when he at last concludes that " the imperative, that commands to him who wills the end the willing of the means, is in both cases analytic."†

* P. 39.
† Pp. 41-42.

But we must turn again. From the pure problematic where " O " and " O^1 " are constants, to the same formula where they are variables. From the various hypothetical imperatives, whether of skill or of prudence, to that of which all are specifications. For obligation, if of the same kind whether represented by an imperative of skill or of prudence, is even more obviously of the same kind whether represented by this or by that pure problematic. Kant bases his distinction between categorical and hypothetical imperatives on that between the per se necessary and the necessary as means. He is bound beside one principle to set another, not specifications of another. Kant is often censured for recognising only one categorical imperative. Is he not to be censured for recognising more than one hypothetical imperative?

Or for recognising any? Only because sunk in its specifications does the principle of adoption of means appear hypothetical. The specifications of every principle are hypothetical. Every principle is categorical. The formula " Realise that whose realisation is necessary to the realisation of your end " is hypothetical neither in the logical nor in the Kantian meaning. The necessary as means is derivatively necessary only because it is the means and the means is fundamentally necessary. Only confusedly could the means be said to be necessary as means. And the confusion would be that of taking the per se necessary to be necessary as itself.

Distinguished from its specifications the principle of adoption of means is categorical. But is it practical or is it theoretical?

Of moralists who take for granted the distinction between *willing the end* and *willing the means* Kant is neither the first nor the last. Something we must take for granted. Let it be the less ambitious distinction between *adoption of end* and *adoption of means*. Adoption of end is not choice of end. Adoption of means is even farther from being choice of means. To adopt O as end is not to *choose* O but to *choose to realise O*. To adopt O^1 as means to O, if it is to choose at all, is again to *choose to realise O*. But

adoption of means rather presupposes than includes adoption of end. To adopt O^1 as means, if it is not to *choose to realise* O^1, is not to choose at all. What then is it?

Choice is only one of two aspects of deliberate decision. The other aspect is *deliberate omission.* Like choice this is divisible into positive and negative. Positive choice is choice, positive deliberate omission is deliberate omission, *to realise.* Negative choice is choice, negative deliberate omission is deliberate omission, *not to realise.* What is my justification for distinguishing either positive deliberate omission from negative choice or negative deliberate omission from positive choice? The difference between choice and deliberate omission is that between proceeding as if you *have*, and proceeding as if you *lack*, a sufficient reason. Now it is one thing to proceed as if you *have* a reason for *not realising* : it is another thing to proceed as if you *lack* a reason for *realising.* The distinction of positive deliberate omission from negative choice is justified. But is negative deliberate omission more than an offering on the altar of formal symmetry?

More than the *distinction* of positive deliberate omission from negative choice is justified. All that is choice is also deliberate omission, positive or negative according as choice is negative or positive. You always lack a *sufficient* reason for the contradictory of that for which you have a sufficient reason. But, where you have no reason either for realising or for not realising, is decision impossible? Nowhere is it easier. Reasons are needed for realising ; none are needed for not realising. You will decide not to realise. And your decision, without being choice not to realise, will be deliberate omission to realise. Positive deliberate omission is *separable* from choice.

But it is as *negative* deliberate omission that I hope to diagnose adoption of means. A reason for realising O would commonly be said either, in the light of discovery that realisation of O^1 is necessary to realisation of O, to become, or, conjoined with the discovery, to yield, a reason for realising O^1. What ought rather to be said is that you proceed in the light of the discovery as if you

have a sufficient reason for realising O only if you proceed as if you lack a sufficient reason for not realising O^1. You in the light of the discovery choose to realise O only if, besides deliberately omitting not to realise O, you deliberately omit not to realise O^1. But you do not choose to realise O^1.

Not all such negative deliberate omission being adoption of means, fulfilment of what further condition differentiates adoption of O^1 as means to O? Not that realisation of O^1 be cause rather than effect of realisation of O. But that *intention* to realise O^1 be necessary to realisation of O^1 and so to realisation of O.

This differentia of adoption of means is the key to that recourse to imperatives which has seduced Kant into isolation of a topic from its context. The office of the imperative is production of decision. But the speaker is usually concerned with decisions only because with intentions, and with intentions only because with actions. You are commanded, if O is your end, to realise O^1. Why? That you may realise O. When? When not only realisation of O^1, but also intention to realise O^1, is necessary to realisation of O. Kant insists that to command adoption of means is to represent the *practical* necessity of an action. But whether to realisation of O be necessary only realisation of O^1 or also intention to realise O^1 the obligation to intend is the same.

How account for such intention*, if instead of choosing to realise O^1 you only deliberately omit not to realise O^1? Lack of sufficient reason for not realising O^1 is only absence of impediment. What positively accounts for your intention to realise O^1?

Your intention to realise O. Discovery that realisation of O^1 is necessary to realisation of O must be connected not, in hope of accounting for *choice* to realise O^1, with *choice* to realise O, but, in hope of accounting for *intention* to realise O^1, with *intention* to realise O. The true con-

* My problem is purely psychological, not psycho-physical. I venture, however, here to express the opinion that the physically efficient mental state is never decision but always intention. That is why the planchette works. It is also why some people can, and why others cannot, ride a horse. For intention is expectation.

nection is between two premises of an inference whose conclusion is intention to realise O^1.

The principle of adoption of means is the principle of nothing but such inference.

Already attracted by O you, without yet choosing, and so forming the intention, to realise O, inquire how you could realise O. You find no way. You are *theoretically* obliged not to intend to realise O, and you cannot choose to realise O without violating this theoretical obligation.

You find that realisation of O^1 is necessary to realisation of O. You are *theoretically* obliged both if you intend to realise O also to intend to realise O^1, and if you intend not to realise O^1 also to intend not to realise O. Only by violating this theoretical obligation can you either choose to realise O without deliberately omitting not to realise O^1 or choose not to realise O^1 without deliberately omitting to realise O. That the alternative of choice to realise O accompanied by deliberate omission not to realise O^1 is, rather than the alternative of choice not to realise O^1 accompanied by deliberate omission to realise O, obligatory, the discovery of the dependence of O on O^1 affords no presumption.

Without inquiring, or without pressing home the inquiry, how you could realise O, you choose to realise O. More cautiously, you decide to realise O if practicable. Still more cautiously, if practicable on easy terms. Even such decision would be generally held to amount to adoption of O as end ; and subsequent inquiry how you could realise O would be reckoned part of pursuit of end. Should you find no way, or should you, upon finding none but a distasteful way, deliberately omit to realise O, you would be held rather to relinquish, than never to have adopted, O as end. But decision to realise O, though in advance of inquiry how you could, may be without reservation. Or, though you inquire, you may fall into error. You may choose to realise O in the mistaken belief that O is independent of O^1. Now reserved decision invites reconsideration. What of unreserved decision ?

How can unreserved decision be neither forthwith executed nor forthwith reconsidered ? Choice at *t* to

realise O at t must be either forthwith executed or forthwith reconsidered. But only because such choice must be executed either forthwith or never. Choice at t to realise O^1 at t^1 must be executed either at t^1 or never; and choice at t simply to realise O may be executed either at t or later. Only where time *of* choice is also time *in* choice must choice be either forthwith executed or forthwith reconsidered. Not where time of choice differs from time in choice. Not where, as frequently, there is no time *in* choice. Choice, moreover, that need be neither forthwith executed nor forthwith reconsidered, need be neither ever executed nor ever reconsidered. All men are mortal, and most are forgetful.

In thus opposing reconsideration, rather than revision, to execution, I have in mind congruent as well as discrepant reconsideration. Where, upon reconsidering an earlier decision, you find yourself of exactly the same mind, deciding later exactly as you decided later, you do not so decide because you so decided earlier. And execution of your later decision is execution only per accidens of your earlier decision, as it may be also of my decision. You strictly execute your earlier decision only where, instead of reconsidering, you treat it as final.

Now congruent cannot rather than discrepant reconsideration be obligatory. There can be no obligation to decide later as you decided earlier. Every decision stands or falls on its own merits. I except neither decisions to reconsider earlier decisions nor decisions to treat earlier decisions as final. You may be well advised against reconsidering in haste or drunk what you have already considered at leisure and sober. But not against reconsidering in the light of discovery what you have already considered only in ignorance.

Either just such mechanical obstinacy must pass for moral stability or the principle of adoption of means must be interpreted as purely theoretical. That the alternative of choice to realise O accompanied by deliberate omission not to realise O^1 is, rather than the alternative of choice not to realise O^1 accompanied by deliberate omission to realise O, obligatory, the discovery of the dependence of O

on O^1, I have insisted, affords no presumption. Neither does the recollection of an earlier choice to realise O unaccompanied by deliberate omission not to realise O^1.

The derivatively practically necessary is never, but Kant thinks it is always, the necessary as means. Altogether missing the derivatively, he is unlikely altogether to hit the fundamentally, practically necessary. But Kant does not derive what he takes for the derivatively, from what he takes for the fundamentally, practically necessary. What is adopted as means must, he thinks, be at least misrepresented as hypothetically necessary. What is adopted as end need not, he thinks, be even misrepresented as categorically necessary. It is because his hypothetical imperative does not presuppose his categorical imperative that Kant has been so widely misinterpreted as introducing his hypothetical imperative for the sole purpose of distinguishing his categorical imperative from it.

Without understanding the will we shall not understand the good will. Choice is decision to do an action because the action is of a certain kind. Decision *to do S because S is P* involves not only decision *to do S if S is P* but also decision *to do P if or because nothing.* The three decisions may be distinguished as assent to an assertive hypothetical imperative, to a problematic hypothetical imperative, to a categorical imperative. The choice is valid, the will is good, if and only if P is fundamentally practically necessary. But even what is misrepresented, is represented, as fundamentally practically necessary. And to insist that only the good will assents to a categorical imperative is to confuse invalid choice with failure to choose.

Why does Kant so insist? In order, perhaps, to escape half the penalty of ethical intellectualism. At least among the ways of representing P as fundamentally practically necessary is the indicative " P is fundamentally practically necessary." And to such indicative representation not the agent but the moralist assents. Recalling Kant's failure to distinguish imperatives as practical from indicatives as theoretical, we need only to suppose him more determined to distinguish the wicked agent from the unsuccessful moralist than to distinguish the good agent from the successful moralist.

We see why Kant must, we do not see yet how Kant can, divorce hypothetical from categorical imperatives. To his doctrine of adoption of means what is the complementary doctrine of adoption of ends?

Subjective, material, relative ends are the ground only of hypothetical imperatives. Only an *objective* end can be the ground of a categorical imperative. Subjective ends auf Triebfedern beruhen; objective ends auf Bewegungsgründe ankommen, and these gelten for every rational being. But, while the Bewegungsgrund is the objective ground des Wollens, the Triebfeder is the subjective ground not des Wollens, but des Begehrens.* The distinction is not between *good will* and *will*, not between *valid choice* and *choice*. Choice, Kant implies, is as such valid. The distinction is between choice and something else.

We have seen how Kant allows his distinction between problematic and assertive to be smothered by his distinction between skill and prudence. We have remarked his insistence that happiness is an end which all rational beings (sofern Imperative auf sie . . . passen) have by a Naturnotwendigkeit.† We must now remark the pertinence of the parenthesis. Competition of subjective with objective end, of Triebfeder with Bewegungsgrund, is just what makes actions known as objectively necessary subjectively only contingent. But how can an objective end compete against a subjective end which the fallible will has by a Naturnotwendigkeit? How can actions known as objectively necessary be subjectively even contingent? Why not impossible? How does fallible will fail infallibly to fail?

Because what Kant here means by "Zweck," though more than an object of *desire*, is less than an object of *decision*. It is what you *tend* to decide to realise. It is what, if you have it by a Naturnotwendigkeit, you *necessarily decide to realise unless you decide not to realise it.* Now Kant seems not to recognise any intrinsically bad subjective end. He certainly recognises none that is an end by a Naturnotwendigkeit. And while there is no question of obligation

* *Grundlegung*, p. 52.
† P. 37.

to decide to realise, there is also no question of *fundamenta* obligation to decide not to realise, a subjective end. But decision not to realise a subjective end may be derivatively obligatory. Discovery of dependence of O on O^1, I have insisted, affords no basis for discrimination between the alternatives to which theoretical obligation confines you. Where O is a subjective end the scales are weighted in its favour. But decision not to realise O^1 may be obligatory. Then decision not to realise O is derivatively obligatory. The categorical imperative, while permitting assent to some hypothetical imperatives, forbids assent to others.*

Kant's one and only categorical imperative formulates a command not to act on a maxim not of a certain kind. Granted that such a command both can and need not be disobeyed, can such a command be obeyed? Decisions whose maxims are not of the kind would be wrong. Decisions whose maxims are of the kind would be right. Only decisions not to act on maxims not of the kind would be obligatory. Are such decisions possible?

Not if by "Maxime" Kant means what he says he means. He distinguishes maxim as subjective principle des Wollens,† subjective principle zu handeln,‡ from practical law as objective principle. But, instead of allowing us to interpret this as an exclusive distinction, Kant himself interprets it as a distinction between Grundsatz, nach welchem das Subjekt handelt and Grundsatz, nach dem es handeln soll.§ And only through confusion does his identification of reine Achtung for practical law with the maxim einem solchen Gesetze . . . Folge zu leisten‖ evade identification of the maxim of every obligatory decision with the law itself.

Thus interpreted, the distinction is worse than idle and can lead only to just such confusion. Begin by calling principles "maxims" if and only if they are adopted,

* What Kant calls "*the* Categorical Imperative," Professor Broad suggests, would be better called "the Supreme Principle of Categorical Imperatives" (*Five Types of Ethical Theory*, p. 120). He rightly says it is "a second-order principle." But it is the supreme principle of *hypothetical* imperatives.

† *Grundlegung*, p. 19, note.

‡ P. 44, note.

‡ *Ibid.*

§ *Ibid.*

‖ P. 19.

and you will end by supposing principles to lose their identity upon being adopted. But Kant does not mean what he says he means. If only what is already adopted is a maxim, a command not to act on a maxim not of a certain kind would always be out of date. Verbs in the imperative mood must be in the second person, but surely not in the past tense.

Does insertion of "subjective" amount then to no more than omission of "objective"? Is "Maxime" a synonym of "Prinzip"? The command later formulated by Kant's one and only categorical imperative is earlier introduced as that which allein dem Willen zum Prinzip dienen soll.* Kant need not mean that only decisions of which it is the principle are right. He need mean no more than that only such decisions are obligatory. But, if "Maxime" is a synonym of "Prinzip," are such decisions possible? Can you adopt a principle of adopting only principles of a certain kind, obey a command to obey only commands of a certain kind, assent to an imperative requiring assent only to imperatives of a certain kind? Why, unless because he sees that you cannot, does Kant introduce the word "Maxime"? If he not only uses but also needs another word than "Prinzip," the word he uses can hardly be a synonym.

We may accept Kant's distinction, we must reject his interpretation of the distinction, between maxim as subjective, and law as objective, principle. This must be reinterpreted as an exclusive distinction. Subjective principles are to subjective ends what objective principles are to objective ends. Accordingly, maxim is to hypothetical imperative what practical law is to categorical imperative. If, instead of "Act only on that maxim," Kant said "Give rein only to that Triebfeder" or "Assent only to that hypothetical imperative," there would be no difficulty in seeing how obligatory decisions could be among right decisions. For assent to the categorical imperative would be assent, though not to *that*, yet to *no other*, hypothetical imperative.

The conscientious agent, before adopting a maxim,

* P. 20.

tests it by the moral law. In order to ascertain what? Not whether its adoption is or is not obligatory, not whether it is or is not that by which it is tested, but whether its adoption is right or wrong,* whether he darf, whether his action would be pflichtmässig or der Pflicht . . . zuwider, unerlaubt, pflichtwidrig.†

In order to ascertain this. By ascertaining what? A maxim might without being a law be that which the purpose of the test is to ascertain whether it is. Adoption of a maxim might without being obligatory be right. But perhaps the test itself is too searching. Perhaps only what is obligatory is right. We are commanded not to act on a maxim not of a certain kind. Not of what kind? Can a maxim without being a law be of the kind?

Told that nothing that is not an allgemeines Gesetz can ever come to be one, I protest that the impediment is prejudicially underestimated. Neither what is not, nor what is, an allgemeines Gesetz can ever come to be one. Nor can such absurdity be either willed or even wished.

Not if by " allgemeines " Kant means *allgemein gültiges*. But may he not, instead of *universally valid*, mean *universally prevalent*? Unless his " allgemeines " is otiose, must he not? For das Gesetz führt den Begriff einer . . . allgemein gültigen Notwendigkeit bei sich.‡ And is this interpretation not fully confirmed by Kant's illustrations? The liar's maxim must destroy itself as soon as zum allgemeinen Gesetze gemacht.§ How? That which by preventing promises from being believed would prevent them from being made is the prevalence of the maxim. Is this interpretation not, moreover, explicitly authorised by Kant's identification of that which allein dem Willen zum Prinzip dienen soll as die allgemeine Gesetzmässigkeit der Handlungen überhaupt?|| No doubt Gesetzmässigkeit belongs rather to actions than to law. But Gesetzmässigkeit of actions is prevalence of law. The coming of a maxim to be an allgemeines Gesetz is the coming of actions to

* Cf. *Metaphysik der Sitten*, pp. 29-30.
† *Grundlegung*, pp. 20, 21, 45, 46.
‡ Pp. 38-39.
§ P. 22.
|| P. 20.

be allgemein gesetzmässig. It is the *universal adoption* of the maxim.

Kant does mean *universally prevalent.* But he means this not instead of, but as well as, *universally valid.* Why, if so, must his " allgemeines " rather than his " Gesetz " be otiose? Need either be intolerably otiose and would the expression " allgemein gültges Gesetz " be at all un-Kantian? If on the other hand Kant means no more than *universally prevalent,* why does he introduce " Gesetz " ? Why not " eine allgemeine Maxime," or, better, simply " allgemein " ? Even if a maxim cannot without being a law qualify under the test, even if all is obligatory that is right, Kant can hardly be directing us to ascertain whether the adoption of a maxim would be right by ascertaining whether it would be obligatory, much less by ascertaining both this and something else.

To the question whether by " allgemeines " Kant means *universally valid* or *universally prevalent* I answer : Both. How can he? Because by " Gesetz " he means *psychical uniformity.* Because of *natural law* universal validity is nothing but universal prevalence. And exactly this is the point of Kant's authorisation of the substitution for " Gesetz " of " Naturgesetz." *

If this is Kant's meaning, the universal adoption of *any* rule is its coming to be an allgemeines Gesetz. But the rightness of the individual adoption of a maxim is to be ascertained by ascertaining not barely whether the maxim is *able,* but whether it is *fit,* to be universally adopted. Fit in what way? A way, as I hope to show, in which every rule whose formula is a hypothetical imperative must, but in which no rule whose formula is a categorical imperative can, be either fit or unfit. Certainly a way in which fitness for individual adoption is compatible with unfitness for universal adoption. Certainly not morally fit. The fitness for universal adoption that is to be the test of moral fitness for individual adoption must itself be of another kind.

* P. 44. In the immediately following illustrations, pp. 45-7, Kant's regular preference of " Naturgesetz " makes for lucidity. In the earlier illustration, p. 21, the expression " als ein allgemeines Gesetz . . . gelten " remains obscure until we see our way to identification of validity with prevalence.

This other than moral fitness may be distinguished as feasibility. It is susceptibility, not of adoption, nor even of bare execution, but of fruitful execution. Difficulty in realising O by realising O^1, including without being exhausted by difficulty in realising O^1, may make the rule *If O is your end, realise* O^1 unfit even for individual adoption. But the best, because the purest, illustrations of morally unfit maxims are maxims unfit in only such ways as morally unfit maxims must be. Other than morally, Kant thinks, they must be unfit for universal, but need not be unfit for individual, adoption. Kant, to be sure, plainly hints that to extricate yourself from a difficulty by lying is not even klüglich. But he plainly dismisses this possible unfitness for individual adoption as neither moral unfitness nor the test thereof.*

Though presumed morally indifferent, the end is not presumed morally irrelevant. There may be means which no end would justify. Other means, some but not all ends would justify. Lying, according to Kant an example of the former, is according to many moralists and many plain men an example of the latter. And to make no distinction, if not of guilt and innocence, at least of degree of guilt, between lying aus Selbstliebe and aus Menschenliebe is to embrace a considerable paradox. More disturbing is Kant's advancement of " in allen Erklärungen wahrhaft (ehrlich) zu sein " as an " unbedingt gebietendes . . . Vernunftgebot."† Kant, I suspect, is deterred from advancing this as derivatively practically necessary only by his identification of the derivatively practically necessary with the necessary as means. The consistent claim would be that the one and only moral law disqualifies the maxim *If O is your end, lie* for all values of O. In the *Grundlegung*, however, only to extricate yourself from a difficulty by lying is in question. And for confining his illustration to such lying Kant has good reason. He must not include among his illustrations maxims whose moral unfitness is controversial.

Only by thus insisting on the moral relevance, while

* *Grundlegung*, p. 21.
† *Über ein vermeintes Recht, aus Menschenliebe zu lügen.*

conceding the moral indifference, of the end, only by thus more than verbally insisting that maxims are to be formulated as hypothetical imperatives, can we grasp the other than moral fitness for universal adoption that is to be the test of moral fitness for individual adoption. Difficulty in realising O by realising O^1 may make the rule *If O is your end, realise* O^1 unfit even for individual adoption. Not morally unfit but unfeasible, whether what is difficult be to realise O^1 or, though you realise O^1, to realise O. Only the susceptible of execution is susceptible of fruitful execution. But feasibility is susceptibility of fruitful execution. Now a rule may be susceptible of fruitful execution by some only so long as not adopted by others. Again we may distinguish impediment to realisation of O^1 from impediment to sequence of realisation of O upon realisation of O^1. But we must distinguish these only as cases of impediment to realisation of O by realisation of O^1.

Rendering Kant's categorical imperative by the formula " So act, that the rule on which thou actest would admit of being adopted as a law by all rational beings," Mill protests :* " But when he begins to deduce from this precept any of the actual duties of morality, he fails, almost grotesquely, to show that there would be any contradiction, any logical (not to say physical) impossibility, in the adoption by all rational beings of the most outrageously immoral rules of conduct. All he shows is that the *consequences* of their universal adoption would be such as no one would choose to incur." That Kant shows no more of any is not even plausible. But that, showing more of some, he neither shows nor even thinks he shows more of others is a criticism which Kant invites by the very passage designed to forestall it. For he distinguishes actions whose maxim " ohne Widerspruch nicht einmal als allgemeines Naturgesetz gedacht werden kann ; weit gefehlt, dass man noch wollen könne, es sollte ein solches werden " from actions in which this " innere Unmöglichkeit " is not to be found " aber es ist doch unmöglich zu wollen, dass ihre Maxime zur Allgemeinheit eines Naturgesetzes erhoben werde."† Is not the inner impossibility, the contradiction

* *Utilitarianism*, Chap. I.
† *Grundlegung*, pp. 47-48.

in thinking the universal adoption of the maxim, what Kant sets out to establish? Is not the impossibility only of willing the universal adoption a δεύτερος πλοῦς? And is not the latter impossibility reducible to what Mill says?

No and no and no. Kant specifies the impossibility of willing by adding "weil ein solcher Wille sich selbst widersprechen würde."* And he at once proceeds to claim that all duties "durch diese Beispiele in ihrer Abhängigkeit von dem einigen Prinzip vollständig aufgestellt werden." What, then, is wrong with the passage? It gives the distinction undue prominence. It misrepresents impossibility of universal *execution* as impossibility of universal *adoption.* It disastrously contrasts this as contradiction in *thinking* with contradiction in *willing.* The only relevant contradiction is in willing.† Impossibility of *execution* is relevant only as a case of impossibility of *fruitful execution.* Nowhere is Kant's claim that the consequences "would be such as no one would choose to incur." Everywhere Kant's claim is that the consequences would not be such as adoption of the maxim is designed to achieve, that the end, instead of being advanced, would be retarded.

"Mill's criticism on Kant's formula is," Abbott says,‡ "that when we speak of a maxim being 'fit' to be a universal law, it is obvious that some test of fitness is required, and that Kant, in fact, tests the maxims by their consequences; as if the whole gist of Kant's argument were not that the only test of this fitness is logical possibility; or as if this were not the one thing expressed in his formula." Offered as a correction of Mill, this is exactly Mill's mistake. But, thus unconsciously agreeing with Mill about what Kant *sets out to do,* Abbott disagrees with Mill in thinking that this is also what Kant *does,* that Kant tests maxims only "by the logical consequences, not the practical." Why, if so, does Kant say not that the *intellect,* but that the *will,* would contradict itself? "Take the case of a promise. In Kant's view, the argument against

* Not the will, but the intellect, not the decision, but the intention, would contradict itself. But Kant mistakes the principle of adoption of means for an *analytic practical* principle.

† Cf. Ewing, *Philosophy* (1938), p. 44.

‡ *Kant's Theory of Ethics,* p. liii.

the law permitting unfaithfulness is not that it would be attended with consequences injurious to society, but that it would annihilate all promises (the present included), and therefore annihilate itself. Of inconvenience to society not a word is said or implied." Kant's words are : " würde das Versprechen und den Zweck, den man damit haben mag, selbst unmöglich machen."* Because universal execution would be impossible, universal fruitful execution would be impossible.†

" Take the case of a promise." But take also those cases concerning which Mill's protest is plausible. Of these Abbott can make nothing. " There is nothing contradictory in willing that none should help others."‡ But perhaps there is something contradictory, though not in advocating individual selfishness as means to individual happiness, yet in advocating universal selfishness as means to universal happiness.

Not the difference between " vollkommene und unvollkommene Pflichten," but that between " Pflichten gegen und selbst und gegen andere Menschen," determines Kant's comparative success and failure. He succeeds at least as well with his fourth illustration as with his second. He fails at least as badly with his first illustration as with his third. Where the duties in question are gegen uns selbst Kant is unable to exhibit the maxims in question as unfit for universal adoption in any way in which they are fit for individual adoption.

Success and failure in what? Even more pernicious

* *Grundlegung*, p. 46.

† Thus interpreted, Kant's test would not, as Hegel (*Werke*, 1845, Vol. I, p. 347), followed by Bradley (*Ethical Studies*, 2nd ed., p. 155) and Rashdall (*Theory of Good and Evil*, 2nd ed., Vol. I, p. 115), supposes, disqualify the maxim " den Armen zu helfen." For the disappearance of poverty, unlike the disappearance of credulity, is the very consequence which the adoption of the maxim is designed to achieve. Hegel's challenge, " Dass es aber kein Depositum gäbe, welcher Widerspruch läge darin? " (*Ib.*, p. 343), ignores, though he has just quoted it, Kant's formulation of the maxim under examination, namely, " mein Vermögen durch alle sichere Mittel zu vergrössern " (*Kritik der praktischen Vernunft*, p. 35). Cf. Ewing, *Philosophy* (1938), pp. 44-45.

‡ Cf. Rashdall, *Theory of Good and Evil*, Vol I, pp. 113-14 ; Field, *Moral Theory*, p. 44 ; Kant's *First Moral Principle* (*Mind*, 1932), p. 25 ; Broad, *Five Types of Ethical Theory*, pp. 130-131. Consistently with his interpretation of Kant's categorical imperative, Professor Broad thinks " we ought to be testing the claims of Egoism to be a *categorical* imperative."

than the banausic prejudice that only useful knowledge can be worth having is the pragmatist assumption that only that can be knowledge which is useful. In speaking of the moral law as a test (Kant himself speaks of it as der Kanon der moralischen Beurteilung*), we are not to imagine that Kant either is or ought to be testing doubtful maxims by undoubted moral law. This no doubt is what the agent in Kant's illustrations is doing. What Kant is doing is to test his doctrine of the content of moral law by what he takes for undoubted maxims.

For those who share Kant's wholesome respect for ordinary moral convictions this test in reverse is not circular. But among decisions undoubtedly wrong and among decisions undoubtedly right may be decisions whose disobedience to Kant's moral law is doubtful. By such decisions Kant's doctrine is in no degree discredited, but is simply not tested. If, however, among undoubtedly wrong decisions are any decisions undoubtedly not disobedient, Kant's one and only moral law is not the *only* moral law. And if among undoubtedly right decisions are any decisions undoubtedly disobedient, Kant's one and only moral law is not even *among* moral laws.†

Kant consents thus to test, only after trying by independent argument to establish, his doctrine of the content of moral law. For the prevalent misinterpretation of his doctrine his argument is largely responsible.

The argument of the First Section is dominated and vitiated by the phrase "Handlung aus Pflicht." That nothing but a good will can be ohne Einschränkung‡ held good is irrelevant, and Kant does not even try to use it. What he does try to use is only the complementary affirmation that a good will can be thus held good.§ Not even this can serve his purpose. The goodness of a good will is easily seen not to depend on whether the agent succeeds

* *Grundlegung*, p. 47.

† Yet Abbott says that his remarks "only show that the formula is not a mechanical rule of conduct; they do not disprove its scientific value" (*Kant's Theory of Ethics*, p. li).

‡ P. 10. Not all that is good as distinguished from useful can be thus held good. Kant does not deny that happiness is good as distinguished from useful. But he holds that happiness is good only where bestowed on those whose will is good. Cf. Ewing, *Philosophy*, (1938), p. 41.

§ P. 20.

in realising his end. It is less easily seen not to depend on what the agent's end is. Kant's premiss cannot establish, because it does not imply, the latter. And it cannot establish the former because only through the former can it be established.

Though Kant fails to establish it, let us concede his claim that the moral worth of an action depends solely on the Prinzip des Wollens.* But he claims much more. He claims that only Handlung aus Pflicht has moral worth and that action is such only where the will is determined durch das formelle Prinzip des Wollens überhaupt.

Let the same action be both P and P^1 ; and let P, but not P^1, be fundamentally practically necessary. Then, though the agent decides to do the action not because it is P but only because it is P^1, his action may simply because it is P be said to be pflichtmässig. The action of an agent who decides to do the action because it is P we may be driven to distinguish as Handlung aus Pflicht. The expression is dangerously condensed. What is really Handlung aus P is said, because P is a Pflicht, to be Handlung aus Pflicht. And the phrase invites interpretation† as applicable only where an agent decides to do the action neither because it is P^1 nor because it is P but because it is Pflicht.

The claim that only Handlung aus Pflicht has moral worth yields, when cautiously interpreted, no conclusion about the content of moral law. Incautiously interpreted, it yields the absurd conclusion that the one and only moral law is : *Do your duty.* Is this what Kant means by " das formelle Prinzip des Wollens überhaupt " ?

As the logician distinguishes form and matter of inference, so may the moralist distinguish form and matter of decision. The distinction being between what is relevant and what is irrelevant to validity, the form of a decision is the motive. Where the principle is *Do P*, the form is *P*. But Kant distinguishes form and matter not only des Willens‡ and des Begehrungsvermögens,§ but also eines

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* Pp. 17-18.
† Cf. Bradley, *Ethical Studies*, IV.
‡ *Metaphysik der Sitten*, p. 213.
§ *Kritik der praktischen Vernunft*, p. 26.

praktischen Prinzips.* Since practical principles differ only as forms of decision differ, that which is relevant to validity appears only as the matter of a principle, while its form is nothing more than validity in general. Yet Kant insists that only such principles can be laws as nicht der Materie, sondern bloss der Form nach den Bestimmungsgrund des Willens enthalten. He accordingly proceeds to identify the distinction between form and matter of principles with a distinction between formal and material principles.†

The argument of the Second Section‡ is disingenuously elaborate. Kant may remind us that an imperative represents action as practically necessary in relation not to will in general but only to fallible will. We may remind Kant that an imperative represents action as practically necessary simply by commanding. Ausser dem Gesetze, accordingly, the imperative enthält nothing. Kant's conclusion that the imperative properly represents as necessary only the Gemässheit of the maxim of the Handlung to a Gesetz überhaupt would be more ingenuously formulated : A categorical imperative commands only what a practical Gesetz überhaupt contains. And Kant's argument, so far as the difference between categorical imperative and moral law is in question, would be more ingenuously formulated : Since moral law überhaupt is the one and only moral law, categorical imperative überhaupt is the one and only categorical imperative.

Is anything more in question? That moral law überhaupt is the one and only moral law is a premiss. Is it also a conclusion? That so bleibt nichts als die Allgemeinheit eines Gesetzes überhaupt übrig, that the law as distinguished from the imperative contains nothing more, Kant not only claims but argues. And of this argument the sole premiss is " das Gesetz aber keine Bedingung enthält, auf die es eingeschränkt war." What does this mean? And why does Kant think it evident?

The context in which Kant earlier§ distinguishes the

* *Ib.*, p, 34.
† *Ib.*, p. 52.
‡ *Grundlegung*, pp. 43–44.
§ P. 39.

categorical imperative as " durch keine Bedingung eingeschränkt " confirms the obvious interpretation of this phrase as saying in more words only what " unbedingt " says in one and, accordingly, as a mere synonym of " categorical." The necessity of S represented by " If (or because) S is P, do S " may be said to gelten only under the Bedingung that S is P. The necessity of P represented by " Do P " may be contrasted as unbedingt, allgemein gültig.*

However unbedingt, however allgemein gültig, necessity of P is necessity only of P ; and, though it could hardly be said to be *durch*, it might easily be said to be *auf*, P eingeschränkt. Then, while every law must be *durch*, no law can be *auf*, keine Bedingung eingeschränkt. For, while every law must represent something as *categorically* necessary, no law can do this without distinguishing *otherwise than through its categorical necessity* that whose categorical necessity is represented. Only necessity überhaupt, law überhaupt, is *auf* keine Bedingung eingeschränkt.

If Kant's premiss means that the law contains no more than necessity überhaupt, why does Kant think it evident ? Why does Kant not think it evidently absurd ? Because, confusing durch with auf, he confuses categorical necessity with necessity überhaupt. The effect is exactly that of incautious interpretation of the phrase " Handlung aus Pflicht " and exactly that of incautious application of the distinction between form and matter.

These arguments are fairly interpreted as attempts to establish the absurd claim that no moral law is distinguishable from moral law überhaupt.† And this is that doctrine of the content, or rather lack of content, of moral law which has so generally passed for Kant's. But why is Kant anxious to establish this doctrine and how does he fail to see its absurdity ? My answer is that he confuses it with the very different doctrine that the one and only moral law permits individual adoption of only such maxims as are feasible for universal adoption and the one and only

* That imperative must be ohne Einschränkung held gültig, assent to which is ohne Einschränkung held gut.

† In *Metaphysik der Sitten*, p. 28, Kant even speaks of his one and only categorical imperative as that which überhaupt nur aussagt, was Verbindlichkeit sei.

categorical imperative permits assent to only such hypothetical imperatives as are formulæ of such maxims.

Since law is as such universally valid, we easily bridge the gap between " Gesetz überhaupt " and " die Allgemeinheit eines Gesetzes überhaupt.* But, whatever Kant's elimination may have failed to drive out, how has " die allgemeine Gesetzmässigkeit der Handlungen überhaupt "† ever crept in? Allgemeine Gesetzmässigkeit of nature really is allegemeine Gültigkeit of natural law. And Kant supposes the agent to be to moral law not what the scientist but what nature is to natural law.

* *Grundlegung*, p. 44.
† P. 20.

Joint Meeting of the Institute of Physics, the Mind Association, and the Aristotelian Society, on May 19th, 1943, at 6 p.m., at the Royal Institution, Albemarle Street, W.1

VIII.—SYMPOSIUM: THE NEW PHYSICS AND METAPHYSICAL MATERIALISM.

By L. SUSAN STEBBING, J. H. JEANS, R. B. BRAITHWAITE, AND E. T. WHITTAKER.

I.—*By* L. SUSAN STEBBING.

THE belief that developments in physics during this century have an important, and even a decisive bearing, upon the philosophical doctrines of materialism and idealism seems to be firmly held by some philosophers and some physicists. Some of those who understand these developments (and some who do not) have claimed that recent physical theories show that materialism is false and that some form of idealism must be accepted as metaphysically true. This topic, or an offshoot from it, has been twice discussed by the *Aristotelian Society* in symposia, in each of which I took part.* These discussions were, however, carried on by philosophers. The present discussion is one between philosophers and physicists, and we may hope that it will do something to make a little clearer what exactly is the bearing of the "new physics" upon metaphysical materialism. Since the date of the earlier discussions important books have been published by a number of physicists which merit discussion in detail in connexion with our present topic. Such detailed discussion cannot be undertaken on this occasion, for detailed discussion takes space in writing and time in speaking more considerable in extent than is now available.

* See Aristotelian Society: Supplementary Volumes VIII and IX; the symposia are respectively entitled: "Materialism in the Light of Modern Scientific Thought," and "Realism and Modern Physics."

I regret that I shall not be able to say anything that is at all new. In a book published in 1937* I did my best to examine the claims made by some physicists that the philosophical implications of contemporary physics were favourable to some form of philosophical idealism, and thus contradictory of metaphysical materialism — a contention that caused no small alarm to Lenin and other dialectical materialists. With the more recent contention of Sir Arthur Eddington—that " the whole system of fundamental hypotheses [of physics] can be replaced by epistemological principles ",† I shall not deal in this paper. I am told that my present task is to draw the fire of Sir James Jeans, whom we are now fortunate enough to have an opportunity of hearing in discussion ; I believe he does not subscribe to Eddington's remarkable theory. I shall mainly consider Sir James Jeans's own views, especially as put forward in his recent book, *Physics and Philosophy.*

There are certain preliminary considerations with which I should like to deal. It is important at the outset to get as clear as we can what exactly we are to understand by " metaphysical materialism "—a term which occurs in the title of our discussion. The word " materialism " is undoubtedly used in different, even if in allied, senses to denote doctrines which may not have much in common, and which, consequently, will not be established, or refuted, by the same arguments. As the prefix " metaphysical " shows, we are to distinguish the doctrine to be discussed from what is sometimes called " ethical materialism." So far as I have been able to discover an ethical materialist is hardly to be distinguished from an egoistic hedonist. Anyone who makes a parade of being preoccupied with the pleasures of the senses, with comfort, or with what is called " worldly success," and with the adjuncts of these—wealth and power

* See *Philosophy and the Physicists.*

† *The Philosophy of Physical Science*, p. 56. He adds : " Or, to put it equivalently, all the laws of nature that are usually classed as fundamental can be foreseen wholly from epistemological considerations. They correspond to *a priori* knowledge, and are therefore *wholly* subjective."

—is an ethical materialist. The term derives from the usage of the word "material" in contrary opposition to "spiritual." Such a doctrine has no logical connexion at all with materialism as a metaphysical theory. It is, however, not very difficult to understand how they have come to be psychologically associated. I believe that it is a psychological connexion of this kind that accounts for the very considerable amount of interest aroused by the "new physics" in the minds of unspeculative people who are ignorant alike of physics and philosophy. Developments in physical theories which they do not understand have aroused hopes, seldom clearly formulated, but hitherto vaguely supposed to be threatened by the advance of the sciences. This attitude of mind can hardly be better described than by quoting a passage from Sir James Jeans :

"The classical physics seemed to bolt and bar the door leading to any sort of freedom of the will ; the new physics hardly does this : it almost seems to suggest that the door may be unlocked—if only we could find the handle. The old physics showed us a universe which looked more like a prison than a dwelling-place. The new physics shows us a universe which looks as though it might conceivably form a suitable dwelling-place for free men, and not a mere shelter for brutes—a home in which it may at least be possible for us to mould events to our desires and live lives of endeavour and achievement."*

It is important for us to ask in what sense exactly did the old physics show us a prison-like universe, and how is it that the new physics can show us a universe "which looks as though it might conceivably form a suitable dwelling-place for free men, and not a mere shelter for brutes." Before I attempt to consider what answer Sir James Jeans has already given us to this question, I want to draw attention to the contrast he has so eloquently drawn between

* *Physics and Philosophy*, p. 216. Subsequent references are to this book unless otherwise indicated.

the effect made upon us by the old physics and that now made upon us by the new physics. I think he is right in supposing that a contrast of this kind can be found in the effect of nineteenth century science as contrasted with the effect of the new physics. I have purposely used the word "effect"; it is a contrast in the *effect upon us* (*i.e.*, upon certain people), not a contrast in the philosophical implications of the old and the new physics. Further, I think we must speak (as I have) of the effect of nineteenth century *science* as contrasted with contemporary *physics*. Nineteenth century developments in biology played a very considerable part in this effect. To the importance of this point for our present discussion I shall return later.

Very plain men can hardly be said to accept or to reject metaphysical materialism; they do not entertain any philosophical theory with regard to the constitution of the universe, and insofar as they can be said to have a set of beliefs which imply any philosophical theory, this theory is likely to be some form of dualism. By "very plain men" I mean such men as Locke's "gazing countryman," who, Locke said, would have a very inferior idea of the famous clock at Strasbourg from "his who knows all the springs and wheels, and other contrivances within," since the countryman "barely sees the motion of the hand, and hears the clock strike, and observes only some of the outward appearances."* More reflective plain men, who ponder upon the "causes of things" and "the meaning of life," usually understand by metaphysical materialism the doctrine that matter alone is properly "real," and that minds are existentially dependent upon matter, being epiphenomena or in some other unexplained way completely dependent upon matter. Perhaps the gist of this view can be summed up in the statement that according to it all the sciences are finally (*i.e.*, when analysis is carried far enough) reducible to physics. This has, at least, been a very common way of stating a view that has been labelled *materialism*, but it is

* *Essay Concerning Human Understanding*, Bk. III, c. vi, s. 3.

not a clear statement unless we are told what exactly is meant by " reducible."

It is this view, I think, that is expressed by T. H. Huxley in a once-famous discourse. With great confidence he said :

" Anyone who is acquainted with the history of science will admit that its progress has, in all ages, meant, and now, more than ever, means, the extension of what we call matter and causation, and the concomitant gradual banishment from all regions of human thought of what we call spirit and spontaneity. . . . And as surely as every future grows out of past and present, so will the physiology of the future gradually extend the realm of matter and law until it is co-extensive with knowledge, with feeling, and with action.

" The consciousness of this great truth weighs like a nightmare upon many of the best minds of these days. . . . The advancing tide of matter threatens to drown their souls ; the tightening grasp of law impedes their freedom ; they are alarmed lest man's moral nature be debased by the increase of his wisdom."*

It will, I hope, be agreed that the nightmarish effect Huxley seeks to describe could be regarded as similar to the prison-house feeling to which Sir James Jeans refers. In a characteristic metaphor Huxley speaks of the advancing tide of matter as threatening to drown our souls. What he means to assert is that the advance of science consists in showing that matter and causation suffice to describe everything that is and everything that happens in the universe. Whereas, so he seems to suggest, before people had acquired this knowledge yielded by the advance of science, they had supposed that their thoughts, feelings, and actions lay beyond the scope of physical and physiological science. Now they are forced to see that these also are subject to the laws of material phenomena. As he himself puts it : " The thoughts to which I am now giving utterance, and your thoughts regarding them, are the expressions of molecular

* *Lay Sermons*, 1870, p. 156.

changes in that matter of life which is the source of our other vital phenomena." Although Huxley himself expressly repudiated " materialistic philosophy " (which involves, he said, " grave philosophical errors "), it cannot be denied that his conception of " the advancing tide of matter " is what plain men would regard as materialism.*

Ordinary plain men are apt to be dualistic in their outlook on the universe. They take for granted that the world contains (i) material objects, *i.e.*, things which are pieces of matter, in the sense of " matter " which is the commonsense prototype of the Newtonian concept of *mass* ; (ii) living things, including animals and men. Animals are not regarded as automata, as Descartes thought, but I think plain men would not seek to draw any *clear* distinction between living things having consciousness and living things of which consciousness is not properly to be predicated, *e.g.*, plants and sea anemones. On the other hand, plain men do hold that it is the presence of mind which essentially distinguishes men from rocks and stars. A plain man regards himself as both a mind and a body ; he is certain that his mind acts upon his body and that his thoughts are not to be brought within the domain of the laws of matter in motion. It is this belief of the plain man that Huxley attacked ; he recognized that the success of this attack would induce a nightmare, and he believed (erroneously in my opinion) that he could dispel the nightmare.

Huxley was a biologist ; in consequence, what he was most concerned to stress was the extension of physical laws (picturesquely described as " the advancing tide of matter ") to the domain of vital activities, *i.e.*, to the phenomena of life, to the behaviour of living things. He naturally spoke in terms of matter ; no doubt his extremely cocksure attitude was in part due to the great success of nineteenth

* Huxley's repudiation of materialism is difficult to understand. He refused to be classed with materialists because, he said, " I am utterly incapable of conceiving the existence of matter if there is no mind in which to picture that existence." I take for granted that everyone will admit that this argument is full of confusion. (I have discussed this point in *Philosophy and the Physicists*, Ch. IX.)

century physicists in developing their science during his lifetime. These physicists were confident in believing that everything could be explained in terms of atoms conceived after the fashion of ultra-microscopic billiard balls. There is, however, no reason to suppose that this billiard ball view of matter was in the least essential to the claim that the advance of the physical sciences meant the " gradual banishment from all regions of human thought of what we call spirit and spontaneity." There is certainly no logical necessity for basing this claim upon the conception that gross matter *really* consists of innumerable billiard balls of inconceivably minute size. If this be correct, it follows that the contemporary rejection of the billiard ball view leaves entirely unaffected the arguments that have been advanced in support of the contention that our thoughts, our feelings, and our actions, are no less subject to laws than are the hurricanes, the tides, the growth of trees, and the movements of the stars and planets in their courses.

Despite the absence of logical connexion, there is nevertheless a strong psychological connexion between the billiard ball view and the acceptance of scientific determinism. In estimating the " effect upon us " of the new physics as contrasted with the " old physics," this psychological factor must be taken into account. To understand this it is necessary to recall to mind the dominance of the machine-image in the thinking of the classical physicists and the familiarity of plain men with the workings of machines. Both these factors have played a part in producing the nightmare feeling of living in a prison-house, or—to vary the metaphor—of being helpless cogs in a machine. The point can be brought out by saying tnat " helpless cogs in a machine " has hardly been regarded as a metaphor. It was assumed that the world is a machine, not unlike a huge and very complicated clock. The business of the physicist was taken to be to examine the pieces of the clock, to take it to pieces—so to speak—by careful experiments, to find out as far as was possible of what its minutest pieces con-

sisted and to discover the laws of the inter-relation of the pieces. It was further assumed by many scientists that at the Creation God made the clock and determined the laws in accordance with which its heterogeneous parts should interact; He wound it up and started it going. From time to time He might have to repair the mechanism He had made, but, for the most part, it went on with clock-like regularity. How else should a clock behave?

It was a conception of this sort that inspired nineteenth century physicists to make models to represent the behaviour of physical phenomena whose nature was not immediately obvious in terms of the machine-image. Hence they set up complicated microscopic structures formed of elastic strings, pulleys, gyrostats, jellies, vortices, and suchlike. The knowledge acquired by physicists throughout the whole course of the nineteenth century could be presented not wholly ineptly in this way. It is, in consequence, not surprising that physicists should have felt they knew exactly what the world was like and that subsequent discoveries would be the same in kind, namely, merely extensions in their knowledge of the laws of the interaction of the minute parts of the clock.

Meanwhile, not only plain men but also many physicists continued to think of *men* as not wholly included in the clock-view of the world. The "world" was taken to be Nature; man—in virtue of his mind and soul—was not to be included in Nature, or, at least, not to be wholly included. As the memoirs and letters of distinguished physicists show, not a few physicists also regarded men after the fashion of the plain man's natural dualism. A man's thoughts and actions, his behaviour as a spiritual being, were not to be comprised within the deterministic scheme of science. *Man*, despite the fact that he had a body, was not a part—a cog—in the machine; he was essentially a spirit or immortal soul. This separation of man from Nature gave new urgency to the so-called "mind-body" problem, but it was a problem the nineteenth century physicists were well content to leave to the philosophers.

It was not the advance of the physical sciences that upset this convenient partition of problems : it was the biological theory of natural selection as propounded by Darwin. Darwin, and still more Huxley, by insisting that man's place in Nature was derived by descent from the other animals, did a good deal towards making it difficult, even if not impossible, to continue to regard man as so specifically different from his animal ancestors as to be an immortal soul. Huxley, by insisting that physical laws are also laws of vital phenomena, brought every specifically human activity within the scheme of scientific law. Thus these activities were finally to be understood in accordance with the clock-view of the world. The distinction between *men* and the *world of Nature* became vanishingly small. The part played by these new biological theories in this development must not be forgotten.

It is perhaps worth noticing how varied were the reactions of scientists to the implications of Darwinism. I select for illustration one French and one German writer. Remy de Gourment summed up his reflections in the words : " La vie est terrible. Elle a un but qui n'est pas celui que nous insinuent notre vanité et notre lâcheté."* Nevertheless, he remained serene and was able to find his own " philosophie du bonheur." Haeckel, an ardent popularizer of Darwinism, whole-heartedly accepted all that he took to be the implications of the theory. He maintained that matter and motion constituted a single principle from which all phenomena could alike be derived. He is a good representative of what Darwinism meant to his contemporaries—to those " best minds " of whom Huxley spoke. But, unlike these " best minds "—as pictured by Huxley—he did not shrink from the ethical implications ; unlike Huxley, he did not think that ethical progress consisted in combating the cosmic forces of Nature ; on the contrary, he thought that we had only to learn how natural forces work in order to be led to a fuller and happier life. He was extremely

* *Le Chemin de Velours*, 1902, Ch. XI.

optimistic, very easily pleased, never discouraged. His monistic philosophy was excessively metaphysical and, in my opinion, it abounds with bad arguments. His writings were voluminous, but he wrote very clearly and his books were widely read. He was undoubtedly one of the " best-sellers " of those days—for the time perhaps rivalling Sir James Jeans in that respect. To-day—to me at least—he is almost unreadable.

What bearing has the new physics upon these nineteenth century conceptions of " the reign of law " and the status of man in the animal kingdom? Certainly no bearing at all upon the latter. With regard to the former it will be desirable to quote from Sir James Jeans :

" Before the era of modern physics, it was a simple matter to define what we meant by causality and free-will. We supposed the world to consist of atoms and radiation ; we imagined that precise positions could be assigned, in principle, to every atom and to every element of radiation, and the question of causality was simply whether, knowing these positions, it was possible in principle to predict the future course of events with certainty. The question of free-will was whether it was still possible to predict this course when consciousness and human volitions intervened in the picture " (p. 215).

I cannot myself agree with Sir James Jeans that it was ever a simple matter to define what was meant by " free-will," but he seems to me to be correct in saying that it was the inclusion of human volitions in the course of natural events that created fresh difficulties with regard to the possibility of human freedom. Mental events and physical events were brought within the same mode of connexion ; hence, if the latter are determined, so are the former ; if the latter are undetermined, so also must be the former. Thus the question of freewill was resolved into the question whether it is possible to predict natural happenings.

With regard to macroscopic phenomena, it is not difficult

to understand what is required in order that an event should be predictable. The conditions that render an event predictable are the conditions that enable us to apply a physical law. In order that a physical law may be applied to a particular occasion it is necessary to know the initial conditions. In the case of macroscopic phenomena it is possible sometimes to have this knowledge. For example, the path that will be followed by a shell fired from a gun can be predicted, provided that we know the direction in which the barrel of the gun is pointing and the muzzle-velocity of the shell. The construction of guns, aeroplanes and tanks all depend upon knowledge of physical laws which can be unambiguously applied to particular occasions where the initial conditions are known. The new physics has shown us that in the case of sub-atomic phenomena it is not possible to know the initial conditions. As is well-known, it is not possible to give any precise meaning to the combination of momentum and position as simultaneously ascertainable in the case of an electron. The conceptions of space and time, which were fundamental in the old physics, cannot be retained, according to the new physics, in the domain of microphysics.

Prof. Dirac has put this point as follows :

" When an observation is made on any atomic system that has been prepared in a given way and is thus in a given state, the result will not in general be determinate, *i.e.*, if the experiment is repeated several times under identical conditions several different results may be obtained. If the experiment is repeated a large number of times it will be found that each result will be obtained a definite fraction of the total number of times, so that one can say that there is a definite probability of its being obtained any time the experiment is performed. This probability the theory enables one to calculate. In special cases this probability may be unity, and the result of the experiment is then quite determinate."*

* *The Principles of Quantum Mechanics*, 1900, 1st Ed., p. 10.

I draw from this the conclusion that quantum phenomena are not *lawless*; quantum laws are not *inexact*, but they are not laws that can be *exactly applied* to some one given particular occasion to yield a precisely determinate and certain effect. It is difficult to see how this conclusion can be used to help "unbolt the door" leading to human freedom.

Sir James Jeans, however, thinks otherwise. I hazard the suggestion that he is able to do so because he is thinking largely in terms of pictures—the wave-picture and the particle-picture, as he calls them. His account of these is too well known to need recapitulation here. Certain points, however, may be recalled to mind. The account he gives in *Physics and Philosophy* requires, I think, to be supplemented by what he said in his Presidential Address to the British Association in 1934, if his latest account is to be properly understood. The functions assigned to the particle-picture and the wave-picture are different. The particle-picture is said to be indeterminist; it is "a materialistic picture which caters for those who wish to see their universe mapped out as matter existing in space and time." The wave-picture "caters for those who ask the question: 'What is going to happen next?'" This picture is determinist, but it is a determinism of waves, and the waves are waves of knowledge. He concludes: "The Nature depicted by the wave-picture in some way embraces our minds as well as inanimate matter. Things still change solely as they are compelled, but it no longer seems impossible that part of the compulsion may originate in our own minds." It is difficult to know what Sir James Jeans is referring to by the word "things," which are said still to change "solely as they are compelled," or to know the source of the compulsion except that it originates in part "in our minds." On this point Sir James Jeans is insistent. I shall quote in full a paragraph from *Physics and Philosophy* in which he emphasizes this contention:

"The new dualism of the particle- and wave-pictures

is in many ways reminiscent of the old dualism of Descartes. There is no longer a dualism of mind and matter, but of waves and particles; these seem to be direct, although almost unrecognizable, descendants of the older mind and matter, the waves replacing mind and the particles matter. The two members of this dualism are no longer antagonistic or mutually exclusive; rather thay are complementary. We need no longer devise elaborate mechanisms, as Descartes and Leibniz did, to keep the two in step, for one controls the other—the waves control the particles, or, in the old terminology, the mental controls the material" (p. 204).

On what grounds can it be maintained that the waves replace mind, or, going perhaps a step further—as Sir James does in the passage quoted—that the waves are mental? Shortly, the answer no doubt is that the waves are waves of *knowledge*, and that knowledge is mental, in the sense that knowledge is that which is known, and knowing is a mental activity; in other words, only a mind can *know*. But to know is to know *that* so-and-so is the case. It is extraordinarily difficult to see how it is supposed to follow from the fact that a *mind knows* that so-and-so is the case, that what is the case is also itself mental. So far as I have been able to discover, Sir James Jeans gives no reason at all for this assumption; possibly he is not aware that there is any need for giving a reason. Since Sir James has rejected the subjectivism of Berkeley, we are forced to ask him whether he regards the waves as constituting an *objective* periodicity of knowledge. I believe that this question does not make sense, but I think that to ask it is in conformity with what Sir James Jeans has said, and I suppose his answer must be that they do.

Possibly he is led to speak in this way because the waves are a mathematical construct. He takes it for granted that mathematics is a language constructed by us, and that whatever is constructed by us is mental. From this it would follow that the waves are mental. But not everything, on Sir James Jeans's view, is mental. The particles

are not mental, although, as was stated in the passage quoted above, the particles are controlled by what is mental, viz., the waves.

His view of the progress of physics is that at first it was believed that the physicist was studying " an objective Nature which existed in its own right independently of the mind which perceived it, and had existed from all eternity whether it was perceived or not " (p. 202). Then quantum physics required the representation of the wave-picture. " In this progress towards the truth," he says, " let us notice that each step was from particles to waves, or from the material to the mental; the final picture consists wholly of waves, and its ingredients are wholly mental constructs." Even if we accept the last statement—with its leap to mind—we have not shown that reality is mental. This Sir James Jeans admits. It is not a picture of reality; on the contrary, he says quite clearly: " It is a picture we draw to help us imagine the course of events in reality." He is not at all unaware of the danger of transferring to " reality " the characteristics of our pictures and devices which we employ to help us to understand the course of events. In this book (as in his earlier books, *The New Background of Science*, and *The Mysterious Universe*) he points out the mistake made when it is argued that, since the course of events can be most easily understood in terms of mechanical models, reality must itself be mechanical in nature. But he nevertheless argues that *now*, since " we can best understand the course of events in terms of waves of knowledge, there is a certain presumption—although certainly no proof—that reality and knowledge are similar in their natures, or, in other words, that reality is wholly mental " (p. 203). If the mechanical presumption failed, there would seem to be good ground for supposing that this latest presumption also fails. Sir James is careful to say that there is only a presumption, not a proof, but the reader can hardly escape concluding that Sir James is himself convinced that reality is mental.

It is not possible, so far as I can judge, to render Sir James Jeans's statements entirely consistent. As I have shown by quotations, he asserts that there is a new dualism—the dualism of particles and waves ; in this dualism particles replace matter, waves replace mind ; the waves control the particles. The waves are knowledge ; perhaps reality is like the waves, *i.e.*, is like knowledge. But what has happened to the other element of the dualism? Are the particles not real, or "in reality"? Sir James cannot airily dispense with the particles, since they are required to give sense to the waves, and were said by him to be the complementary members of the new dualism.

I do not assert that the foregoing paragraph makes sense, but I think it does not misrepresent what Sir James Jeans says. Perhaps it may be possible to understand his views a little better if we remember that he is convinced that there is a "deeper reality" which our minds can never penetrate. "Our studies," he says, "can never put us into contact with reality ; we can never penetrate beyond the impressions that reality implants in our minds" (p. 15). Frequently he has insisted on the same point ; he maintains that we are shut up within the prison-house of our own minds and thus can never "investigate the real nature of the things—gold, water, atomic hydrogen, centimetres or wave-lengths—which inhabit that mysterious world out beyond our sense-organs" (p. 8). To do justice to Sir James Jeans's view, it is certainly necessary to understand this, but, for my part, I find I cannot understand what his difficulty is.

If he means only to assert that physics cannot deal with what is *in principle unknowable*, then the statement is indisputably true, for it is tautologous ; it is thus an irrelevant addition. If he means that *we*, *i.e.*, human beings generally, lack the sense-organs required to know what is not capable of being sensibly presented, then the statement escapes being a tautotology only by verging on the self-contradictory. If, however, he means—as much that he has said

suggests—that we can have knowledge *only* by ratios, then it is vitally necessary for him to make clear what he understands by "knowledge of a ratio." But about this he is very unclear indeed. He says, for example, that we can have exact knowledge that the density of gold is 19.32; by this a physicist means, he says, "that the ratio of the weight of any piece of gold to that of a volume of water of equal size is 19.32." This statement "imports real knowledge into our minds," because 19.32 is "a specific number, the idea of which is already in our minds," and the statement identifies this number "with the value of a ratio which has an existence in the world outside" (p. 7). But the things between which the ratio expresses a relation cannot be understood apart from the relation, and our knowledge is only of the ratio. How. then, has he been able to assert that the ratio expresses a relation between things outside? Presumably we know *that* there are "things outside," but do not know *what* the things are. He firmly believes (although how he can have come by the belief is left a mystery) that things outside have "essential natures" and of these essential natures we must for ever remain ignorant. To know this is to know a great deal. But how does Sir James Jeans know it?

Sir James Jeans's conception of mathematics does not seem to me to be entirely consistent. It is clear that he regards mathematics as a mental construct, and one gathers the impression that we understand mathematics just because *we* have made it, whereas the physical reality which our mathematical pictures represent is not made by us, and must remain unknown. On the other hand, he asserts: "in physics God made the mathematics and man made the rest" (p. 16). Is it *gold* and *water* that man has made, or only the ratio between their weights? Perhaps it is not worth while to try to answer this question; nevertheless, it is a question which may reasonably be put to Sir James Jeans. His final conclusion is: "In brief, modern physics is not altogether antagonistic to an objective idealism like that of Hegel" (p. 204).

I do not find it easy to be sure that I have correctly understood what, in Sir James Jeans's view, "the world" is really like. But, if I have not misunderstood him, then it seems to me that he pictures the world in terms of layers. There is first "the world of appearance"; in this are matter and radiation which can be represented in ordinary space and time. There is, secondly, "physical reality," which includes subatomic entities—ingredients which cannot be represented in ordinary space and time, and which can be referred to only in terms of mathematics. These two constitute "the dualism of appearance and reality." Finally, there is the unknowable reality, to which our minds can never penetrate—the real gold, the real water, the real centimetre. If Hegel's "objective idealism" is anywhere near a correct doctrine of the world, then I suppose this third layer is "really mind," viz., "objective mind," and the first layer is its wholly misleading appearance to *us*. But what *we* really are, with our minds and our bodies, is left a good deal more of a mystery than is the essential nature of a centimetre.

In my opinion it does not make sense to speak in terms of layers of appearance and reality, and I do not believe that Sir James Jeans has given any good reasons for supposing that it does make sense. The way of presenting this conception of "layers," in the preceding paragraph, is mine, not his, and I may have misrepresented his view. If so, I hope he will make this clear, for I do not think it could be maintained that he has done so in any of his philosophical writings.

Certainly, if Sir James Jeans's views are correct, then it must be admitted that the new physics is inconsistent with the doctrine of materialism, if by "materialism" he meant the belief that Nature "existed in its own right independently of the mind which perceived it" (p. 202)—to quote the belief which, he says, "was the soil in which materialism had its roots." This belief by itself does not suffice for what is most commonly regarded as materialism. To say that Nature, *i.e.*, "the world of material objects,"

existed prior to the arrival of minds in the universe, and thus independently of mental activity, is necessary to materialism but not sufficient, since—it would generally be admitted—materialism has been regarded as the contrary opposite of idealism : the former asserting that whatever is is material in nature ; the latter asserting that whatever is is mental in nature.

Understanding " idealism " in this sense, it seems to me quite clear that the new physics does not imply idealism. Neither, however, does it imply materialism. It does not make sense to say that whatever is mental *really* is material, or that whatever is material *really* is mental. The world (*i.e.*, everything that is) contains both minds and bodies ; the distinction between mental activity and bodily activity is a distinction in what actually is the case. There are problems in plenty to be dealt with concerning the interconnexions of mental and bodily activity, but none of these problems are in any way affected by developments in physics. To pursue this topic further it would be necessary to consider in detail the various abstractions by means of which we are able to divide " the sciences " up, assigning some problems to physicists, some to chemists, some to biochemists, some to physiologists, and some to psychologists. These problems overlap, but not—at least in my opinion—in such a way that any development in subatomic physics could throw light upon any problem with regard to mental life. I may be mistaken here, and certainly I have committed myself to a rash statement. I can, however, say with confidence that it is quite certain that quantum physicists who talk about " waves of knowledge " are not saying anything that could possibly have a bearing on the problem of the inter-relation of mind and body, or upon the question whether materialism is true or not. With regard to the latter question, I should myself say that the question does not make sense. We do not need to say that " materialism is false " ; we need only to ask : " What *sense* can you give to the statement 'materialism is true ' ? "

II.—*By* J. H. JEANS.

I am particularly grateful to Professor Stebbing for her clear statement of the points of agreement and disagreement between us.

There seems to be a fair measure of agreement on the two subjects which come mainly under discussion—materialism and free-will.

Professor Stebbing concedes that, provided certain views of mine are correct, then "the new physics is inconsistent with the doctrine of materialism" if by materialism we mean "the belief that Nature exists in its own right, independently of the mind that perceives it." In plain English, subject to the proviso stated, the new physics establishes that Nature does not exist in its own right, but exists only in relation to a perceiving mind, which comes very near to saying *esse est percipi*. This is further than I wish to go, or, I hope, have ever gone; I do not think that subjective idealism can be established by physics. Later on, Professor Stebbing says she does not either, so she probably thinks that the views mentioned in her proviso are untenable. But these views, if I have rightly identified them, are not in any way peculiar to me; they are held by most physicists, and I hope to show later that her criticism of them is ill-founded.

On the question of human free-will, Professor Stebbing quotes Dirac to the effect that in the new physics a cause is not followed by a unique effect—"if an experiment is repeated several times under identical conditions, several different results may be obtained." She comments: "It is difficult to see how this conclusion can be used to 'unbolt the door' leading to human freedom," and proceeds to say that I think otherwise. But in this she is mistaken; I entirely agree with her, if she means the word 'difficult'

to be taken at its face value. I think it *is difficult*, or someone would have done it before now, and in my opinion no one has. But I do not think it is necessarily impossible, and I think it is perhaps here that we differ. I *think* what Professor Stebbing *says*, while she, I conjecture, thinks more than she says.

She is obviously right in saying that the old physics had produced a nightmarish effect in the minds of thinking men. The man-sized world seemed to be governed by strict causal laws—like the cogs in a machine; given the precise position and motion of every particle in the machine, the future followed uniquely and inevitably. Little wonder that this led to a sort of anxiety-neurosis, for it implied that human aspirations and effort were futile, and the life of the spirit empty and meaningless. The new physics reassures us, by pointing out that these particular fears at least are groundless; our conclusion was drawn from false premisses; it is meaningless to think of knowing the precise position and motion of even one particle in the universe, let alone those of all. And if our premisses are meaningless, then the conclusions we draw are invalid.

There remain other arguments, as Professor Stebbing has reminded us, which purport to show that "our thoughts, our feelings, and our actions, are no less subject to laws than are the hurricanes, the tides, the growth of trees, and the movements of the stars." It seems to me that these arguments fall into two classes; *either* they produce something out of nothing (in which case I, for one, refuse to accept them), *or* they must be based on something, and this something can only be our experience of the world, in which case they reduce in the long run to the argument just discussed. Our experience of the man-sized world has implanted in our minds the idea that every happening must have a cause in the immediate past, and we have raised this idea to the status of a law of thought. The new physics tells us this is wrong, but does not tell us what is right. Indeed it could not, since, as Bohr first pointed

out, the concept of causality is meaningless to the new physics. Thus it seems to me that the whole problem of mechanical causality—and so of causality in general—is only a confusion of our own minds. If we indulge in the materialistic over-simplification of picturing the world as particles located in space, when we know that it is not, then we must expect puzzling complications, and have only ourselves to thank for our headaches when they arrive. The first difficulty in establishing human freedom is that we cannot see clearly what human freedom means —we do not know what we want to prove. My mind feels fettered, and keeps on assuming that the present must grow out of the past, although my science assures me that it need not.

It is not until the last paragraph of her paper that the main difference between Professor Stebbing and myself emerges clearly. Having said that the new physics does not imply either materialism or its opposite—with which I agree—she goes on to say " with confidence " that " it is quite certain that quantum-physicists who talk about ' waves of knowledge ' are not saying anything that could possibly have a bearing on the problem of the inter-relation of mind and body, or upon the question of whether materialism is true or not." It is here that we differ fundamentally.

For it seems clear to me that our philosophy—our interpretation of the world, the picture that we draw when we try to fit our private experiences into a wider public whole—must in the last resort be based on our experience of the world, and so on the findings of science—for science merely expresses our experience in a condensed and systematised form. Now physics has recently invaded two new worlds—the worlds of the very great and of the very small—and has there found codes of laws different from those which prevail in the restricted world of direct human experience. The world is not what we used to think it was, and philosophy, which has hitherto taken account

only of the more restricted world of our direct experience, must clearly adjust itself to the new facts.

Perhaps the most significant of these new facts is this—that when we try to interpret our physical observations in terms of the mechanistic matter of Victorian science, we find this shedding its material properties, one after another, until nothing is left of matter but the name. To me, at least, this seems to have some bearing on Professor Stebbing's problem of whether materialism " is true or not."

Hardly less significant is the new fact that I just mentioned, that in the world of sub-atomic physics, causality, as we ordinarily conceive it, becomes meaningless. Surely this has some bearing on Professor Stebbing's " rash statement " (again in her last paragraph) that no " development in sub-atomic physics could throw light upon any problem with regard to mental life."

I will not, however, try to answer Professor Stebbing point by point. It seems better to survey the subject on broad lines, and turn aside to deal with her objections at the appropriate places. May I first sketch out those happenings in recent physics that are important to us?

The early astronomers watched the motions of the sun, moon and planets, and when they began to discover regularities in these motions, science was born. Many must have felt that they were mere spectators of events which were entirely external to man, and indifferent both to him and his observations; the same motions would have occurred if man had never appeared on the scene, and would continue after the last man had passed away into silence.

Starting from such beginnings, it was natural that science should pre-suppose an objective universe, external to man and indifferent to man. Cornford described this as the " discovery of nature," and called it one of the great triumphs of the human intellect. But it was not a discovery; it was the introduction of a working hypothesis. A man who observed a star established a relation between

himself and the star. The star affected him ; why should not he affect the star ? Why should the interaction be all one way ? Of course a puny man could not affect a huge star very much, but there are smaller objects than stars. As science travelled its long road from the very great to the very small—from stars to atoms—the working hypothesis of an uninterested objective universe might conceivably fail at any point of the journey.

It has failed now, but for thousands of years it did not fail ; on the contrary, it swept science on from triumph to triumph. The labours of Galileo, Newton and their successors added precision to the postulated objective universe, which was now made to appear as a machine—pieces of hard matter occupying fragments of space and pushing or pulling one another about through the action of electromagnetic or gravitational forces. Such was the scheme of mechanistic materialism which reduced the world to an automaton. This scheme seemed to accord with all the observations for a time—the time when " the rising tide of matter seemed to threaten to drown men's souls." Then doubts began to accumulate.

The theory of relativity came, and showed that the interaction between two pieces of matter could be explained neither by direct action at a distance nor by mechanical action through a medium. Direct action at a distance became inadmissible, since it depended on the now meaningless concept of simultaneity in time, while mechanical action through a medium became equally inadmissible, since the requisite forces could have no objective reality ; they were mental constructs which would be different for different observers. The mechanical interpretation of nature had failed (1905), although some years were to elapse before this was generally understood.

Science was soon carried further along the same road. Experimental physics had resolved its supposed matter into molecules, its molecules into atoms, and its atoms into still smaller particles. The simplest atom of all, that of

hydrogen, was believed to consist of a nucleus with a single electron revolving round it like the moon round the earth, and under the same law of attraction. We might, then, reasonably expect motion in the hydrogen atom to be similar to that in the earth-moon system—apart, of course, from an obvious difference in scale.

But it is not; the spectrum, and even the continued existence of the atom, show that it cannot be. Bohr explained the spectrum by supposing that the electron was restricted to a definite series of orbits, and that it occasionally jumped from one of these orbits to another. Thus the atom, and the universe with it, shed one of the most material of the properties with which the materialistic hypothesis had endowed it—the property of continuity of motion (1913).

But this was not all; determinism had to go too, since the jumps of the electrons did not conform to a causal, but only to a statistical law. Rutherford's researches on radio-activity had already suggested that such laws were fundamental in the scheme of nature; Einstein now showed that they controlled the jumps of the electrons in the atom. From the state of the atom at one instant, it was impossible to predict what the atom would do next; we can only assess the *probabilities* of various happenings. Mechanical causation disappeared, and with it the nightmare of the predetermined path from which no deviation is possible (1917).

Let us be clear how the matter now stood. By combining the hypothesis of a mechanical material universe with certain facts of observation, science had reached conclusions which were inconsistent with the hypothesis from which it had started. The proper deduction was not (as many still write, and seem to think) that the conclusions were right, but that the preliminary hypothesis was wrong—not that continuity and causality had disappeared from the scheme of things, leaving the door open for chaos and free-will, but that the universe is not the material structure that we had imagined.

To see Bohr's study of the hydrogen atom in its proper light, we must regard it as a last despairing effort to explain the atom in mechanical and material terms. When interpreted in this way, the atom insisted on shedding its material properties of continuity and causality. When Bohr discarded these, he had success with the simple hydrogen atom, but not with more complex atoms; here the failure was so complete that no further attempts have been made to explain spectra on purely material lines.

In this way it became clear that a new philosophical outlook was called for—if not on the universe, then at least on methods of investigating the universe. Progress became rapid when Heisenberg rejected all hypotheses as to the nature of the universe, and concentrated on the phenomena (1925).

All astronomers see the same stars, and all physicists find the same phenomena in Nature, whence we conclude that there is something objective behind the phenomena. This is why we come to a dead end if we limit our discussion (as some suggest we should) to our observations—we are left either with solipsism or with a big unsolved problem. This, too, is why it seems legitimate to me, although not to Professor Stebbing, to picture the world as consisting of layers—appearance in front (nearest to our senses) and reality behind.

Let us employ the term "radiation" to describe whatever it is that stimulates our sense-organs—*i.e.*, the proximate source of our sensations—and the term "matter" to describe the source of this radiation. Thus our sensations originate in matter, and are transmitted to our sense-organs (or instruments) through the medium of radiation. Heisenberg concerned himself with the radiation emitted by matter. He was not concerned to discuss what radiation and matter *were*, but only what they *did*—to our senses and instruments. He here assumed a philosophical standpoint which had much in common with the positivism of Comte and Mach. We are debarred in principle from ever

knowing what matter and radiation are; we can only know how they affect us. Our senses form a sort of lantern screen on which nature's lantern is for ever projecting pictures. These pictures are all that it is possible for us to see; we cannot pass round the screen to examine what the lantern is or how it works. For this reason we can never answer the questions "What is matter?" or "What is radiation?" The only legitimate question is "What do matter and radiation do to our senses and instruments?" We can *know* about phenomena, but can only *speculate* about the underlying reality.

The investigations which Heisenberg initiated on these lines were continued by Born and Jordan and others. They found that the unknown ingredients behind the phenomena conformed to very simple laws—the familiar laws of the Newtonian mechanics supplemented by the addition of an entirely new law. This new law imposed a further restriction on the changes permitted by the old laws, since it required a sort of atomicity on these changes. It was through the addition of this new law, and by this alone, that the new physics differed from the old.

A good illustration of this restrictive effect is provided by the hydrogen atom, assuming this to have the structure imagined by Bohr. The new law restricts the electron to a few only of all the orbits which would otherwise be possible.

A second illustration is provided by radiation. Under the Newtonian laws, radiation might be emitted in any amount and at any rate; under the new laws it can only be emitted in the complete units we call "quanta."

Judged by the standards of ordinary life, this new unit is almost unthinkably small; billions of units are involved in each of our ordinary activities, and the restriction to complete units becomes unimportant. This is why the new unit eluded discovery for so long. When we are dealing with the Atlantic ocean as a whole, it does not matter much that the ocean must contain an integral number of molecules; we just treat it as a continuous fluid. This is in

effect what the Newtonian mechanics had done. But in small scale phenomena in which only a small number of units are involved, the atomicity becomes of extreme importance. The complete system of laws is now needed to tell us the truth.

Like the simpler system of Newtonian laws, the new laws are known to us only in the form of mathematical equations, and we can never know what the symbols in these laws represent in reality. But we can make pictures for ourselves, thus trying to clothe the laws with a concrete and intelligible meaning, even though we can never know whether such pictures bear any relation to the reality.

There is a simple picture for the Newtonian laws. For these can be put in the form :

$$\left.\begin{matrix}\text{Rate of change of} \\ \text{momentum}\end{matrix}\right\} = \left\{\begin{matrix}\text{Something which depends only} \\ \text{on the positional arrangement} \\ \text{of the system.}\end{matrix}\right.$$

We may agree to call the unknown something on the right " Force." We feel familiar with it through its effects, for it produces changes of momentum, which is what our muscles do when they operate on external objects. Thus our muscles exert force, and Newton's laws can be interpreted pictorially in terms of pushes and pulls like those we exert with our muscles. In brief they admit of a mechanical interpretation.

But the new added law admits of no such interpretation ; the atomicity which it imposes precludes that at the outset, since it prohibits the continuous change which is fundamental in a mechanical interpretation. Indeed, the new equation can be put in the form :

$$\left.\begin{matrix}\text{Something which would} = 0 \text{ on} \\ \text{a mechanical interpretation}\end{matrix}\right\} = h,$$

where h is the new unit. In large scale processes in which h is involved in billions, the single h on the right is relatively so small that we may properly disregard it, and rewrite our equation in the form :

$$\left.\begin{matrix}\text{Something which would} = 0 \text{ on} \\ \text{a mechanical interpretation}\end{matrix}\right\} = 0.$$

This latter statement shows that mechanical interpretation is permissible, although of course not obligatory, for the large scale phenomena of nature; but the former statement shows that such an interpretation is not permissible for the small scale phenomena. A mechanical interpretation can at best provide a picture of the coarser processes of nature; it fails outside that corner of the canvas on which these large scale phenomena are depicted. We must, then, discard all mechanical pictures and search for a picture which shall be valid through the whole range of phenomena.

Such a picture has been found. Its ingredients are waves—the waves which form the subject matter of the wave-mechanics. These waves are not only non-mechanical, they are also non-material, using these words in the sense of nineteenth-century physics. They do not exist in the ordinary three-dimensional space of mechanics, but in conceptual spaces which are ordinarily of more than three dimensions.

I do not think that this picture can claim any special quality of uniqueness, but it is at least true enough to nature to receive the support of experiment; the ultimate constituents of matter exhibit certain wave-like properties which can be recorded photographically, and these are precisely the properties predicted by the wave-mechanics.

In this way matter is brought into line with light. Long before the wave-interpretation of the general laws of physics had been attained, it had been recognised that light —and radiation in general—had both particle-like and wave-like properties. Newton had thought of light as corpuscular; after this its properties were thought to indicate a wave-like structure, and then, with Röntgen's discovery of the X-radiation in 1895, particle properties began to reappear. A gas through which this radiation had passed did not resemble a structure which had been rocked by waves, but one which had been bombarded by projectiles—some of its molecules emerged unhurt and

apparently untouched, but others were shattered. Ordinary light was soon found to possess similar properties, and the question was asked : " Does light consist of particles or of waves ? "

We know now that it " consists of " neither. Experiments can be arranged to show that it has properties which are quite inconsistent with a particle structure, and others to show that it has properties that are inconsistent with a wave structure. Clearly, then, light cannot consist of either particles or waves ; the correct statement is that in some of its effects light behaves *as though* it were corpuscular, while in others it behaves *as though* it were undulatory. But neither the waves nor the corpuscles exist in reality—*i.e.*, outside our consciousnesses ; they are merely ingredients of mental pictures we draw for ourselves in our efforts to understand fragments of a group of properties which in its entirety lies beyond our comprehension.

It is the same with matter ; we now find that in some of its effects this behaves as though it were corpuscular, in others as though it were undulatory. It has never been easy to define matter, but before the era of modern physics we could say it was something external to, and independent of, our consciousness, which produced sensations in our consciousness, and we could believe that it consisted in the last resort of detached particles. But the new physics shows that our sensations should be pictured as originating sometimes in particles and sometimes in waves, although we know that actually they cannot originate in either.

We may think of these two pictures as providing two windows out on to the world. Through one we see particles ; through the other we see waves. Through each we see something that we can comprehend, but we know that each shows us only one aspect of the outer world. We know that we are merely viewing the same external scene from different angles, for Heisenberg and Dirac have shown that the wave-picture is simply the particle-picture dressed up in different mathematical clothes—the one

transforms mathematically into the other. What, then, is the relation between the two, and how can things which are as different as waves and particles represent the same reality?

The particle-picture is seen in a perceptual space of three dimensions, but the wave-picture in a conceptual space of many dimensions. Generally each point in the wave space represents a whole series of points in the particle space. With this in our minds it is easy to understand the relation between the two pictures which, as Born first pointed out, is as follows: The intensity of the waves at any point P of the conceptual space gives a measure of the probability that the various particles of the particle-picture shall occupy the corresponding points of the perceptual space. But when the particles are particles of light (photons), then the conceptual space of the wave-picture has only three dimensions, and its points may be identified with the points of the perceptual space of the particle-picture in a one-to-one correspondence—in brief, the two spaces can be made to coincide. The intensity of the waves at any point of the wave space now measures the probability that there shall be a particle at the corresponding point of the particle space.

Here a new concept, that of probability, makes its entry into physics. We may well ask: Why? The old physics did not need it, why does the new? There can be but one reason, the new "atomicity" law, since this constitutes the sole difference between the new physics and the old, and we shall now see that this is the reason.

Let us notice first that the measure of a probability is not a clear-cut, self-contained idea. Like the measure of a velocity, it contains a loose end which must be tied up to a background before the idea acquires precision. In general a probability implies a relation between a possible event and knowledge about events, and so varies with the degree of our knowledge. I have no knowledge of horses, and so cannot be expected to pick a winner, or even to estimate

the probability that a particular horse will be a winner. But amongst those who have some knowledge, one degree of knowledge will lead to one estimate of probabilities, another degree of knowledge to another. The more knowledge I have, the more closely will my probabilities approximate to certainties, until finally, with perfect knowledge, the probability becomes a certainty one way or the other. Now in problems dealing with the motion of particles the Newtonian mechanics assumed that we could have, and did have, perfect knowledge of the positions and speeds of all the particles involved, so that probabilities as to these did not come into the question at all—only certainties. In the new physics, this is not so; we can never have exact knowledge as to the positions and speeds of our particles. The reason is that the atomicity of nature extends to the instruments with which we explore nature; nothing less than a complete electron or a complete photon is at our disposal. These are blunt probes, and so cannot give us infinitely refined knowledge of the objects of our study; imperfect knowledge is the best we can aspire to.

It is relative to this imperfect knowledge that the probabilities of the wave-picture are measured; indeed, the picture depicts the imperfections of our knowledge. But, in reply to Professor Stebbing's question, it is of course not true that "the waves constitute an objective periodicity of knowledge." To assert this would be like saying that a storm at sea is periodic, because the waves move up and down. The periodicity we encounter in the wave-mechanics is not one of knowledge, or indeed of anything else that we can give a name to, and the waves are wholly subjective, so that if we change the extent of our knowledge (as, for instance, by performing a new experiment), the waves will change. This is why there can be no general wave-picture of an electron such as will fit all electrons; the only possible picture is one of our imperfect knowledge of an electron. And here we come upon the most surprising and most significant feature of the new physics. It is that the

subjective waves of this picture can depict for us the objective universe—*e.g.*, the light emitted by the sun and stars—with perfect fidelity. Here, if we need it, we seem to have a final proof that the hypothesis of a detached objective universe is inadequate. Here, too, I think, we have a proof that Professor Stebbing wholly misunderstands the situation when she says that "quantum-physicists who talk about 'waves of knowledge' are not saying anything that could possibly have a bearing on the inter-relation of mind and body, or upon the question of whether materialism is true or not."

When we look through one of our two windows, we see matter and radiation—the source of our sensations—in the guise of particles. We may describe the ingredients of this picture as material, using the word in the sense in which it was used by nineteenth century science. When we look through the other window, we see waves representing our knowledge of these same particles. The ingredients of this latter picture are subjective, in the sense that they are—or at least may be—private to particular individuals, and vary with the different knowledge of different individuals; they are mental in the sense that they derive from consciousness, for if there is no consciousness there can be no knowledge and so no waves. And—again in answer to Professor Stebbing—the pictures themselves are mental in the sense that they and their ingredients exist only in our minds; a mental picture can of course be of material objects, as when I dream I see a rhinoceros.

Thus one picture shows us objects, the other our knowledge of objects; one picture is of material things, the other of mental things. So long as we deal with large scale phenomena, the material picture is adequate—hence the illusion of materialism. But suppose that our sense organs could become so refined that we could perceive single electrons and photons. We should then find the particle-picture inadequate to describe what we saw; we should need the wave-picture also. The inadequacy of

a materialistic interpretation of the world as a whole would now become apparent—only by putting a blind eye to the second window could we still think it sufficient. There would be a whole group of *physical* phenomena to which the materialist could only shut his eyes, just as now (as many think) there is a whole group of *vital* phenomena to which the materialist only shuts his eyes.

The two windows on to the world of physics show us the same scene, but viewed under different aspects. There is no gradual transition from the one to the other, so that there is a real dualism. Is this dualism a property of the world, or is it a contribution—or perhaps a limitation—of our perceiving minds? Or is it perhaps both, just as an artist's picture depends in part on the turn of his mind, but also in part on what he finds in the world?

The contributions of the artist's mind can be recognised from their appearing in all the pictures he draws, whatever their subject. Some may think that the dualism of the physics pictures does not reappear in other pictures of the world; if so, they will conclude that it is not a contribution of our own minds, but represents something real in the world of physics. Others may think that a similar dualism is to be found in other pictures. Bohr has suggested that it is needed in our pictures of vital phenomena. Let me quote to you Professor Born's discussion of this suggestion. He writes:—

"The idea that it is possible to think about the same phenomena with the help of two entirely different and mutually exclusive pictures without any danger of logical contradiction is certainly new in science. Bohr has pointed out that it may help to solve fundamental difficulties in biology and psychology. A living creature, plant or animal is certainly a physico-chemical system. But it is also something more than this. There are apparently two aspects again. The time of materialism is over; we are convinced that the physico-chemical aspect is not in the least sufficient to represent the facts of life, to say nothing

of the facts of mind. But there is the most intimate connection between the two spheres ; they interlap and are interwoven in the most complicated way. The processes of life and mind need other conceptions for their description than the physico-chemical processes with which they are coupled. Why do these different languages never contradict one another ?

" Bohr has suggested that this is another case of complimentarity, just as between particles and waves in physics. . . . The old desire to describe the whole world in one unique philosophical language cannot be fulfilled. Many have felt this, but to modern physics belongs the merit of having shown tne exact logical relation of two apparently incompatible trends of thought, by uniting them into a higher unity."

I suggest that it is possible to go further and find a similar dualism in our pictures of the world as a whole. Is it not merely the Cartesian dualism of mind and matter ? This, by surviving for some centuries, has shown that it conforms, at least in part, to what we see in the world around us.

If so, we must no longer think with Descartes of mind and matter as two *ingredients* of the world, but rather as two *aspects* of the world ; they are not two existents, but two ways of looking at one existent. Just as light and matter seem to us to behave sometimes as though they were corpuscular, and sometimes as though they were undulatory, so the universe seems to us to behave sometimes as though it were material and sometimes as though it were mental—but never as though it was both at the same time ; the material and mental can no more be blended in the same picture than the matter and mind of Descartes. Here, of course, we are using the word " picture " to suggest a pictorial interpretation or explanation attempted by our thinking minds, and not the crude impressions made on our unreflecting senses. Our eyes, but not our minds, can see particles and waves in the same beam of light, and can see mind and matter coexisting in the universe.

If we are right in this, then the age-old debate as to whether the universe is material or mental in its ultimate essence is just as futile as more recent discussions as to whether light is corpuscular or undulatory. In each case the question has been wrongly framed, and in each case the answer is the same. Just as light is neither corpuscular nor undulatory, but has some corpuscular and some undulatory aspects, so the world of our experience is neither material nor mental, but has some material and some mental aspects; these are not attributes of the universe, but of our perceiving minds. When we think of the universe as either material or mental, we are merely drawing partial pictures for ourselves to help us understand partial aspects of a truth which is for ever beyond our comprehension. Personally, I would not argue for an idealism which insists (in Professor Stebbing's words) that "whatever is, is mental in nature." For one thing, I do not know what it means.

The train of thought that I have suggested—or rather, that is, as it seems to me, suggested by modern physics—is not new; it is about 300 years old. Perhaps Spinoza came nearest to it. I will not attempt to interpret Spinoza myself, but may perhaps quote Adamson. He writes:—

"The universe, according to Spinoza's doctrine, is one. The extended world and the world of conscious experience are not two worlds, of which one is the copy of the other. The one *is* the other. A circle and the idea of a circle are one and the same thing, taken now under the attribute of extension, now under the attribute of consciousness. Thus Descartes' difficulty about the relation of soul and body receives an easy solution. Soul and body are not two realities which react upon one another, but one and the same reality viewed under different attributes."

If this is translated into the language of modern physics, every physicist will at once recognise its truth. It runs somewhat as follows:—

"The universe, according to modern physics, is one.

The world of particles and the world of waves are not two worlds of which one is the copy of the other. The one *is* the other. An electron and our knowledge of an electron are one and the same thing, taken now under the aspect of particles and now under the aspect of waves. Waves and particles are not two realities which react upon one another, but one and the same reality viewed under different aspects."

There still remains the central difficulty which Spinoza found in the question, "How is it that God manifests himself to us only under the two aspects of extension and consciousness?" Or, in the more restricted problem of physics: How is it that nature manifests herself to us only under the two aspects of particles and waves? In brief, why have we two, and only two, windows on to the world? But what was a philosophical puzzle for Spinoza has now become almost a matter for laboratory investigation,

May I conclude by summarising, very briefly, my own position on the questions under discussion?

1. I do not think that free-will can be "proved" by present-day physics; but I do think that it can no longer be disproved.

2. I do not think that either materialism or mentalism can be "proved" by present-day physics. This seems to me rather to suggest that the question as to whether the world is material or mental is wrongly framed, and so meaningless—like asking whether light consists of waves or of corpuscles. There is a dualism, but it does not reside in the world but in our way of looking at the world; it results from the limitations of our sense-organs.

III.—*By* R. B. Braithwaite.*

When I agreed to open the discussion, I felt I ought not to prepare a speech, but to come ready to comment on some of the things which Professor Stebbing or Sir James Jeans would say. Since my time is limited, I shall devote it entirely to Sir James Jeans.

I will controvert first one remark which Sir James has made this afternoon. He said that a great part of the substance of his recent book, *Physics and Philosophy*, formed part of the corpus of modern physics, so that no one who is not a physicist has any right to criticise it. Now every sensible person recognises that no one but a practising physicist has a right to an independent opinion as to the adequacy or inadequacy of a particular physical theory (e.g. the Heisenberg quantum theory). The function of physicists is to discover the laws of nature (and these laws, as I shall mention later, are not to be restricted to "deterministic" laws) : to do this, they put forward laws, when they first think of them, as hypotheses, and then test their hypotheses experimentally to see whether they are confirmed or refuted. So far as this function, the proper function of physicists *qua* physicists, is concerned, no philosopher has any right to criticise what they say (though he may of course, like anyone else, ask for elucidation if he cannot understand what they say) ; but when physicists start saying such things as that one part of the picture given by modern physics is material and another part mental, they are no longer speaking as physicists but as philosophers. For the words "mental" and "material" do not occur in treatises on physics ; they occur in works on philosophy : and when a physicist uses them, he is entering upon matters of high philosophic controversy. In

* My contribution to the discussion printed here has been recast by me from a verbatim report of the speech I delivered at the meeting.—R.B.B.

the contexts in which Sir James uses the words, he is philosophizing about physics; and the philosophy of physics is a subject upon which what physicists have to say may be of great value, but need not be the last word.

Sir James, however, has not confined his philosophical remarks to the philosophy of physics: he has had a good deal to say, both in his recent book and this afternoon, about the "essential nature" of things. Here he is talking pure metaphysics and ontology; and it is what he says on this subject that I, a philosopher in the empiricist tradition, find most confused and misleading. Sir James has said that we do not know what is the essential nature of water, or of gold, or of a centimetre. To-day he has omitted the qualification "essential nature" and has gone so far as to say that he (and I presume everyone else) does not know what a billiard ball *is*. I have not got a billiard ball in my pocket, but I have a pencil; and I maintain that I do know what a pencil is, and (if you care to use the expression) what the essential nature of a pencil is. A pencil is an object which resembles in shape and size the object which I am now holding in my hand, and which is used for writing. You all understand me when I say this; and, in answer to the question "What is a pencil?" or "What is the essential nature of a pencil?", there is really nothing more to say.

A pencil is, of course, physically a compound structure; and there are perfectly good physical questions that can be asked (and answered) as to the relations of the physical parts of the pencil with each other, and in particular as to the physico-chemical composition—the relations of the molecules and of the electrons, protons, etc.—of the different parts of the pencil. But the answers given by physicists to these questions assist us in no way to answer the question "What is a pencil?", the answer to which is the common-sense description I have just given. For when a pencil has been described to us in such a way that we can correctly recognise an object as being a pencil, we know what a pencil is. All the talk in which Sir James has indulged

about our not knowing the essential nature of a commonplace physical object is mere obfuscation : such talk tends to make one believe that there are certain questions which it is reasonable to ask over and above the questions asked by common sense or science. It suggests that, when all the questions of physics have been answered, there are still further questions that can be asked, questions such as " What is the essential nature of (or what is the substratum lying behind) a physical object ? " I take it to be one of the principal functions of a philosopher to attempt to diminish the inclination to ask such questions. One of the ways of doing this with a person who insists upon asking about " essential natures " is to ask him to enquire into the " essential nature " of the use of the phrase " essential nature." If he does this, I think he will find that he never requires to use this phrase in any enquiry of science or common sense ; and that the only occasion on which he would require to use it would be if he wished to make a distinction between the " essential " nature and the non-essential or " accidental " nature of a thing in the discussion of such a subject as the theological doctrine of transubstantiation, a subject quite outside the domain of common sense or of natural science.

To deal now with some points in Sir James Jeans' philosophy of physics. Sir James has said to-day that modern physics " has left nothing of matter but the name." If he was using the word " matter " here in its customary sense, his statement is certainly false ; since, with the customary use of the word " matter," the existence of matter is a logical consequence of the existence of objects such as pencils or desks, and this desk certainly has not disappeared with the advent of quantum physics. But I take it that in this aphorism Sir James was wishing to convey that modern physics has deprived the physical world of many of the properties which had been thought to be most characteristic of its materiality. If, as he says in his book (p. 202)* and has repeated to-day, " the ingredients of

* All my page references are to *Physics and Philosophy* (Cambridge : 1942).

the particle-picture are material, those of the wave-picture mental," and if, as he implies (p. 177), the wave-picture is superior to the particle-picture, there would be " a certain presumption " that " reality is wholly mental " (p. 203).

Why does Sir James believe the premiss of this argument —that the ingredients of the wave-picture, unlike those of the particle-picture, are mental? The reason he gives in his book is that the wave-picture ingredients are " mental constructs " in a sense in which the particle-picture ingredients are not (p. 202). And his principal reason for this contention is, I think, that the ingredients of the particle-picture " can be represented in ordinary space and time " (p. 193), whereas those of the wave-picture cannot be so represented.

I do not believe that the difference between these two types of physical theory is sufficient to justify Sir James's argument. It is true that the theories of classical mechanics and of particle mechanics make use of a geometrical representation which is three-dimensional and not more than three-dimensional (unless time is included, as in relativity theory, in which case it is four-dimensional). I speak of a " three-dimensional geometrical representation " rather than of a " representation in space of three dimensions " advisedly, because the important point is that the physical laws in question have a certain abstract mathematical form, which abstract mathematical form is one which mathematicians describe as that of a three-dimensional geometry. And it is true that the theories of wave-mechanics are of a more complicated mathematical form which is not that of a three-dimensional geometry: the form is that of a $3n$-dimensional geometry, where n is the number of electrons involved. It follows from these two facts that, since the space of common sense is three-dimensional (it itself is a construct out of the three-dimensional spaces given in our sense-experience), the laws of classical mechanics and of particle-mechanics can be imagined as applying directly to objects which are similar to the objects of common sense in that they are located in the three-dimensonal space of common sense, whereas the

laws of wave-mechanics cannot be imagined to apply directly to such objects. But this impossibility of imagination does not make any important philosophical distinction between the two sorts of theory : wave-mechanics is applicable to the world of experience (else it would be a branch of pure mathematics and not of physics) even though it cannot be imaginatively represented in a common-sense way in a three-dimensional space. When Sir James says that such a theory cannot therefore " be intelligible to our restricted minds " (p. 175), he is surely forgetting that it is perfectly intelligible to the " restricted mind " of a mathematical physicist—or, at any rate, sufficiently intelligible for the physicist to make predictions which are capable of empirical verification, the requirement for intelligibility of a scientific theory.

A second reason, which Sir James Jeans has given to-day for the philosophical difference between the particle-picture and the wave-picture, is that the latter is " subjective " because it is " private," and it is " private " because it has to do with knowledge. The wave-particle-picture, he told us, gives us objects ; but the wave-picture only gives us knowledge of objects. I believe that this also is an unimportant and misleading distinction. What physics tries to do is to describe in general terms the physical world, *i.e.*, to give descriptions in the form of general laws of how things happen. These general laws, put forward to start with as hypotheses, are accepted if their empirical consequences are found to be experimentally confirmed. When they are accepted, they give us knowledge—knowledge which enables us, within certain limits, to predict the future. And this is the case with the particle laws and the wave laws equally. (If it be alleged that this " description " is not " explanation," I would reply that description in this way by means of general laws is exactly what is meant by " scientific explanation " : to ask for anything more is to cry for the moon.).

When Sir James further suggests that the knowledge given by wave-mechanics is private because the application of wave-mechanics yields different knowledge about the

future for each different observer, he is surely forgetting his valuable comment on the theory of relativity: "It is the body of the observer that we want, and not his mind; a laboratory equipped with cameras and various instruments of measurement would serve our purpose just as well" (p. 65). In wave-mechanics also the difference in the results obtained by different observers arises from the difference in the physical circumstances in which the observers are or will be in making their observations.

For the reasons that I have indicated, I do not think that Sir James Jeans' contention that "modern physics has moved in the direction of mentalism" (p. 216) is valid. And I do not think that any fundamental philosophical consequences follow from the findings of the "new physics." But there is one finding which is of great interest to the philosophy of science—the change which has occurred in the conception of the nature of physical law. What seems to have happened is this. Up to the beginning of this century physics had been extremely successful in discovering laws which were "deterministic," *i.e.*, laws which would enable us, given the state of an isolated physical system at one moment, to predict exactly what would be the complete state of that system at a subsequent moment. When nineteenth-century physics made use of statistical laws (*i.e.*, laws enabling us only to predict the most probable proportion of events in the system, but not the complete state of the system), as it did in thermodynamics, it always supposed that these statistical laws were used *faute de mieux*, and that their justification lay in there being deterministic laws behind them which were yet unknown. However, in the first quarter of the twentieth century physics found itself more and more unable to find satisfactory laws of the traditional, "deterministic" type to explain electronic phenomena; and in 1925 Heisenberg took the revolutionary step of putting forward a principle (his Uncertainty Principle) a consequence of which is that the fundamental laws of quantum mechanics are ultimately and irreducibly statistical, and have no "deterministic" laws behind them.

And on this assumption great advances have heen made. It is to this irreducibly statistical nature of the wave-mechanical laws to which Sir James Jeans is referring when he describes wave-mechanics in terms of " waves of probability " which do not enable us " to see what *will* happen, but what *may* happen " (p. 136). For the probabilities about which physicists talk are always analysable in terms of the proportion among events having one property of those which also have another property (or, to be more exact, in terms of the distribution of these proportions in a great number of sets of events). To return to an earlier point, there is no particular " privacy " or " subjectivity " about these " waves of probability."

The admission that, in physics, the most fundamental laws are statistical shows that the philosopher of physics must be prepared to accept a wider view of what is meant by a law of nature than he has done in the past. But this wider view has no relevance, I think, to the case for materialism or for mentalism, since the subject-matter of the physical laws is the same whether they are statistical or " deterministic." And it has little relevance to the question of the possibility of establishing psychological or psycho-physical laws, though it should incline us to be prepared, if necessary, to accept irreducibly statistical laws in these fields as well. But it has no relevance at all to the question of determinism as this word is used in the Free Will *versus* Determinism controversy ; for statistical laws, as well as " deterministic " laws, enable us to predict the future. As for the feeling of release which the new physics seems to have brought to so many people, I myself, educated in the classical physics, never felt imprisoned by its laws in the way Sir James describes (p. 216), and consequently had no feeling of escape when I learnt something of the new physics. The universe is, in fact, a "dwelling-place for free men," whatever system of physics be accepted ; and the coming of relativity and quantum physics has made this " dwelling-place " neither more nor less " suitable " for this purpose than it was before.

IV.—*By* E. T. WHITTAKER.

The question which we are studying this evening, I take it, is whether, and if so in what ways, the new physics impinges on philosophy. On this question, I share with Sir James Jeans the view that the new physics does impinge on philosophy, because all philosophical doctrines are attempts to provide a framework for one's view of things in general, and that framework must, of course, depend on our knowledge of things in detail; and therefore it is probable that changes in our knowledge of the world in detail—in particular, changes in our knowledge of physics —will have some reaction on our philosophical views.

Now, the two philosophical doctrines which have been mentioned especially to-day are the doctrine of materialism and the doctrine of determinism. Those two doctrines are, of course, quite independent. I think it is probable that most modern materialists are also determinists, but there is no necessary connection, as can be seen by referring to the history of ancient atomism. The earlier atomists were both materialists and determinists, while the later—Epicurus, for instance—were materialists but not determinists.

Further, the particular way in which modern physics impinges on these two doctrines is, I think, quite different. Let us take first of all materialism. There has been some question this evening as to what exactly materialism is, so that I had better say what is the sense in which I, at any rate, understand it. I should define a materialist as a philosopher who, in his search for reality, thinks that he has found it in matter, and regards mind as a mere epiphenomenon of matter. I do not know whether all materialists would accept that as a fair statement of their position, but it is what I, at any rate, would understand by it.

Has the new physics done anything to upset or to modify that attitude? I think so; because, although this point has not been mentioned by previous speakers, I think that nearly all the people who would call themselves materialists in any sense are people who have been impressed by the idea of the permanence of matter. Go back to the Greek atomists; they thought that the universe was composed of atoms, more or less like Sir James Jeans's billiard balls, and, because they thought that everything that happened was a mere rearrangement of these atoms, they took the atoms to be the permanent element of the universe, and that led them in fact to become materialists. Our modern materialists, who for the most part follow in the train of the German materialists of the last century, are people who are profoundly impressed by the doctrines of the conservation of matter and the conservation of energy and other doctrines of conservation which seemed to indicate that there was a quality of permanence attaching to matter and to things which come into physics, which did not attach to things connected with the mind; and therefore they preferred to place reality in matter.

Now, that position has certainly been changed by the new physics, for, as Sir James Jeans has pointed out, the new physics has entirely destroyed those ideas of permanence in connection with matter which were, I think, the main basis of Victorian materialism.

Has modern physics done anything to the other philosophical doctrine which I mentioned, the doctrine of determinism? I should say yes, definitely; because, as I explained in the lecture which I gave here yesterday, we can classify events in physics into three categories. First of all, there are those which are fully deterministic in the sense of being predictable, those where we can say definitely what will happen. Secondly, there are those (such as the tossing of a coin) where we cannot make confident predictions, but which we nevertheless regard as deterministic, in the sense that the postulate of causality is not violated.

We cannot say whether the coin will come down heads or tails, but we believe that all that happens to it is in accordance with the laws of dynamics, and that if we were better observers and quicker mathematicians we should be able to predict exactly whether the coin would fall heads or tails. That I called yesterday crypto-determinism. Then there is a third possibility, true indeterminism, where there is no causality at all. A large part of what I said yesterday was devoted to showing that the new physics has established conclusively that many of the phenomena of physics in which we cannot make predictions are not of the crypto-deterministic kind, but are cases of true indeterminism ; so that determinism does not reign absolutely in the physical world. That, I think, will not be without a certain psychological effect, at any rate, on people who ask themselves whether they should believe in determinism as a general philosophical doctrine applicable to both mind and matter, though I agree with the criticism of Professor Stebbing, that we cannot logically deduce anything regarding the mind from what we know about matter in physics.

It occurred to me when I was reading Professor Stebbing's book, which I did with admiration, that a great deal of the difference between herself and Sir James Jeans and Sir Arthur Eddington was really due to a difference in their approach to the subject. I think that Professor Stebbing, who is a distinguished logician and systematic philosopher, rather failed to realise what to my mind is most important in Sir James Jeans and Sir Arthur Eddington, which is that whereas they are ordinarily classified simply as distinguished men of science, who happen to have great powers of exposition, I doubt whether the extraordinary popularity of their works is due either to their eminence as men of science or to their powers of exposition ; it is rather, I think, that they have a quality which is found, perhaps, most markedly in great poets, of having flashes of insight which reveal to them things which are beyond the

range of exact knowledge. Knowing them to be eminent scientists, we imagine that what we are going to get from them will be precise and logical, and we actually get, on the contrary, brilliant suggestions which are utterly unlike systematic philosophy. That is what makes their books so fascinating, and I am not sure that Professor Stebbing fully allowed for that fact. When I was reading her book, I could not help thinking that it had all the merits and perhaps some of the defects that one would expect to find, say, in a commentary on some of the more mystical poems of Wordsworth by Mr. Bertrand Russell. In that way, while giving the fullest credit to Professor Stebbing's logical criticisms, in which she attacks any claim that the work of Jeans and Eddington might have to be regarded as systematic philosophy, at the same time I cannot withhold my admiration from Jeans and Eddington for a quality which is perhaps of a higher order.

There are one or two detached comments which I should like to make on things which have been said this evening. In the first place Professor Stebbing took the view, which seemed to me rather curious, that it was biology rather than physics which had changed our minds in regard to some of these problems. I am bound to say that I have never seen exactly why people think that the fact that the doctrine of evolution revealed our continuity with the animal world brought anything new into philosophy or theology; because if the point to be considered is, as I think Professor Stebbing put it, that when we recognise that we have continuity with the animals we find great difficulty in understanding at what precise point in the evolution the soul came into existence, and we may regard that as a reason, therefore, for not believing that there is a soul at all, then I think we should remember that that problem has been familiar to theologians from the very beginning, because it is identical with the problem of when the human embryo acquires a soul. The human embryo passes through various stages which can be more or less

paralleled in the history of the evolution of the human race, and while we can say that at one stage it does not seem to have any but animal qualities, yet when we consider mature human beings there is a general consensus of opinion that they have something which animals have not, and we find it very difficult to say exactly when the transition took place. I do not think, therefore, that evolution brought any radically new problem to the philosophical theologians.

The other point I want to mention is that I think that part of the criticism of Jeans in Professor Stebbing's book was written under the impression that he was tending towards idealism of more or less Berkeleyan type. As has been made quite clear this evening, his thought is not taking that direction at the present moment. I am perhaps a little surprised to find that he is now becoming a follower of Spinoza, because I should have thought that a deterministic monism of that type was a great leap from the position which he took up not long ago. I am bound to say that for my part I have never quite understood—though no doubt many philosophers here do understand it—in what way Spinoza managed to combine the two substances, the mind and matter of Descartes, into a complete unity; it did not seem to me that it amounted to much more than the mere idea that there is mind and that there is matter, two things, as Descartes thought, but that they are both contained in the universe, and the universe is one. Thus I am not able to share Jeans's expectation that a satisfactory solution of the dualism will be provided from this quarter.

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