VII.—CRITICAL NOTICES.

Foundations of Ethics. The Gifford Lectures delivered in the University of Aberdeen, 1935-1936. By Sir W. DAVID ROSS. Oxford: Clarendon Press, 1939. Pp. xvi + 328. 15s.

THE Provost of Oriel's book, ***The Right and the Good***, published in 1930, was much the most important contribution to ethical theory made in England for a generation. Every one interested in ethics had to take serious account of it, and it gave rise to a vast amount of critical discussion. The Provost has taken careful note of these criticisms, and he has devoted a considerable part of his Gifford Lectures to restating his position, with such modifications as he now considers necessary, and defending it against criticisms which he thinks invalid. This in itself constitutes a very valuable bit of work, but it is by no means the whole of the book. There is a chapter on ethical epistemology, one on the psychology of moral action, and one on indeterminacy and indeterminism, which treat elaborately subjects that are hardly touched upon in ***The Right and the Good***; and the last two chapters, on "The Nature of Goodness" and on "Moral Goodness", contain a great deal of important new material.

In the Introduction Ross divides attempted definitions of ethical terms into "attitude-theories" and "consequence-theories", and then sub-divides each of these into a naturalistic and a non-naturalistic sub-class.

In chapter ii he discusses naturalistic definitions of "right". He rejects consequence-theories in this connexion as highly unplausible, and devotes most of his attention to attitude-theories and logical-positivist theories. In discussing attitude-theories he points out that, when A judges that X is right, he might, according to various possible forms of such theories, be judging either: (i) that A himself does (or would) contemplate X with a certain kind of emotion; or (ii) that all or most members of a certain class of men do (or would) do so; or (iii) that an agent, in doing such an act as X, would feel a certain kind of emotion about it. Ross thinks that the third is the most plausible form for a naturalistic attitude-theory to take. But he considers that there is a fatal objection to all such analyses, *viz.* that specifically moral approval or disapproval or a sense of obligation in acting is felt towards an act only in so far as the latter is already believed to be right or to be wrong on account of certain of its non-ethical characteristics.

Logical-positivist theories allege that ethical sentences *express* certain emotions or commands but do not have any specific *meaning*.

Ross discusses two forms of such theories, due respectively to Carnap and to Mr. Ayer. He rightly points out that they are not the results of direct reflexion on ethical facts, but are forced on their authors by their acceptance of a certain theory about the nature of significant sentences. In the main, therefore, he confines himself to criticising this general theory; but he also makes certain specific criticisms on the accounts of ethical sentences proposed by these two authors. Ethical sentences which refer to the past or to hypothetical circumstances or to the person who utters them cannot plausibly be supposed to express commands; and those ethical sentences which can be so regarded command an action on the ground of its rightness or forbid it on the ground of its wrongness.

Chapter iii is concerned with the nature of Rightness and of Obligation. The main points in it are the following: (i) Ross thinks that "right" is indefinable, whether naturalistically or non-naturalistically. (ii) An act is "obligatory" if (*a*) it is right, and (*b*) any alternative act in the circumstances would be wrong; but it must be admitted that "right", as applied to acts, is often used to mean the same as "obligatory". (iii) Strictly speaking, we ought not to use the word "obligatory" as if it stood for a property of certain acts, as, *e.g.*, the word "cruel" does. The only correct usage is to say that "so-and-so is under an obligation to act in such and such a way". (I think that what Ross has in mind here is true and important. But I think that it could be expressed in another way, *viz.* by saying that "obligatory" applies to *agibilia*, *i.e.* to possible acts, and that, when we say that a certain *agibile* is obligatory, this is a short way of saying that it ought to be enacted by some one.) (iv) Subject to this understanding, the only correct *application* of "obligatory" is to agibilia which it is in the power of a human being to enact or to refuse to enact at will. And the only correct *sense* of it is that which I have called the "deontological". (v) It is a mistake to suppose that "obligatory" applies only to agibilia which an agent has some inclination not to enact. "Duty is something that we ought to do *irrespective* of our inclination; not something that we ought to do in spite of a contrary inclination." (vi) Rightness is predicated of an act in relation to a situation and an agent, and this fact is brought out by calling it a species of fittingness or appropriateness. But its fittingness is quite unique, though it has a certain community with æsthetic fittingness.

Having decided that "right" is indefinable, Ross discusses in chapter iv the question whether ultimately all "right-making" characteristics, as I am wont to call them, can be reduced to a single one. At the beginning of the chapter all the theories which have already been dismissed as naturalistic *definitions* of "right" reappear in the new guise of accounts of the one and only right-making characteristic. Ross remarks that, whilst some of them were *prima facie* quite plausible in their former aspect, none of them are at all plausible in their latter aspect.

The various possible attitude-theories are dismissed fairly quickly, but more attention is paid to one of the causal theories, *viz.* the first half of Universalistic Ethical Hedonism, to wit the theory that being optimific is the one and only right-making characteristic. Ross argues that this proposition has no claims to be accepted unless it be self-evident, and he states that he does not find it so himself. He then adduces five objections to it. The first two are concerned with the rules for a right distribution of goods by an agent among other persons. There are certain principles which every one accepts here, and they cannot be justified on purely utilitarian grounds. The third is concerned with a similar fact about the distribution of goods by an agent between himself and others. The fourth objection is much more special, since it rests on the assumption that pleasure and pain can be equated and that they are the only intrinsic goods and evils. No doubt many utilitarians have accepted both these propositions, but they are certainly not an essential part of the doctrine which Ross is here concerned to refute. The fifth objection is that there are at least three kinds of special obligation, *viz.* to recompense those whom we have injured, to help those who have benefited us, and to keep our promises, which cannot plausibly be reduced to the single obligation of general beneficence as applied to these special kinds of situation.

Ross admits that a utilitarian might deal with the first two difficulties about distribution by distinguishing between primary and secondary goods, and holding that certain distributions of primary goods are themselves secondary goods, whilst other distributions of the same primary goods are secondary evils. He does not discuss the alternative which, I suppose, would be taken by really "tough" utilitarians, *viz.* that the only reason why those distributions which are commonly thought to be right are so is that they have greater "fecundity" than others. I do not think that this theory has the least plausibility. As regards the third difficulty about distribution, *viz.* that which concerns distribution between self and others, Ross argues that a utilitarian could not evade it by a distinction between primary and secondary goods. The fifth objection, about special obligations resting on special relationships, is elaborately discussed, so far as concerns promises, in chapter v.

Chapter v begins with a statement and an elaborate criticism of Mr. Pickard-Cambridge's strictures on the theory of *prima facie* obligations and of his utilitarian account of the ground of the obligation to keep one's promises and to return benefits. This is followed by a brief critical account of the theory of M. Katkov, a follower of Brentano, on the same subject.

Ross's own account of promise-keeping may be summarised as follows: (i) Strictly speaking, one is under an obligation only to do one's best to bring about a result which one has promised; and this is always understood by both parties. (ii) If, before the time for fulfilling the promise has come, circumstances have rendered it im-

possible for the promiser to fulfil it, it ceases to be a *prima facie* duty even to try to do so. But the changed circumstances may impose other *prima facie* obligations on the promiser. (iii) Suppose it has become much harder, but not impossible, to keep the promise. Then the *prima facie* obligation to try to do so is not diminished. But the changed circumstances may have given rise to new *prima facie* obligations, or may have increased the urgency of old ones, which conflict with that of keeping one's promise. So that the least unfitting act which the promiser can do in the new circumstances may be to break his promise. (iv) The obligation to keep a promise is annulled if the promiser has reason to believe that the promisee no longer wants the promised act done.

Ross admits that this last fact seems to support the utilitarian's contention that the ground of the obligation is the promisee's future gratification or disappointment. His answer is that we feel a different and a much weaker obligation to confer an unpromised benefit of the same amount, and that we do not consider ourselves to be released from our promises to a man when he dies, even if we do not believe in human survival. He admits that this might seem to be explicable by the persistence of a superstitious emotion in the promiser, but thinks it enough to answer that we should have a similar feeling if the promisee had merely gone abroad and was certain not to return. I doubt whether any utilitarian would need to feel much anxiety about either of these arguments as it stands.

Ross ends the chapter with the interesting remark that utilitarians have tended rather to over-estimate the disastrous consequences of promise-breaking in order to square their theory with the very strong sense of obligation which ordinary men feel in this connexion. I think that this is true; but I also think that they might have secured their object without this exaggeration if they had laid more stress on the strength of the temptation to break one's promises, and therefore on the importance, from a utilitarian point of view, of a strong superstitious taboo being attached to promise-breaking.

Chapter vi is primarily concerned with the question whether the rightness or wrongness of an act is, in part at least, dependent on the nature of the motives which influenced the agent in doing it. Ross reiterates the doctrine, already asserted in *The Right and the Good*, that there is no such dependence. He considers separately the case of an act being done because the agent believes it to be right and desires to act rightly, and the case of an act being done from some other motive. He argues that, in the first case, to make the rightness of an act depend on the agent's motive would involve a vicious infinite regress; in the second case it would involve the absurdity that the agent is under an obligation to have certain beliefs and desires and to be moved by them, although admittedly all this is completely out of the control of his will at the time when he is about to act. Finally, he argues that, if an act cannot owe its rightness to being done from the conscientious motive, which is admittedly the

highest possible one, it is most unlikely that it could owe it to being done from any other motive. These dialectical arguments are further supported by an appeal to the empirical fact that, when one is trying to decide what one ought to do in a given situation, one considers the nature of the possible alternatives, their probable consequences, and their relations to various factors in the external situation, but never the motives from which one would be acting.

As this opinion has been questioned, Ross devotes a great part of the chapter to considering the doctrines of Mr. Joseph, of Prof. Field, and of Prof. Reid, each of whom has, in one way or another, held that rightness of an act can depend on goodness of motive in doing it. Mr. Joseph's theory on this subject is part of a more general theory about the connexion between rightness and goodness, and Ross discusses the other parts also. I should be inclined to put a different interpretation from Ross's on the passage from Mr. Joseph's *Some Problems in Ethics* quoted on page 131 of the present work. But anyone who reads that passage will admit the extreme difficulty of translating it from Josephan into English.

In chapter vii Ross discusses two closely connected questions: (i) Of what kind of change can it be said, in the strictest sense, that a person ought or that he ought not to produce it? (ii) What bearing, if any, has an agent's ignorance or error about (*a*) non-ethical facts, and (*b*) ethical facts, on what he ought to do? Questions (i) and (ii, *a*) have been elaborately discussed in Prof. Prichard's lecture on "Duty and Ignorance of Fact". Ross gives a synopsis of this lecture and states that he has been converted by its arguments. The answer to question (i) is that, in the strictest sense, a person cannot be under an obligation to produce any change which is not wholly within his power. Now the only change which it is wholly within an agent's power to produce is that mental change which Prichard calls "setting oneself to perform" an action. Whether this will produce the expected overt movements of one's own body depends on conditions which are out of one's power, though they are in fact generally fulfilled. And whether these bodily movements, if they take place, will produce the intended changes in the external world depends on conditions which are not only out of the agent's power but also may easily fail to be fulfilled. Hence, strictly speaking, no one is under an obligation to make any particular bodily movement, and *a fortiori* no one is under an obligation to make any particular change in the external world. Similar remarks would apply, *mutatis mutandis*, to changes in the agent's dispositions, beliefs, emotions, etc. This argument appears to me to be quite conclusive.

Granted that nothing but "self-exertions", as Ross calls them, are obligatory on an agent, and granted that of all the alternative possible self-exertions in a given situation the agent ought to make that one which is "right", there remains an ambiguity in the latter word. In one sense of "right" the right self-exertion in a given situation is that one which *will in fact* produce the most claim-

fulfilling action open to the agent in the situation *as it actually is*. This may be called the *completely objective* sense of "right". Now the agent may be partially ignorant or partially misinformed about the nature of the situation and about the effects, direct or remote, which various alternative self-exertions will produce. There is another sense of "right" in which the right self-exertion is that which *would* produce the most claim-fulfilling action *if* it had the consequences which the agent expects it to have and *if* the situation were as he believes it to be. This might be called the *factually subjective and ethically objective* sense of "right". Ross agrees with Prichard in holding that the self-exertion which is right in the completely objective sense is *not*, as such, the one which the agent ought to make. Is the obligatory self-exertion the one which is right in the factually subjective and ethically objective sense? Ross holds that this is not necessarily the case.

The agent may be ethically ignorant and ethically mistaken. He may fail to see that some of the factors which he believes (rightly or wrongly) to be present in the situation would impose certain claims upon him. He may be mistaken about the relative urgency of the various claims which he rightly believes that the situation would impose on him if it were as he believes it to be. There is a third sense of "right" in which the right self-exertion is that which the agent, in the light of his non-ethical beliefs about the nature of the situation and the consequences of his self-exertions, and in the light of his ethical beliefs about the claims which the situation as he sees it imposes on him, *believes* will produce the most claim-fulfilling action. This may be called the *completely subjective* sense of "right". Ross holds that the self-exertion which is right in the completely subjective sense is the one which is, as such, obligatory on the agent. It may, of course, happen to coincide with the one which is right in one or other of the two remaining senses; but, if so, this is irrelevant to its being obligatory.

Ross produces various plausible reasons for accepting this view if it be a possible one. But he sees that it is *prima facie* open to the fatal objection that it seems to make being right logically dependent on being thought to be right. To this Ross makes the following answer. That self-exertion which it is right for a given individual to make at a given moment is the one which *is* most fitting to his *total* state of belief, ethical and non-ethical, at the time. What the theory asserts is that the self-exertion which has this property is the one which the agent *believes* to be most fitting to the *non-ethical part* of his total state of belief. There is nothing logically vicious in the statement that the former property is entailed by the latter. Nor is there anything very paradoxical in it when we remember that the only thing that anyone is, strictly speaking, under an obligation to do is to make a self-exertion, and that this is simply to make a certain kind of change in the state of his own mind. It is not surprising that the obligation to make a certain change in one's own state of mind

should depend entirely on the characteristics of certain other states of one's own mind.

Ross continues to hold that the moral goodness or badness of an act depends only on the nature of the agent's motive in doing it, and that being done from a sense of duty is a good-making characteristic of an act. It follows at once that an act which is made good by this motive is also a right act, in the completely subjective sense of "right". The converse does not hold, since an act which is right in this sense may be done from some other motive than the desire to do what is right as such. Lastly, an act which is rendered good by some good-making motive other than the conscientious motive may not be right in any sense of the word.

Chapter viii is concerned with epistemological questions about ethical cognition. The main points are as follows: (i) Though rightness always depends on the presence of certain right-making characteristics which entail it, it is not the case that singular judgments of rightness are always reached by inference from general principles which assert such entailments. On the contrary, the general principles must have been reached by intuitive induction from particular cases in which the compresence of rightness with certain non-ethical characteristics was directly observed. (ii) We can *know*, in regard to certain features which frequently recur in practical life, that they impose claims on us to act in certain ways. But, except within wide limits, the relative urgency of these claims is a matter of *opinion*. (iii) A person can never know what is the right act in the completely objective sense. If he is subject to several conflicting obligations, he cannot know what is the right act in the ethically objective and non-ethically subjective sense. But he can form a reasonable belief on this point. When he has done so, he *knows* what is the right act in the completely subjective sense; since he knows what his own belief is, and nothing further is needed. (iv) Since general beneficence is one of our *prima facie* duties, though not our only duty as utilitarians hold, we shall often have to make calculations about the goodness or badness of the consequences which our acts are likely to have. This leads Ross to consider the nature of goodness as a magnitude and the nature of our estimates of it.

The discussion on this last point seems to me to fall considerably below the very high level of the rest of the book. I cannot go into details, but I consider the argument on pages 180 to 183 (in which a theory of Prof. Price's is being criticised) to be curiously naïve and (for Ross) somewhat obscure. We are not told on what principle Ross claims to be ordering goods in respect of magnitude at the bottom of page 181 and the top of page 182. After struggling with this passage for a long time, I came to the conclusion that the following rule covers all the cases about which Ross says that comparison is possible and none of the cases about which he says that it is impossible on Price's theory. Let X and Y be two goods, of which at least one is an aggregate of several goods. It is assumed that no two goods in

the same aggregate are equal. Then X is certainly preferable to Y if, and only if, one or other of the following two conditions is fulfilled. *Either* (*a*) X and Y both contain the same number of goods, and, for all values of *r*, the *r*-th best good in X is better than the *r*-th best good in Y; *or* (*b*) X contains more goods than Y, and there is a part U of X such that condition (*a*) is fulfilled with U substituted for X.

The great defect is the absence of any adequate discussion of the conditions under which several co-existing goods constitute a whole which has some amount of goodness.

In chapter ix Ross deals with the psychology of moral action. An action may be started either (*a*) by one's deciding on an end and then taking means to bring it about; or (*b*) by an action being suggested to one, either by another person or by something in one's environment, whereupon one goes on to consider what effects it is likely to have. Men may be divided roughly into "Planners", and "Suggestible Persons". The former may, in particular cases, be less estimable than the latter; but it is the former who become Provosts while the latter remain Professors.

Ross gives an excellent analysis of planned action. In deliberating about alternative ends a person does consider in rough outline the means which would be necessary to attain each of them, and he does not decide to pursue a certain end unless he assumes that it could be reached by some means or other which are not too discreditable or too unpleasant. When we make a decision, what we decide is to take whatever means may be necessary to reach a certain one of the ends about which we have been deliberating. Then there follows a stage of more detailed reflexion about alternative means to the chosen end. At this stage we have to consider and compare a number of alternative causal chains, each starting from a possible self-exertion and terminating with the attainment of the chosen end. Each link in any such chain has to be appraised in respect of (*a*) its efficacy as a causal ancestor of the chosen end, (*b*) its intrinsic attractiveness or repulsiveness, (*c*) the likelihood of its being a causal descendant of any self-exertion that we can make, and (*d*) the attractiveness or repulsiveness of its causal ancestors and its causal descendants. Finally, there comes the act of self-exertion which brings into being the first link in the chosen means to the chosen end. This is always different from the act of decision, and it may not begin until long after the latter has happened.

The chapter ends with a discussion of conscientious action, in which Ross expresses his dissent from Kant's view that such action is not caused by desire but by a special kind of emotion. This view of Kant's arose from his holding an unreasonably narrow and depreciatory opinion about desire.

The tenth chapter deals with indeterminacy and indeterminism. It opens with a discussion of indeterminacy in physics, and introduces a refreshing breeze of good sense into a region in which

eminent scientists, with a taste for philosophy and no training or aptitude for it, have talked great nonsense whilst the public have "wondered with a foolish face of praise". Ross regards the law of universal causation as self-evident; and rightly insists that the only question here that concerns philosophy is whether this is so or not, and that no discoveries in practical or theoretical physics have the slightest bearing on it. Now the law of causation is a proposition about events, *as such*, and not about physical, as opposed to mental, events. Moreover, acts of decision and of self-exertion, however peculiar they may be in other respects, are events. Therefore Ross consistently accepts determinism about human voluntary action. Whether we accept Ross's view of the law of universal causation or not, I think that there can be no doubt (*a*) that there is a very strong *prima facie* case for it; (*b*) that, if it be accepted, his conclusion about determinism in human voluntary action follows; and (*c*) that, except as a consequence of this *a priori* premise, such determinism is not plausible enough to be worth serious discussion.

The rest of the chapter discusses the *prima facie* objections to determinism based on the alleged intuition of freedom and on the contention that certain ethical facts entail freedom. The discussion is excellent, but the subject is a hackneyed one, and I decline to pander to sadistic readers by presenting them with the spectacle of Ross flogging these moribund asses.

We revert to more wholesome pleasures in chapters xi and xii, which are concerned with the nature of goodness in general and of moral goodness. These contain much the best discussion of this subject that I know of. The results may be summed up as follows:—

(i) The word "good", in a non-instrumental sense, is commonly applied to (*a*) certain moral volitions, emotions, actions, dispositions, and characters, *viz.* to such as would be called "benevolent", "conscientious", "courageous", and so on; (*b*) certain intellectual and æsthetic dispositions and actions and characters, *viz.* to such as would be called "*intelligent*", "*æsthetically creative*", and so on; and (*c*) to pleasures. The question is whether the word "good" has the same meaning in these various applications. (ii) Ross holds that, in applications (*a*) and (*b*), being good entails and is entailed by being a *fitting* object of *admiration*. (iii) This shows that "good", in this sense, does not apply to pleasure; for it is obvious that no one thinks it appropriate to *admire* a pleasant sensation, as he feels it appropriate to admire a benevolent action or a process of cogent reasoning. (iv) In the case of pleasure a distinction must be drawn between a person's own pleasures and those of others. *Other* men's pleasures are, as such, fitting objects of *sympathetic satisfaction* to anyone, provided that they are morally innocent. And this is what is meant by calling them "good". But a man's own pleasures cannot, even when they are innocent, be called "good" by him, even in this sense. (v) When a person calls his own pleasures "good" he is not ascribing any characteristics

to them. He is merely expressing a " pro-attitude " towards them. (vi) In all three applications the use of the word " good " expresses a pro-attitude towards the object to which it is applied, and this is the only feature common to all three. (vii) Anything that is a fitting object of admiration, and therefore good in the first sense, is also a fitting object of sympathetic satisfaction to another person, and therefore good in the second sense. But the converse does not hold. (viii) Goodness, in the second sense, is a relational property; but it is not a naturalistic one, since fittingness is not so. (ix) " Good ", in the first sense, does not *mean* the same as " fit to be admired ", any more than " being equilaterally triangular " means the same as " being equiangularly triangular ". For the sense in which " admiration " is here used is such that to admire anything means to feel a certain kind of emotion towards it which can be felt only in respect of the supposed *goodness* of the object. " Good ", in this sense, is the name of a non-natural quality, whose supposed presence in an object makes us admire it, and whose actual presence is necessary and sufficient to make it a fit object of admiration.

I am sure that Ross is right in refusing to admit that pleasure is good in the sense in which virtue and intelligence are so; and I am sure that he is right in distinguishing a man's own pleasures and those of others in respect of goodness. But I feel less confident about some of the details. It seems to me, in the first place, that, on Ross's theory, each man would have a *prima facie* obligation to give himself as many innocent pleasures as possible, since each of them would be a good (in the second sense) for every one but himself even if no one else happened to know about them or to feel sympathetic satisfaction in contemplating them. Yet I understand Ross to hold that no one has any obligation to give himself pleasures, and this is certainly in accordance with common sense. Again, I am not greatly impressed by the argument to show that " good ", in the first sense, is the name of a non-naturalistic quality. I should have thought that the following account of the facts would be about equally plausible. Admiration, in the sense required, is an emotion which is appropriate to the presence of any one of a large number of natural characteristics, such as courageousness, truthfulness, etc. " To be good ", in the first sense, simply means " to have one or other of the natural characteristics which make an object fit to be admired ". And so each of these natural characteristics counts as a good-making characteristic. I cannot see the need to have both a non-natural quality of goodness, grounded on these various natural characteristics, and a non-natural relation of fittingness grounded on this non-natural quality.

Chapter xi ends with a discussion of what Herr N. Hartmann calls " *Sachverhaltswerten* ". These are goods which are not events in or dispositions of persons but are states of affairs involving certain relations between persons. It has been suggested that utilitarianism might be saved by the recognition of such goods. Ross takes the

view that these states of affairs are good in the sense in which other men's pleasures are so, *viz.* that they are fitting objects of sympathetic satisfaction to anyone who contemplates them. But he holds that some at least of them fulfil this condition only because they are fulfilments of a pre-existing obligation, *e.g.* a promise. In such cases the rightness of the act which brings the state of affairs into being cannot be derived from the goodness of the state of affairs.

In chapter xii, on Moral Goodness, Ross considers first the bearers of moral goodness, and decides that these are (i) voluntary actions proceeding from certain motives, (ii) desires which would lead to such actions if not prevented by other causes, (iii) certain emotions, (iv) habits and dispositions to do good voluntary actions and experience good desires and emotions, and (v) character, in so far as the various good factors in it are present in intensities commensurate with their goodness.

Next Ross criticises Butler's account of particular propensities, and decides that in most cases we desire activities, such as eating, not for themselves, but because we have found them to be pleasure-giving or pain-relieving and expect them to be so again in future.

He then gives a list of fourteen important kinds of possible motive, consisting of seven pairs ; each pair consisting of a highly restricted and a highly generalised motive of the same kind, *e.g.* desire that a certain person's character may be corrupted in a certain respect and desire for the general corruption of all rational beings. Certain of these motives are devilish and not human, others occur only in a few exceptionally bad or exceptionally mad human beings, but most of them are present in some degree in all normal men. Ross then arranges the non-devilish motives in a moral hierarchy, ranging from desire to corrupt another man's character, at the depth of human badness, to the desire to do on all occasions that act which is most fitting on the whole, at the height of human goodness. Finally, he discusses mixture of motives, and draws the essential distinction between the case where admixture of a lower motive was *necessary* to ensure the doing of a certain action and the case where such a motive, though present and co-operating, was causally superfluous. He points out that the goodness or badness of an action is not determined wholly by the agent's motive *for* doing it. This may be neutral or good, and yet the action may be bad. We have to take into account also the wrong-making factors in the action, which the agent noticed and by which he was not enough repelled, and the right-making factors in alternative actions, which he noticed and by which he was not enough attracted.

The book ends with an admirable summary of the preceding argument. In the last two pages the Provost relieves the Gifford Trustees from all imputation of breach of trust by referring in civil terms to his Creator.

Philosophical writing, at the present time, is in rather an unfortunate state. Those who can think clearly and write lucidly are

mostly Logical Positivists, assiduously occupied in taking in each other's poverty-stricken washing; whilst those who are concerned with matters of human interest and importance are too often confused or crazy. It is therefore an immense pleasure to read a book like these Gifford Lectures of Ross's, in which good sense and acuteness and clarity, commonly lavished on trivial straw-chopping, are devoted to elucidating questions of perennial significance. I hope that generations of undergraduates, in the intervals between making the world safer and safer for democracy, will come to know and appreciate this book under the affectionate and accurate nickname of "*The Righter and the Better*".

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Die gegenwärtige Lage in der mathematischen Grundlagenforschung. Neue Fassung des Widerspruchsfreiheitbeweises für die reine Zahlentheorie. (Forschungen zur Logik, etc., Neue Folge, Heft 4.) By GERHARD GENTZEN. Leipzig: S. Hirzel, 1938. Pp. 44. M. 2.20.

Grundlagen der Mathematik, Bd. II. By D. HILBERT and P. BERNAYS. Berlin: J. Springer, 1939. Pp. xii + 498. M. 43.80.

BOTH of these books on the foundations of mathematics are written from the formalist standpoint. 'Book', however, is a misleading word to apply to Dr. Gentzen's survey *cum* specimen of original research. Philosophers will find more of direct interest in the report on the present state of research in this subject which fills the first thirteen pages of the pamphlet. Here a tremendous range of topics is taken at the gallop; the mathematical paradoxes, the mathematical notion of infinity, the relations between the various schools of research in the foundations of mathematics, interpretations of some of the more remarkable theorems and some comments on the use of non-finite methods in formalist proofs make a breathless and tantalisingly brief appearance. While the ground covered coincides very nearly with the second chapter of Heyting's useful report, which appeared in 1934 (*Mathematische Grundlagenforschung, Intuitionismus, Beweistheorie*), the later pamphlet, for all its compression, contains a few novelties of emphasis. It is interesting, for example, to find attention drawn to the importance of Skolem's theorem, according to which "Wenn zu einem Axiomensystem von bestimmter Art überhaupt ein Modell, beliebig hoher Mächtigkeit, existiert, so existiert auch bereits ein abzählbares Modell, welches das Axiomensystem erfüllt" (p. 11). [There is no mention of this theorem in Heyting; Hilbert and Bernays, whose book will be henceforward quoted as '*G.M.*', attribute priority to Löwenheim (1915), and state that the result was used by Skolem himself in 1920, two years earlier than the date quoted by Gentzen (*cf. G.M.*, 2, 182-183).] That *every* system of axioms can be satisfied by a denumerable (*abzählbar*) set of objects,