

The whole system of the philosophy, with the Logic as implying it and implied in it, is a construction of wonderful ingenuity and much insight. The Logic seems to me beyond criticism in so far as it stands on the unity of reality and the existential character of the judgment. Only, although philosophy is indeed no more than the full interpretation of facts, yet this has many grades and aspects, and the fact given to perception is itself a very different thing from the underlying subject in which a complex of data is unified for inference, or the ultimate subject, for example, of a categorical judgment which does not deal with events. And so my final feeling is that Croce has achieved a successful and instructive adventure in welding together the extreme poles of the logical world, but that he has dropped out the systematic structure of the whole which lies between them, and consequently has left them, though attached to the same axis, yet irreducibly unreconciled with one another.

BERNARD BOSANQUET.

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*Mysticism and Logic, and Other Essays.* By BERTRAND RUSSELL.  
M.A., F.R.S. Longmans, Green & Co. Pp. viii, 234.

THE essays in this collection have all appeared before either in journals or in published books, and several of them have been already reviewed in MIND on their original appearance. But some of them were difficult to procure; and Mr. Russell's *Philosophical Essays*, which contained several, is now out of print, and by some mistake, I believe, was never noticed in MIND. No excuse therefore is needed by Mr. Russell for republication, or by us for reviewing.

The book consists of ten essays of which the first five (*Mysticism and Logic, The Place of Science in a Liberal Education, A Free Man's Worship, The Study of Mathematics, and Mathematics and the Metaphysicians*) are comparatively popular, whilst the remainder (*Scientific Method in Philosophy, The Ultimate Constituents of Matter, The Relation of Sense-data to Physics, The Notion of Cause, and Knowledge by Acquaintance and Knowledge by Description*) are more technical. The essays on mathematical subjects have been brought up to date by additional notes; but Mr. Russell remarks in the preface that he is now less convinced than formerly of the objectivity of good and evil, and it is uncertain how far this change of view should modify the essays which deal with ethical questions.

I think it is fair to say that the keynote of the earlier papers is the demand for 'ethical neutrality' in philosophy. This is the pursuit of our investigations without reference to hopes and fears as to the destiny of ourselves or of our race. Ethical neutrality has been obtained in most branches of science (though I think we must

except some physiological and biological speculations), but it has hardly been reached by philosophers. I agree entirely with Mr. Russell about the importance and the rareness of ethical neutrality in philosophy. Our hopes, fears, and judgments of value (even supposing the latter to deal with a characteristic of things as objective as redness or squareness) seem to me to be only relevant in philosophy in one rather roundabout way. The way is this. Among the facts that the ethically neutral philosopher has to recognise is the somewhat strange one that the process of evolution has produced people with hopes and fears, and with the power of ignoring them and acting and speculating disinterestedly. Now this fact *may* be perfectly compatible with such a view of the universe as is held to be almost certainly true in the *Free Man's Worship*. On the other hand, it is by no means obvious to me that it is compatible with such a view. The philosopher who lacks ethical neutrality immediately jumps at this difficulty and fills in the gap in his knowledge with a more comfortable hypothesis than the mechanical theory. But an ethically neutral thinker, recognising that there is not the slightest necessity for causes to resemble their effects, will, I think, refuse to do this. The effect on him of considering those facts which Mr. Russell somewhat ignores in the *Free Man's Worship* will simply be to reduce his confidence in the adequacy of the mechanical theory; he will, however, frankly admit his ignorance at present as to how it ought to be modified or supplemented, and will not assume that the modification must be in accordance with our hopes or our judgments of what is good. As against every form, from the crudest to the subtlest, of what is called Ethical Idealism, I believe Mr. Russell to be absolutely right. Every such system involves at some point the logical fallacy of passing from what ought to be to what is; and the state of mind which makes a man slur over this fallacy seems to me a detestable intellectual vice whose effects will not be confined to his philosophy.

I must add, however, that, so far as I can see, it is not a breach of ethical neutrality for a philosopher or physiologist to introduce at some point the hypothesis that certain processes in nature are more akin to mind than a mere study of chemistry and physics would suggest. Mr. Russell seems to hold that the motive of such a thinker is always to make the universe more 'homely'. But mind, on the face of it, is a *vera causa* among others; and some processes in the evolution of species and even in the growth and adaptation of living bodies have a very strong appearance of something like human design. To take, purely as an hypothesis, the view that they really are due to something like mind is as scientific as to suppose that light is due to something like waves in the sea. The main objection to the hypothesis is not that it is assumed to flatter our hopes, but that it is so difficult to state it clearly and work out its consequences in detail that it can hardly be verified, refuted, or modified by experience.

Mr. Russell evidently sets great store by the essay on *A Free*

*Man's Worship.* I think we must admit that, even though the mechanical theory, which it assumes, needs modification, no modification will make the world a decent place unless it allows that some people at any rate survive the death of their bodies. Unless this be so all values produced on earth are destined to extinction sooner or later. Now I am quite sure that philosophy has nothing whatever to tell us about survival except by the illegitimate process of postulating that what would be very bad cannot be true. So, in the main, I am inclined to think that Mr. Russell's pessimism remains the most probable view, though I am slightly less certain than he for two reasons: (a) that I think it highly probable that the mechanical theory is not the whole truth, and do not know how much modification it may need: and (b) that, whilst fully recognising the almost insuperable difficulties, I think it possible that the progress of Psychical Research (which appears to me to be the only way of dealing scientifically with the question of survival) may necessitate a modification of that view about human destiny which is almost forced on us by most of the other sciences when taken by themselves. (I must add that with survival the world might be worse than without it, a fact which enthusiastic believers in immortality sometimes forget. On the mechanical theory we know the worst and can avoid it by suicide. But if we survive bodily death we may be doomed to become continually more wicked, stupid, and wretched, and yet be indestructible. Survival in fact is a *necessary*, but not a *sufficient* condition of decency in the universe. The alleged communications of the departed certainly do not suggest on the whole that they have improved in intellect or virtue. Hence things may be even worse than Russell suggests.)

So much then for the facts which the Free Man has to recognise; what of the attitude which Mr. Russell advises him to take up? Negatively, he is not to think that external nature or human institutions are better than they appear because they are stronger than he and can hurt his body. This is excellent advice against the cosmic snobbery of the nature-worshipper, and the political snobbery of the worshippers of our 'new idol' as Nietzsche termed the state. Again, Mr. Russell strongly insists, the Free Man will not spend his time shaking his fist at the universe, for this attitude of indignation is itself a kind of slavery. (We might add that to feel moral indignation at the inanimate world is ridiculous, since it is not susceptible of moral predicates, whilst to shake one's fist at God is a consolation which Mr. Russell's Free Man—in spite of the drama with which the essay begins—could not consistently enjoy.) When we come, however, to Mr. Russell's positive directions to the Free Man, I fail to see how they are connected with each other, or with the Free Man's view of the nature of reality. He is advised to moderate his desires for particular objects, to accept the indifference of nature to his ideals and 'turn his necessity to glorious gain' by viewing the life of man as a sublime and beautiful tragedy, and to be uniformly kind to others and not to judge them harshly.

The first and last of these maxims seem to me obviously sound, but to have very little connexion with the Free Man's views on human origin and destiny. No special view of the universe is needed to enable us to see that most things which most men and nations struggle to get are not worth crossing the road for. We have merely to observe that the people who do get them are not satisfied, and in general we could easily foresee that they would not be satisfied. Again, it is clearly my duty to be kind and helpful and not to judge harshly; but why is it *specially* my duty to be kind and tolerant to people when I know that they and I are the temporary results of a clash of atoms? You might perhaps say that a man will naturally be less inclined to judge his fellows harshly on this view because it is hardly reasonable to expect much of beings with such an origin and destiny as theirs. But this, I think, is a fallacy. What may reasonably be expected of people can only be determined from an empirical investigation of how people on the average act. If a clash of atoms can produce consciousness and moral action at all our utter ignorance of the details of the process precludes us from arguing deductively to a law rather than a high average of moral achievement. Hence the knowledge that Smith is the transitory result of a fortuitous concourse of atoms provides no special reason for excusing him if his actions fall below the average level attained by the consequents of other such concourses. The Free Man will of course be unwise to lose his temper with Smith, for this is slavery; but it would equally be slavery if Smith were an immortal spirit.

If nature be indifferent to our ideals we shall of course do well to accept the fact and make the best of it. But I fail to see how the long and foredoomed struggle of the human race against cold and the exhaustion of raw materials can give æsthetic satisfaction as a tragedy even to the most impartial spectator; at any rate I should think that the last few million acts will be merely dull and depressing. I doubt if a good tragedy could be made out of the struggles of starving sailors on a derelict ship. In fact a process may be painful and humanly disastrous without being in the artistic sense a tragedy, as when a workman falls into a vat of boiling nitric acid. It seems to me that to make a genuine tragedy we need a selection of incidents between man and man, not the whole course of man's struggle with nature. Is the Free Man allowed to select, or is he to contemplate so far as possible the whole process? Again is he supposed to remember in general his view of man and nature as a whole or only its pessimistic consequences? If the former, there will surely be no question of tragedy but only of the interplay of atoms according to natural laws. If the latter why stop at this amount of inconsistency, when it would be more cheerful to do as most scientists do, and forget both the theory and the consequences?

The essay which gives its title to the book is an attempt to estimate the functions of mystical insight and of detailed scientific investigation in the establishment of philosophical systems. Mr.

Russell thinks that both are necessary. According to him the main characteristics of mysticism are: (1) a belief in direct insight as against detailed analysis; (2) a denial of plurality; (3) a denial of the reality of time; (4) the belief that evil is in some sense an illusion. Mr. Russell holds that most probably mystical doctrines are invented afterwards to explain the feeling peculiar to the mystical experience. As doctrines he is inclined to think that they are mainly false, but that all contain a germ of truth which it is most important not to neglect. The first is right in so far as the function of reason is merely to mediate between intuitions. It is wrong when some special kind of intuition is held to give a revelation which is to be trusted apart from all criticism and comparison with other intuitions. There is here some excellent criticism of Bergson which appears in the *Lowell Lectures*. The denial of plurality, Mr. Russell regards as responsible for the logic of absolute idealism, and he holds that its origin in mysticism explains its total inability to deal with any of the other facts of life and science.

The denial of the reality of time is false as applied to the relation of before and after, but it is valuable as a criticism of the purely human insistence on the distinction between past, present, and future, a distinction which is of no importance to the universe at large, but depends on the fact that our desires work forwards (and, I would add, that our memories work backwards). As regards the fourth point, mysticism generally uses good in two senses; there is a purely human sense in which it has an opposite, but both predicates are within the realm of appearance, and there is another sense in which it has no opposite. In this sense it applies to reality alone, and to it as a whole. Mr. Russell seems in the main to accept this view, and to regard it as a valuable protest against using ethical arguments on philosophical questions. Running through these essays there seem to me to be three questions about good and evil which are not very clearly distinguished: (1) Are good and evil merely subjective? (The preface suggests that this is so.) (2) Is anyone sufficiently free from bias to be a fair judge of better and worse? (The story of the pigs and the Grand Augur in Essay VI., and the doubt as to whether amoebæ would consider that the course of evolution had been upward or downward are here in point.) (3) Are good and evil sufficiently fundamental categories to be dealt with by philosophy? (The argument that love and hatred are very similar types of complex from the philosophical point of view in spite of their entirely opposite ethical character seems to be concerned with this question.) It is clear that (2) and (3) might be answered negatively without necessitating an affirmative answer to (1), whilst the affirmation of (1) involves the denial of (3) and the irrelevance of (2). As regards (3) I seem to detect yet another possible confusion. We must distinguish between the properties of good as an abstract characteristic and the properties (if any) other than goodness which are common and peculiar to good things. The argument about love and hate

only proves that a good thing and a bad thing may be very similar in their other properties. It does not have any tendency to show that there might not be a science of pure ethics dealing simply with goodness in the abstract. At present such a science seems likely to be 'short and dry' as Kant said of formal logic; but we may be as mistaken here as Kant has proved to be there.

The rest of the 'popular' essays call for no special comment, and I pass to the more technical ones. The Herbert Spencer Lecture on *Scientific Method in Philosophy* has already been reviewed in MIND by Dr. Schiller. With its plea for ethical neutrality, patient analysis, and logical construction as the only hopeful method in philosophy I entirely agree, and the examples about space and the reality of the external world are completely opposite to Mr. Russell's thesis. The essay on the *Notion of Cause* was reviewed in this journal by me when it appeared in the Aristotelian Society's *Proceedings* for 1912-13. Essay VII. on the *Ultimate Constituents of Matter* is a very important one in connexion with Russell's views about physical objects which will be familiar to most readers of MIND from the *Lowell Lectures*.

In Russell's view the chief difficulties of realism in regard to the external world spring from three sources: (a) the belief that physical objects must be persistent; (b) the belief that space has only three dimensions; (c) the belief that an event can only have one cause. These beliefs create difficulties even after the more obvious confusions such as that between sense-data and sensations have been removed. For Russell the world consists of (i) minds; (ii) a six-dimensional manifold of sensibilia, each of which has probably only a very short duration. Most of these sensibilia have no direct spatial or temporal relations (such as exist between the sense-data cognised by a single mind) to each other. But most of them can be classified consistently according to two different schemes. (i) We can classify them into groups such that the members of any given group have direct temporal relations to each other, though members of the different groups have no direct temporal relations. Such groups are called 'biographies'. All the sense-data cognised by a single mind form a biography, but there are doubtless similar groups of sensibilia cognised by no one. The latter, Russell, with some humour, terms 'official biographies'. (ii) The other method is to classify together all sensibilia which are related by certain relations of similarity and continuity. These groups are what are meant by 'things,' their members are the 'states of things'. Sensibilia do not depend for their existence or nature on minds, but the members of one group may vary with those of another and particularly with those of the group which constitutes a human body. It is possible that some sensibilia (e.g., dreams, etc.) are 'wild', i.e., are members of a biography but are not members of a thing. By a logical construction we can regard groups of the second kind as being in a single three dimensional space with constructed spatial relations. This seems to me to be about the most hopeful theory

that I have yet seen about the physical world. No doubt it bristles with difficulties of detail, but I do not see why they should be insuperable. *E.g.*, I suppose the distinction between what would ordinarily be called an objective change—as where a thing breaks in two—and a subjective one—as where we push our eye aside and double our sense-data would be explained somewhat as follows. In an objective change there is a change in practically all the members of the thing, and therefore in practically all the biographies which contain members of the thing. In a subjective change only that member of the thing which is in a single biography changes. I do not see clearly at present how the theory is going to deal with mental images. These do not seem to be ordinary 'wild' sensibilia, for there seems to be a clear difference open to inspection between images and sense-data. I am indeed strongly inclined to think that my visual images are not in the same private space as my visual sense-data, and that even the colours and loudnesses of my images are not directly comparable with those of my sense-data. *E.g.*, I can hear a whistle and have an image of the sound, but it does not seem to me that the image and the sense-datum are at the same point in a single scale of loudness, but rather that they occupy correlated positions in two entirely separate scales. There is again the fact to be noted that I cannot have an image of a colour unless I have previously sensed either the same (or, on my view, the correlated) colour. This seems curious if images be not in some way mind-dependent, though of course it might be put in a form which only makes the image dependent on my body and my past sense-data.

The next essay on the *Relation of Sense-Data to Physics* is earlier in publication than the one just discussed, and we need not consider it in detail. I will therefore conclude with a few remarks on *Knowledge by Acquaintance and Knowledge by Description*. Mr. Russell says that he recognises, owing to Mr. Wittgenstein's criticism, that his theory of judgment needs some modification, but that the changes needed are not serious. I have not, unfortunately, had an opportunity of talking to Mr. Russell for the last three years or so, and therefore I do not know precisely what Wittgenstein's criticisms and the consequent modifications may be. But I will risk the following criticisms even though they prove to be quite out of date. It seems to me that Russell's theory of judgment, as offered, will only apply to judgments where we are acquainted with all the terms which the judgment verbally professes to be about. In my judgment that  $3 > 2$  it is plausible to hold that what exists is a complex which I will write  $J(M, 3, >, 2)$ . Here  $M$  stands for my mind and  $J$  for the relation of judging. But now take my judgment that Julius Cæsar was assassinated, and suppose that I only knew Julius Cæsar by the description 'the man who was called *Julius Cæsar*'. The proposition that I judge, on Russell's analysis, becomes:—

$(\exists b) : x \text{ is called } \textit{Julius Cæsar} . \equiv_x . x = b : b \text{ was assassinated.}$



Now on Russell's theory I must be acquainted with every term in my judgment. What then are the terms in my judgment when I judge that Cæsar was assassinated? The only ones that I can see are *Julius Cæsar*, calling, formal equivalence, identity, and assassination. It can hardly be said that  $x$  and  $b$  are terms with which I am acquainted, since they are variables and apparent ones at that. Again the terms which the relation of formal equivalence relates are none of the terms which I have mentioned, but are propositional functions taken as wholes and having these terms as constituents. It would seem then that propositional functions must be able to enter as wholes into the judgment complex, and that they cannot enter as separate terms and a non-relating relation as 3, >, and 2 enter into  $J(M, 3, >, 2)$  on Russell's view. We must then, I should suppose, be capable of being acquainted with propositional functions as well as with terms of the more ordinary kind. Further, for any complete theory of judgments ostensibly about objects known only by description we must know how the incomplete symbol  $(\exists b) \dots$  is going to figure in the judgment complex. If Russell's theory of descriptions is to answer its purpose we must be able to know that  $(\exists b) \cdot \phi b$  without having to be acquainted with anything that actually does satisfy  $\phi b$ . Until these points are settled in detail it can hardly be said that the theory of judgment throws any light on judgments ostensibly about objects known only by description. And these are of course the commonest and most interesting kind of judgment.

There is just one other remark that I wish to make about descriptions. All descriptive propositions involve a formal equivalence of the kind  $\phi x \equiv, x = b$ . This equivalence is never or hardly ever guaranteed by logic. Logic will not assure us that  $x$  is called *Julius Cæsar*.  $\equiv, x = b$ , as it will assure us, e.g., that

$$a(\beta \cdot x \in a.)_{x, a, \beta} \cdot x \in \beta.$$

Now it seems to me very unfortunate that the same name—formal implications or equivalence—should be used to cover what are surely quite different relations. Nor is this difference merely a psychological or epistemological difference in the way in which we get to know the same kind of logical fact. For the one kind of implication depends on the logical structure of the related terms, whilst the other does not. This is no objection to the theory of descriptions, but that theory does seem to me to force the distinction, which of course occurs in numberless other places, specially on our notice.

I have harped in this review mainly on points of disagreement. This should not hide the fact that I am wholly in agreement with Mr. Russell's general attitude towards life and philosophy, and with his philosophical method. I only refrain from praise because praise from me to him would be impertinent. Those who agree with me in thinking that the Free Man can extract from the evils of human life a subtle comedy as well as a sublime tragedy will derive ex-



quisite entertainment from reading this book and noting its spirit, and then reflecting that the author was recently lectured publicly on elementary morality by a complacent spiritual descendant of the late Mr. Nupkins.

C. D. BROAD.

*Perception, Physics, and Reality ; an Enquiry into the Information that Physical Science can Supply about the Real.* By C. D. BROAD, M.A., Fellow of Trinity College, Cambridge. Cambridge, University Press, 1914. Pp. xii, 388.

THIS book has a peculiar and unusual quality, in virtue of which it serves a purpose analogous to that which examiners are supposed to serve in education. It does not advance any fundamental novelties of its own, but it appraises, with extraordinary justice and impartiality and discrimination, the arguments that have been advanced by others on the topics with which it deals. Mr. G. E. Moore's *Refutation of Idealism* is awarded an Alpha-minus (cf. p. 177 n.); the rest of us receive such betas and gammas as we deserve, except Locke, who I think may be said to be ploughed.

Locke is the chief victim in the first chapter, "on the arguments against naïf realism independent of the causal theory of perception". There is a long discussion of Locke's two hands in lukewarm water, ending, apparently, with the conclusion that whatever *prima facie* case this experiment may seem to establish against realism can be avoided through the assumption that hands are warmed by being put in cold water and cooled by being put in hot water, or through various other less plausible assumptions.

Mr. Broad's general attitude is that of one who wishes to defend realism, but finds the task difficult. As he proceeds, the arguments against realism grow more and more formidable. At the end, he is left with only a certain degree of probability in favour of a view which is only a pale shadow of the robust realism of common sense. Accepting from Mr. Moore the importance of distinguishing between a perception and its immediate object, the problem for Mr. Broad is as to the relation of this immediate object to the 'real' in the physical world. His definition of 'real' is to be gathered from the following passage: "Whatever else may or may not exist, it is quite certain that what we perceive exists and has the qualities that it is perceived to have. The worst that can be said of it is that it is not also *real*, i.e. that it does not exist when it is not the object of someone's perception" (p. 3). That is to say, the 'real' is what does not exist only when it is perceived. Much might be said in criticism of this definition, but it is at any rate clear and definite. He formulates two questions immediately after giving this definition, namely (a) do objects of perception themselves continue to exist at times when they are not perceived? and (b) do things exist which are not perceived but are inferrible from