

(I) *Some Personal Impressions of Russell as a Philosopher*

The Editor has asked me to preface my contribution with a brief account of what I believe myself to owe, in philosophic matters, to Lord Russell personally and to his writings. I am very glad to have this opportunity to express, however inadequately, my sense of obligation and my feeling of gratitude to Russell for all that he has done for me.

I came up to Trinity College, Cambridge, as a freshman from Dulwich, in October 1906, and spent my first two academic years working for Part I of the Natural Sciences Tripos. During that period my interest in philosophy and my certainty that I should never be a first-rate natural scientist were steadily growing, and I decided to switch over to Moral Science (as philosophy is called in Cambridge), and to spend the next two years working for Part II of the Moral Sciences Tripos.

That decision was not due to any personal influence of Russell's, for he was away from Cambridge during my time as an undergraduate (1906 to 1909). He had gained a Fellowship at Trinity under the then 'Title (α)' in the election of 1895. The Fellowship expired in 1901 after the normal period of six years. It imposed no obligation either of research or of residence; and Russell had already left Cambridge in 1894 and was engaged in various external activities during his tenure of it, as was very usual at that time. But I had, while still at Dulwich, heard of Russell and become interested in one of his books. It happened that my mathematical master, the late Mr F. W. Russell (no relative of Lord Russell's, but a former member of Trinity College) had bought and read Vol. I of *The Principles of Mathematics*, which was published in 1903. Knowing that I was interested in philosophy, he gave me his copy in 1905, and I then tried to read it. Much of it was, of course, wholly beyond me at the time; but I was excited by the parts which I thought I could understand, and, when I came up to Trinity, I found that it was being eagerly discussed by many intelligent undergraduates, and by some brilliant younger Fellows, such as G. H. Hardy.

The prevalent type of philosophy in the universities of Great

Britain and the USA, was a form of Absolute Idealism. Its most important representatives in England were Bradley and Bosanquet, and in the USA Royce. Bradley's *Appearance and Reality*, first published in 1892, was still, and remained for some years later, the centre around which most philosophical discussion turned. Cambridge, indeed, had always been rather aloof from the current orthodoxy of Oxford and the Scottish universities. Sidgwick had been a severe critic of T. H. Green and of Absolute Idealism in general. Ward, though a mentalist and an admirer of Kant, was a pluralist and a theist, and much more akin to Leibniz than to Hegel. McTaggart, far the most brilliant of the Cambridge philosophers of that period, did indeed count himself as a Hegelian; but his interpretation of Hegel was peculiar to himself, and made orthodox Absolute Idealists blush all over. Nevertheless, Bradley and Bosanquet were names to conjure with even in Cambridge. Russell's first philosophical book, *The Foundations of Geometry* (1897) is dedicated with gratitude to McTaggart. The Preface acknowledges the author's chief debt in Logic to Bradley, and an only slightly lesser debt to Bosanquet; and the theory of Space developed and defended in the book is essentially Kantian.

I had been given Bradley's *Appearance and Reality* as a Christmas present by my parents in 1905, and had read it with the fascination and excitement which it is so well fitted to produce in any intelligent young man interested in philosophy. I had also struggled with Kant's *Critique of Pure Reason*, and had been immensely impressed by the little that I understood and the much which I could not understand. So I arrived in Cambridge in October 1906 in the philosophical condition of an enthusiastic but woolly Idealist.

By that time the influence of G. E. Moore and, through him, of Russell, had become predominant among the younger men who were interested in philosophy. Moore, two years junior academically to Russell, had been attracted to philosophy by the latter. He had been elected to a Fellowship at Trinity in 1898, had published *Principia Ethica* in 1903, and had left Cambridge in the following year. He had converted Russell from the Idealism of the *Foundations of Geometry* period to the rather naïve Realism and Pluralism of *Principles of Mathematics*, Vol. I. That was not destined to be a permanent resting-place for either of them; but, owing to the immense influence which these two great men exercised, both through their intellect and their personality, on their contemporaries and their juniors, it was the latest word in philosophical up-to-dateness in the circles into which I now entered.

The reactions of clever young men, following able and inspiring

leaders, in an exciting attack on the orthodoxy of their immediate predecessors, are inevitably accompanied by a pleasant glow of intellectual contempt and *quasi*-moral indignation. We felt this strongly about such old fogies as Bradley and Bosanquet, to whom we must have appeared insufferably uppish and superficial; and we were no doubt often highly deficient in understanding and appreciation of what they had taught and of their reasons for it. When one has become an old foggy oneself, and is exposed to similar treatment by one's clever and scornful and terribly earnest juniors, it is amusing and wholesome to recognize in them oneself and one's friends of fifty to sixty years ago. It is not given to any of us to see 'ourselves as others see us', but it is possible and often salutary to see ourselves as we saw others. And most entertaining of all is to watch the swift inevitable decline, by which those who have been in the van of philosophical progress gradually become the last word but two, and end with what Oscar Wilde called 'a great future behind them'.

Allowing for all this, it still seems to me that the criticisms of Moore and of Russell in the early years of this century did explode for good and all most of the dialectical *arguments* against the reality of Matter, Space, Time, Causality, Relations, etc., which are deployed in Book I of *Appearance and Reality* and were very widely accepted by extremely able philosophers. It may well be that there was something true and important in what the Absolute Idealists were arguing for, and it is not impossible that better arguments might be devised in support of it. (Bradley, who said that 'Metaphysics is the finding of bad reasons for what we believe upon instinct, but to find these reasons is no less an instinct', might justifiably feel that his withers were not much wrung.) But it *was* a great intellectual relief to have these rubbishy fallacious arguments finally dismissed.

In 1910 a special lectureship in Logic and Philosophy was created for Russell in Trinity College, and he returned in the October of that year to the College as Lecturer and member of the High Table, and with the right to rooms in College, though without a Fellowship. I had taken Part II of the Moral Sciences Tripos in May 1910, and had begun working on a dissertation to be submitted in the Fellowship competition of September 1911. Russell took up his Lectureship in October 1910. It was then that I first met him, and it was immediately after that that I saw most of him and was most influenced by him.

Principia Mathematica Vol. I came out in that year, and Russell was actively engaged, in collaboration with Whitehead, who had recently left Cambridge for London, on Vols. II and III, which appeared respectively in 1912 and 1913. Russell lectured on topics

from these books, and I attended his lectures and derived great help and stimulus from them. Another Trinity man, contemporary with me, was the mathematician E. H. Neville, soon to become a Fellow of the College and later Professor of Mathematics at Reading. He attended these lectures of Russell's, and we used to go together to Russell's rooms in College to read and discuss with him the proofs of certain forthcoming chapters in *Principia Mathematica*.

I had been from boyhood a student of natural science, interested primarily in physics and to a lesser degree in chemistry and crystallography. I have not the kind of brain needed for distinction in pure mathematics and pure logic. But I take a deep interest in those subjects, and am not (as many otherwise intelligent persons appear to be) frightened out of my wits by them. In particular I have always been fascinated by the mathematical aspects of natural science, and therefore by philosophical questions concerning Space, Time, Motion, and Causation. Now Russell had treated such topics very fully, and in a most exciting and illuminating way, in *The Principles of Mathematics*. Part V of that book is concerned with Infinity and Continuity, Part VI with Space, and Part VII with Matter and Motion. In the last of these Russell treats of the Laws of Motion and the notion of Causality in dynamics, and he defends the unpopular Newtonian doctrine of Absolute Space and Time. Here he was dealing with just those topics which most interested me. It seemed, and it still seems, to me that he had illuminated a region, in the obscurities of which philosophers had strayed since the time of Zeno, and which the Absolute Idealists had exploited in the interests of their own philosophy.

At the time when I first met Russell he was not, I think, greatly interested in such questions. I should suppose that his main philosophical concern at that period was with the logical difficulties which had emerged in connexion with the notion of Classes, and with attempts to obviate these by some form or other of the Theory of Types. It was inspiring to see for oneself a great thinker grappling with a definite and extremely difficult problem; and Russell conveyed to me some of the excitement that he felt, though the question was peripheral to my interests and I was not competent to contribute anything to its solution.

Undoubtedly the most concrete debt which I owe to attending Russell's lectures at that period is familiarity with the notation and methods of *Principia Mathematica*, and a certain facility in handling them. Of course one was somewhat inclined at the time to overestimate the importance for philosophy of putting questions and arguments into symbolic form. That was inevitable with young men

newly furnished with a fascinating gadget and anxious to 'show off' with it, as one might with a new sports-model. But I have repeatedly found this technique extremely useful in analysing and formulating philosophical problems, and in freeing one from the hopeless ambiguity and muddle of ordinary language when used for anything but the everyday practical purposes in subservience to which it has evolved. One has learned not to expect symbolic logic to supply solutions to the problems which it enables one to formulate clearly, or to furnish a decision between the alternatives which it helps one to distinguish and envisage. And one has come to realize that it is dangerous to assume blindly that the system of *Principia Mathematica* covers all the categories and principles of rational thinking and discourse. (It takes no account, e.g. of 'modality' and of 'modal propositions'; and it is doubtful whether it provides a satisfactory formulation for 'nomic propositions', such as the alleged laws of nature appear *prima facie* to be, viz., something intermediate between mere statements of *de facto* uniformity and statements of logical or metaphysical necessity or impossibility.) But such a system may be (and in fact is) of inestimable value over a very wide range, though it does not cover everything and may become an instrument of distortion in the hands of those who fail to realize that fact.

Although, as I have said, Russell's main interest in 1910-11 was elsewhere than in the philosophy of physics, he was always ready to discuss such topics. I consulted him as to a suitable subject for my Fellowship dissertation, and, if I am not mistaken, he advised me to write on the philosophy of mechanics. He certainly brought to my attention several works in German in that field, which he had studied when writing the relevant parts of *The Principles of Mathematics*, and I read them carefully and critically and discussed them with him. As I worked at the dissertation, however, I found myself more and more involved in epistemological questions about the nature and validity of our ostensible perceptions of a world of material things interacting in accordance with general laws. The thesis was submitted in September 1911 and was successful. During the next two years I re-wrote it, and it was published in 1914 under the title 'Perception, Physics, and Reality'. I believe, but I am not quite certain and cannot now ascertain, that Russell was one of the examiners who reported on the thesis and advised that a Fellowship should be awarded to me. If so, he contributed substantially to causing what I should regard as the most important single event in my life.

Anyone who may have time and inclination to flutter the pages of a book which has for long been a museum piece will see that in

the end only one chapter out of five, and that the last, is devoted to the Laws of Mechanics. In the Preface I acknowledge my obligations to the relevant parts of *The Principles of Mathematics*, as regards the discussion of Causality in Chapter II and as regards the Laws of Mechanics in Chapter V, and in general to Russell's lectures and conversation. Though I was indeed very greatly indebted to him, I was by no means an unquestioning disciple. I did not consider his arguments for Absolute Space and Time, and against those who had maintained a Relational Theory, to be valid. Of course, Russell himself very soon came to abandon the Absolute Theory, though I am not aware that he ever took the trouble to refute publicly the arguments which he had published in favour of it.

I had already left Cambridge to take up a minor academic post in the university of St Andrews at the time when I was elected to my Fellowship, and I did not return into residence. But I used to spend six weeks or so in Trinity during each Long Vacation until the outbreak of the First World War in August 1914. During those periods I saw much of Russell and immensely enjoyed his conversation. His little book *The Problems of Philosophy*, which he used to refer to as his 'shilling shocker', had come out in the *Home University Series* in 1912¹. It is an extremely exciting book, and much of it was highly relevant to the work on which I was then engaged of re-writing my Fellowship dissertation to be published as a book. The many talks that I had with Russell at that time on topics arising from *The Problems of Philosophy* were extremely helpful to me.

The years immediately preceding the First World War were marked by very embittered political controversies in England, e.g. the struggles over Lloyd George's budget, its rejection by the House of Lords, and the subsequent restriction of the powers of the Upper House; the violence of the militant advocates of women's suffrage; continual unrest in industry; and controversies, leading very nearly to civil war, over the question of home-rule for Ireland. And, as a background to these domestic issues, was continually mounting tension between Continental nations, and the growth of German naval power which seemed to threaten England's safety. I was at that time, and for some years after the end of the war, as far left of centre in politics as I have ever been, and far more so than I should now, with fuller knowledge of the facts and the actual outcome of events, think it reasonable to be. Russell was, of course, passionately involved in all this; and I largely sympathized with his views and was to some extent carried along by his enthusiasm and eloquence. I could never excite myself, as he did, over the question

¹ Oxford University Press.

of women's suffrage. I had, indeed, no serious objection to it, since it seemed to me antecedently unlikely that the average woman could be appreciably less competent than the average man to exercise the right of voting. And the 'arguments' put forward by opponents of women's suffrage were obviously, like most 'arguments' for or against any course in politics, just hot air, in argumentative form, expressive or evocative of strong emotions. I should suppose that the granting of the suffrage to women has had the merit of removing a grievance strongly felt by many of them, and that it has had no appreciable effect, for good or for ill, on the subsequent course of English politics. The 'reasons' alleged by politicians for doing it, when it was done, were as absurd as those which had been alleged against it while it was still being refused.

I can well remember the Long Vacation of 1914, towards the end of which the First World War broke out. Maynard Keynes had by then got the proofs of his *Treatise on Probability*, and had lent them to Russell for his critical comments. Russell and I used to go over these proofs together in the latter's rooms in Neville's Court and to discuss them. We were doing this up to that fatal and accursed Fourth of August, when war was declared. Keynes was reft away to London (if I am not mistaken, on the back of his brother-in-law's, A. V. Hill's, motor-bicycle) to help with the nation's war-finances, and 'the lights of European civilization went out'.

Most fortunately for myself I was away from Cambridge during the whole of the four years of war and for some years later. The atmosphere in the College must have been highly strained and unpleasant, and I should hate to have been forced to take sides. There exists one and only one complete and thoroughly fair and reliable account of the relations of Trinity College with Russell during that period. That is the pamphlet written during the Second World War by G. H. Hardy, and privately printed for him by the Cambridge University Press in 1942, entitled *Bertrand Russell and Trinity: A college controversy of the last war*. Hardy had access to all the relevant College archives, and, although the controversy was one in which he had been personally involved and about which he still felt strongly, his pamphlet is a model of accuracy, completeness, and judicial fairness. It is also written, like everything of Hardy's, in a most admirable style. Unfortunately, it has always been a collector's piece. Any reader who is interested in learning the truth about this most involved affair is strongly advised to beg or borrow a copy. (I will not add 'or steal', since my own copy was stolen by an apparently respectable person, to whom I lent it with the strictest injunctions

to treat it as a rare copy of a unique work and to return it to me within a short time.)

So far as I can remember, I saw nothing of Russell and was only in very occasional touch with him by letter during the First World War and for many years afterwards. But I owe very much to the philosophical works which he published from 1914 to 1927 (both included), viz., *Our Knowledge of the External World* (1914), *Analysis of Mind* (1921), and *Analysis of Matter* (1927). My debt to the first two of these will be obvious to any reader of my books *Scientific Thought* (1923) and *The Mind and its Place in Nature* (1925), and it is duly acknowledged in both of them. While I was professor of philosophy at Bristol University (1920–23) I made a careful study of *The Analysis of Mind* and gave a course of lectures on it. It seems to me to be one of the most exciting books on philosophy that Russell ever wrote; and I think that the theory of ‘Neutral Monism’, which is put forward in it, is (whether it be ultimately tenable or not) about the most important contribution which has been made to speculative philosophy in my life-time.

The Analysis of Mind is a rather curious amalgam of Neutral Monism and Behaviourism, and the latter ingredient in it seems to me to be of minor interest. In *The Analysis of Matter* Russell took up, what appears to me to be obviously one of the most important and interesting tasks of philosophy, and one for which he was peculiarly well qualified, viz., the philosophical analysis of contemporary mathematical physics—in this case the then recent Special and General Theories of Relativity. This book developed out of the Tarner Lectures, which Russell gave in 1925 at the invitation of Trinity College, the trustees of the Tarner Bequest.

After that I did not see Russell again, to the best of my belief, until the October Term of 1944. On the motion of his old friend, Professor H. A. Hollond, Fellow of Trinity, the College Council had unanimously decided, toward the end of 1943, to offer Russell a Fellowship under Title B. Russell accepted this and was formally elected on January 4th, 1944, and admitted on October 10th of that year. He was invited by the College to give lectures during the academic years 1944–5, 1945–6, and 1946–7. He accepted, and his lectures attracted huge audiences. During part of that period Russell was living in London and travelling to Cambridge, and during part of it he was living in Cambridge, at one time in his own house and at another in rooms in College. For a while in 1946, when I was away for some eight months in Sweden, he occupied my rooms; which may thus fairly be described to future visitors, not only as Sir Isaac Newton’s, but also as Bertrand Russell’s rooms. (I am glad to record

that, however destructive he may have been as a thinker, he appeared on my return to have been a model tenant.) It was an immense pleasure to us all at Trinity to have Russell among us once again.

per varios casus, per tot discrimina rerum.

full of vigour, making many new friends among the younger Fellows, and adding enormously by his good company and his brilliant conversation to the pleasure of dining in Hall and frequenting the Parlour afterwards. When the tenure of his Title B Fellowship was about to end in 1948 the Council prolonged it until Michaelmas 1949. And when Russell vacated the prolonged Fellowship on September 30th of that year, he entered the haven which all good Fellows of Trinity hope to reach, viz., a Fellowship under Title E, in virtue of which he is now a Fellow of the College for the rest of his life.

In latter years Russell has unfortunately not been able to be much with us in Trinity. On May 18th, 1962, his nintieth birthday, the Fellows of the College assembled in the Combination Room after dinner to drink his health. We should have been delighted if he had been able to be present; but he had had to decline our very cordial invitation because he was, very naturally, involved as the central figure in the more formal and more widely representative celebrations of the event which were taking place in London. So we had to be content to drink his health *in absentia*. There was a record attendance of Fellows and their guests in the Combination Room, and it was only just possible to seat the whole company. I was invited by the College Council to make the speech proposing Russell's health. I felt it to be a great honour to be entrusted with that duty, and it was extremely pleasant to me personally to have this opportunity of expressing, in presence of my friends and colleagues, my gratitude to Russell for all his kindness to me as a young man, for the stimulation of his wit and humour, and for the immense debt which I owe, in respect of my philosophical work, to his conversation and his writings.

It is on that note that I would wish to end.

(II) *Some Remarks on Sense-Perception*

I shall try to elucidate some of the main concepts which seem to me to be involved in the philosophical analysis of sense-perception, and to define the meanings which I should at present be inclined to attach