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RUSSELL'S NON-PHENOMENALIST REDUCTION OF PHYSICAL OBJECTS

1. Introduction

In 1957, in a letter to A. J. Ayer, Russell regretfully stated that his theory of perception " is rejected as a wild paradox by philosophers of all schools." The reason for this rejection was: as Russell himself noticed, that they "unanimously misunderstood" his theory. I am sympathetic to Russell's sentiment. One of the widely misunderstood items of his theory of perception is his constructionist view of physical objects. During the period from 1912 to 1927 2 Russell considered physical objects to be logical constructions out of actual and possible sense-data. Many commentators 3 have suggested that in constructing physical objects Russell abandoned his realist theory of perception for a version of phenomenalism. Their claim is that in his construtionism Russell presents a phenomenalistic reduction of physical objects. But Russell explicitly denies that he ever did so. 4 I think that Russell is right and the commentators are wrong. He never accepted the phenomenalist view of the external world.

In this paper * I argue that Russell always held a realist position despite the fact that he constructs physical objects out of actual and possible sense-data. I defend this view by showing that Russell's constructionism does not involve a phenomenological reduction of physical objects. This approach will have at least two advantages, viz. that the same arguments, on the one

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hand, will reject the charge that Russell commits himself to phenomenalism and, on the other hand, will also secure his realism.

2. Relation of Perception to Physical Objects

In MPD (p. 13) Russell states that "in the years from 1910 to 1914. I became interested, not only in what the physical world is, but in how we come to know it. The relation of perception to physics is a problem which has occupied me intermittently ever since that time." During thie period (and beyond). Russell attempts a reductionist analysis of empirical knowledge, the foundations of which are objects with which we have direct perception. His first excursion into the problem of perception is found in PP, where following Descartes, Russell engages in a programme of systematic doubt, seeking to discover if there is " any knowledge in the world which is so certain that no reasonable man could doubt it" (PP. 7). Ultimately, he is confident that our knowledge of the external world must be based in those elements of it with which we are immediately acquainted. Russell's quest for certainty and his search for the basic elements of our knowledge is conditioned by his doctrine of acquaintance, that those elements with which we have immediate acquaintance have a privileged status. He concludes that these objects are always sense-data, "the things that are immediately known in sensation" (PP. 12). Strictly speaking, we can never perceive physical objects but only sense-data and their properties and relations.

Then how can we answer the question: do physical objects exist? If they do, how do we come to know that they exist? In *PP* Russell suggests that although physical objects are not directly perceptible, they can be known indirectly as the *causes* of our sense-data. However, before he defends this position Russel tries to rationalize the question: can we find in our givel

experience any feature that tends to show that there are physical objects? He find no philosophical proof. He agrees that [i]n one sense it must be admitted that we can never prove the existence of things other than ourselves and our experience" (PP. 22). But although Russell admits that scepticism and solipsism are logically possible, he shows how it is reasonable to adopt the hypothesis that "there really are objects independent of us, whose action on us causes our sensations" (PP. 23). Again, "it is rational to believe that our sense-data, are really signs of the existence of something independent of us and our perceptions" (PP. 27). These passages indicate Russell's explicit commitment to two theses viz, the realist one that physical objects exist independently of our perception of them and the representationalist one that physical objects are causes of our sense-data.

Russell developed a more sceptical doubt about his PP position realizing that it suffered from the serious defect of giving physical objects an ever unobservable status. Russell's private correspondence with Lady Ottoline Morrell⁵ indicates that it was Wittgenstein who convinced Russell that the way he tries to relate perception to physical objects was doomed to failure to the sceptic's argument.⁶ Russell's explicit commitment to a causal theory of perception in PP seems to make it impossible that we should ever know anything about the existence of physical objects which are supposed to lie behind our private sense—data. Once we admit that it is only sense—data that are directly perceptible, any attempt to pass beyond sense—data to physical objects becomes vulnerable to sceptical attack. How can sense-experience give us knowledge of what, ex hypothesi, is not perceptible?

Russell's sceptical doubt about his PP position is evident in "On Matter". Immediately before he started writing this paper

he explained to Ottoline Morrell what he intended to accomplish in it: "I haven't had enough courage hitherto about matter, I haven't been sceptical enough. I want to write a paper which my enemies will call the bankruptcy of realism". Three days later, while reporting to Ottoline Morrell that he had started writing "On Matter" and had reached page 9, he reiterated his intention: "I will shock people, especially those who would like to agree with me—it ['On Matter'] is altogether too sceptical". However, after he had shown the futility of his PP defence of physical objects, Russell, instead of joining with the sceptic, went in a new direction to defend physical object from the threat of scepticism. This direction is the emergence of logical construction, the theory that physical objects are constructed, instead of inferred, out of actual and possible sense—data (sensibilia). He

Although the constructionist theory emerged in "On Matter" Russell fully developed it in OKEW, RSDP, and other places. The constructionist view starts from a very simple and obvious fact that what we know about the external world is based upon and verified by what we are acquainted with. Russell expresses this fact in saying: "empirical knowledge in confined in what we actually observe" (OKEW. 117). It is interesting to notice that the ultimate constituents out of which physical objects are constructed are also constituents with which we have direct aquaintance. When sense-data were first introduced they were used as the basis for inferences to physical objects. Now the same sensedata, supplemented by sensibilia 11 (" which have the same metaphysical and physical status as sense-data, without necessarily being data to any mind" [RSDP. 142]), are used to construct physical objects Thus to say that tables, chairs, houses and the rest are logical constructions out of sensibilia is to say

that they can be defined as functions of sensibilia without making any reference to physical objects as inferred entities.

3. What is Phenomenalism?

Phenomenalism is a philosophical theory of perception according to which, in its strict sense, all our knowledge, beliefs and conjectures about physical objects begin and end with sense-data, and that sense-data are mental The theory abandons entirely the notion of external physical objects as entities of a different sort from sense-data. It tries to reduce physical objects solely to a collection of actual sense-data. It holds "that there are only percepts" (A Matter, 209). I take phenomenalism to be a form of anti-realism. Whereas a realist holds that physical objects are able to exist and retain some, if not all, of the properties which we perceive them as having, even when unperceived, a phenomenalist denies this. He denies the existence of a physical world lying behind the world of experience. There is no reality apart from sense-data; there is nothing left over for us to infer from them. So phenomenalism is not only a form of anti-realism, but also a form of idealism for holding the theses that (a) physical objects are reduced to nothing more than sense-data, and that (b) sense-data are mental.

There may be several versions of phenomenalism of which I take the following three to be the main ones:

- (1) According to the first version, physical objects are defined as "logical constructions out of sense-data". 12 They are nothing over and above sense-data themselves. On this view sense-data are actual mental entities. So to approach phenomenalism is to reduce physical objects to actual sense-data.
- (2) A second version of phenomenalism holds that physical objects are nothing but a collection of actual and possible sensendata. Historically, this version of phenomenalism is generally

traced back to J. S. Mill who regarded matter as consisting of "groups of permanent possibilities of sensation" ¹³ In a similar vein, Armstrong defines it as the theory that "the physical world is nothing more than sense-impressions, actual and possible". ¹⁴

(3) The third version of phenomenalism is the most recent and may be called linguistic phenomenalism. This type of phenomenalism tends to show that what is meant by talk about physical objects can be expressed solely in terms of actual and possible sense-data. On such a view no physical object is different from the class of actual and possible sense-data; therefore, defenders of phenomenalism claim that statements about the former can be translated (without any loss of meaning) into statements about the latter. As Ayer states, "every empirical statement about a physical object, whether it seems to refer to a scientific entity or to an object of the more familiar kind that we normally claim to perceive, is reducible to a statement, or set of statements, which refer exclusively to sense-data". 15.

These versions are not quite identical, but they all have something in common. They all try to reduce physical objects to sense-data, sense-impressions, sensations, etc. That is to say, they define physical objects in terms of a class of actual or possible sense-data.

During his constructionist period Russell, in various places, talks as if he were maintaining a phenomenalist position. Here are some of the passages:

The "matter" of the physicist and the "thing" of common sense will ... be collections of constituents of the nature of sense-data, some actually perceived some not. 16

... in so far as physics and common sense is verifiable, it must be capable of interpretation in terms of actual sensedata alone (OKEW, 88-9).

different people must be a construction, being in fact nothing but a certain grouping of certain 'sensibilia' (RSDP. 161).

... the table which is neutral as between different observers (actual and possible) is the set of all those particulars which would naturally be called 'aspects' of the table from different points of view. ...[T] hese particulars together with ... others as are unperceived, jointly are the table; and ... a similar definition applies to all physical objects (AM, 98-9).

Prima facie these passages have obvious phenomenalist overtones. But I believe that in these passages Russell is not advocating phenomenalism because to accept phenomenalism is to accept, to some extent, idealism. Since in phenomenalism physical objects are reduced to sense—data (actual and possible) and since sense—data are mental, it cannot escape the metaphysical world view that a Berkelian type of idealism (and a certain version of solipsism) entails. So Russell cannot have any truck with phenomenalism, and he justifiably denies that he ever really accepted phenomenalism.

4. Russell's Denial of Phenomenalism

Russell's first explicit denial of phenomenalism (which I believe goes mostly unnoticed) occurred on April 12, 1915, in a meeting of the Aristotelian Society in which C. D. Broad presented a paper entitled "Phenomenalism". 17 Broad characterizes Russell's constructionism as phenomenalism and criticizes the theory. By "phenomenalism" Broad means "a philosophical theory which claims to be able in some sense to dispense with at least one of the three [i.e., sensations, sense-data, and physical objects], viz. physical objects". 18 A phenomenalist, accord-

ing to Broad, "proposes to substitute for physical objects classes of which sense-data are particular individuals". 19 Broad then applies this theory to Russell: "[t]his is as far as some phenomenalists, e.g., Mr. Russell, are at present prepared to go". 10 However, at the end of Broad's paper, Russell publicly declared that his theory of constructionism did not commit him to phenomenalism. As reported in *The Athenaeum*, "Mr. Bertrand Russell, replying in the discussion, said that 'phenomenalism' was not the term he himself used to denote his theory". 21 So it seems quite obvious that during the very period in which he propounded constructionism, Russell had in mind that his theory was different from phenomenalism.

The reason why Russell's theory is quite different from phenomenalism is that the constructionist policy does not commit him to denying the realist view that there are physical objects existing unperceived. When he maintains that an object, say Q, is a logical construction out of x, y and z (sensibilia) he is not necessarily committed to denying the existence of Q as a nonempirical entity distinct from x, y and z. All he is doing is avoiding having to postulate the existence of such an entity for which we do not have any empirical evidence. Russell frequently insists that he is not denying that there is something over and above the constructed physical object: "I want to make it clear that I am not denying the existence of anything; I am only refusing to affirm it. I refuse to affirm the existence of anything for which there is no evidence, but I equally refuse to deny the existence of anything against which there is no evidence" (PLA. 273-4). The fact that Russell does not deny the existence of physical objects should be sufficient to justify the claim both that he is not a phenomenalist (a la Broad's definition, for example) and that he is a realist. This is why, I think Russell's response to Broad's charge that Russell is a phenomenalist is quite justified.

Seven years later Russell reiterated his denial that he never really accepted phenomenalism.

I have never called myself a phenomenalist, but I have no doubt sometimes expressed myself as though this were my view. In fact, however, I am not a phenomenalist For practical purposes. I accept the truth of physics, and depart from phenomenalism so far as may be necessary for upholding the truth of physics. I do not, of course, hold that physics is certainly true, but only that it has a better chance of being true than philosophy has. Having accepted the truth of physics, I try to discover the minimum of assumptions required for its truth, and to come as near to phenomenalism as I can. But I do not in the least accept the phenomenalist philosophy as necessarily right, nor do I think that its supporters always realize what a radical destruction of ordinary beliefs it involves.

Accepting the "truth of physics" means, for Russell, accepting physical theory interpreted in a realist manner, which, in turn, means interpreting physical theory as referring to unobservable things and events. Russell accepts the truth of physics without any question. He holds that common sense accepts the truth of physics over the speculations of philosophy. As to the relative truth value of physics and philosophical systems he says:

Philosophers may say: What justification have you for accepting the truth of physics. I reply: Merely a commonsense basis. If you ask anyone who is neither a philosopher nor a physicist, he will say that physics has a much better chance of being true than has the system of this or that philosopher. To set up a philosophy against physics is rash: philosophers who have done so have always ended in disaster (Reply 700).

Russell takes common sense beliefs as a necessary foundation on which the structure of science is built. The views which are advanced by physics are to be accepted as true and these views provide part of the data on which philosophical speculation is based I think that Russell's rejection of phenomenalism is rooted in his strong adherence to a realist interpretation of physics. As he says, "ap honest acceptance of physics demands recognition of unobserved occurrences" (Reply 701).

The general acceptability of science implies that there are unperceived events. Although there is evidence that Russell wished to construct physical objects with only observed sense-data (see RSDP, 150), on his later admission, he considered this as an "intellectual game" (Reply, 701, cf. also MPD 105). However, this "intellectual game" led Stace to comment:

Always his [Russell's] philosophy wavers unhappily bet ween phenomenalism and scientific realism. In the end the scientific realism always wins... From the position of scientific realism Russell has from time to time held out fluttering and ineffectual hands towards phenomenalism. But he has never embraced it. His traffic with phenomenalism has been no more than a mild and insincere flirtation.

Since Russell had a prejudice in favour of physics during his constructionist period (cf. MPD 130) and since physics requires unobservable physical objects and events, Russell introduced thetheory of sensibilia. The theory of sensibilia suggests that sensibilia continue to exist when they are not in the relation of acquaintance. Russell uses these unsensed sensibilia to justify the reality of unperceived objects and events. The introduction of the unsensed sensibilia helps him escape the charges of both solipsism and phenomenalism, since unsensed sensibilia (of Russellian variety) have no place in a consistent phenomenalism. Admitting that

sensibilia can exist unperceived, Russell reinforces his belief that objects of physics and common sense exist as constructions of unsensed sensibilia. This goes against phenomenalism in a straightforward sense. Thus Anthony Quinton has remarked: "in the theory of knowledge he [Russell] has really been much more concerned to save the reality, the independence from mind, of perceived fact than to establish the rigorously empirical credentials of his conception of the external world".

Now one might claim that Russell's construction of physical objects commits him to phenomenalism, at least, in the sense expressed in the second version of phenomenalism. When a phenomenalist says that physical objects are permanent possibilities of sensation it sounds close to Russell's construction of physical objects out of sensed and unsensed sensibilia. Permanent possibilities of sensation seem to imply that if we were to be at the right place at the right time we would have an experience of such and such sort or, in other words, the physical objects would seem to us to be in such and such a way. But I think that this claim is suspect on a very important ground. Whereas for a phenomenalist, the permanent possibilities of sensation have only a possible existence (since there is no extra-mental support for them), for Russell unsensed sensibilia are actual (real). Since Russell accepts the truths of physics, his position is distinguished from the phenomenalist's by the fact that unsensed sensibilia are actual constituents of physical objects.

As soon as Russell admits the reality of unsensed sensibilia and includes them in construction his realism is completely secured. I think that even the spirit of Russell's pre-constructionist realism is found in his introduction of the theory of sensibilia. This conclusion is fully borne out by the textual evidence. Thus any claim that Russell is not a realist but a phenomenalist would break down, I believe, against such asset-

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tions as that if a man comes newly to occupy a position in a room "we can reasonably suppose that some aspect [unsensed sensibile 1 of the universe existed from that point of view, though no one was perceiving it" (OKEW 95). And again, Russell asserts, "[i]t is open to us to believe that the ideal elements [unsensed sensibilia] exist, and there can be on reason for disbelieving this ", although "we cannot know it " (OKEW. 117). These passages match Russell's undisputed realism in PP where he says that " every principle of simplicity urges us to adopt the natural view, that there really are objects other than ourselves and our sense-data which have an existence not dependent upon our perceiving them" (PP. 24). It is not surprising, then, that in UCM Russell explicitly identifies his position as "realistic" (UCM. 120). This view also agrees with Russell's reply to Professor E. R. Eames 'question as to whether she was " correct in ascribing to him epistemological realism, in the sense that the world is there, and real, and acts upon us in perception". To this question "Russell replied emphatically that he had always been a realist ". "

We have yet to show that Russell's constructionism does not involves an acceptance of phenomenalism in the third sense. We have seen that Russell does not deny that there are external physical objects over and above sense—data. But sometimes he confines himself to a linguistic level which holds that to say that physical objects are logical constructions out of sense—data is to say that statements about them can be translated into statements about sense—data. And if we can do this we will have at least "extruded" the inferred physical objects "from the world of what there is" (PLA 273). Here one might claim that Russell is doing exactly what a (linguistic) phenomenalist would do viz., translating statements about physical objects into statements about sense—data. Thus Sainsbury claims, "[i]n Russell's pheno-

menalistic phase, from 1914 to the middle 1920s, he can easily be read as claiming that physical objects are pure translational constructions out of sense-data". There is no denying the fact that Russell sometimes takes construction on a linguistic level (see RSDP. 149; IMP. 73). However, even if we take Russell's linguistic version as his final position about construction, still, I suggest, he can easily escape phenomenalism. For a strict phenomenalist, say Berkeley, sense-data are mental, but for Russell they are physical (see OKEW. 71; RSDP. 141-5; UCM. 123). ²⁹ When the phenomenalists say that physical object statements are to be translated into statements about sense-data, they must mean that physical object statements are to be translated into statements are to be translated into statements about physical sensibilia.

Ayer has suggested that during his constructionist period Russell abandoned his causal theory of perception (which he reverted to after 1927) for a version of phenomenalism. Our previous discussion shows that Russell explicitly denied phenomenalism. I suggest that Russell need not even abandon the causal theory of perception. By a "causal theory of perception" we usually mean a scientific theory of perception of the external world. On this view perception is a causal network in which physical objects are causal stimuli, emitting light waves etc. which travel through space and strike the retina etc. and become a sensedatum in the brain. Each of these steps is causally connected to the previous step. In his pre-constructionist period, Russell accepted a version of this causal theory (i.e., a Lockean variety) to justify the existence of the ever unknown physical objects (things in-themselves). But later, due to Wittgenstein's criticisms, 31 he

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realized that such an account of physical objects is open to grave doubt and ultimately rests upon a principle for which no empirical justification could be given. So he prefers to construct (rather than to infer) physical objects out of sense-data. In doing so Russell puts the burden of justification on construction rather than on the causal theory of perception. The constructed "thing" takes the place of the inferred "thing-in-itself", which was regarded, in pre-constructionist work, as the cause of sense-data. Now after the construction is completed, there is no need to posit such a cause in order to give an account of the reality we talk about. But, from the fact that such a cause is not posited, it does not follow that it is denied. Russell must not be interpreted as denying that our sense-data have external causes. That is to say, he should not be interpreted as denying the scientific account of perception.

I think that Russell's view that physical objects are logical constructions is not incompatible with his realist view even holding a causal theory of perception. Nothing in Russell's construction of physical objects indicates a rejection of the causal theory of perception. But what Russell is mainly concerned with is an interpretation and verification of the objects of common sense and physics on the basis of sense—data, and not on the basis of the causal origin of the sense—data. The origin is there whether it is inferred or not which, from an ontological point of view, is the end of the causal chain. "This explains why", as Eames rightly suggested, "in spite of what appears to be a phenomenalist method of constructing the objects of science and of common sense from sensed particulars, the causal theory of perception is brought in as a required assumption." "38

It might also be argued that a version of causal theory is evident when he insists that the "inferences from perceptions to

physical facts depend always upon causal laws " (OKEW, 129). Russell explicitly holds that the construction of things consists of "those series of aspects which obey the laws of physics" (OKEW. 115-6; see also RSDP. 164). Physics has been built upon the assumption that there are unobserved objects or events the effects of whose behavior has been found to be consistent in such and such circumstances. Thus there is something objective which is a prerequisite assumption for the establishment of laws of physics. Now what could these laws of physics be other than causal laws which allow "us to infer the existence of one thing (or event) from the existence of one or more others " (OKEW. 216; cf., Reply. 701-2). Russell's notion of matter also clearly reveals his assumption about a causal connection between things and their appearances. "The whole causal efficacy of a thing resides in its matter" (RSDP, 158; see also 170), so appearances are causally affected by matter.

5. Conclusion

Russell's constructionist programme does not commit him to phenomenalism and (b) it is quite compatible with his realism holding a causal theory of perception. But one might wonder, if Russell should hold a realist theory of perception by not denying the independently existing physical objects (which in fact he does not deny), then why should he avoid affirming their existence? The answer would be, that he is playing an intelligent epistemological game. Since he is mainly concerned to show the general grounds for what we claim to know, with the constructionist technique he can talk about physical objects without having to assert that such objects exist as the causes of our sensibilia. The whole constructionist programme is designed not to deny the inferred entities, but to avoid any risk of error in our pursuit of

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empirical knowledge: "you have anyhow the successive appearances, and if you can get on without assuming the metaphysical and constant desk, you have a smaller risk of error than you had before" (PLA. 280). But unlike a phenomenalist Russell is not denying the substantial desk. There may be a metaphysical substance behind the desk's empirical manifestations (PLA. 272). It is only practical to treat the desk as if it is nothing but a collection of sensibilia. Such a consideration "fits the facts, and there is no empirical evidence against it; it is also free from logical impossibilities" (OKEW. 101).

In rejecting phenomenalism, Russell more often stresses that there may be something more than sense-data. But he is inclined to remain non-committal. The reason is epistemological, that the assertion of physical objects more than a class of sense-data "introduces an element of unverifiable dogma" (OKEW, 153). But it is interesting to notice that in Russell's philosophy the epistemological and ontological aspects are not unrelated. He seems to accept the truth of physics without any question, but the matter becomes epistemologically interesting later on. As Russell says, "[i]n ontology I start by accepting the truth of physics; in epistemology I ask myself: Given the truth of physics what can be meant by an organism having 'knowledge', and what knowledge can it have" (Reply, 700)? Logical construction of physical objects has been designed to answer the the problem of our knowledge of the external world. The project is mainly epistemological in the sense that it has been used in determining the basis for belief in physical objects. But Russell very often adds various ontological issues (like the truth of physics), to make it both epistemological and ontological. The whole plan of constructing physical objects depends for its use upon the body of some scientific propositions whose truth value

is not challenged. The policy is to make physics possible upon empirical grounds while minimizing the amount of inference to non-empirical entities. 36

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NOTES

- In this paper reference to most of Russell's published works are given in brackets immediately after passages cited. These references are abbreviated as follows: A. Matter = The Analysis of Matter (1927); AM = The Analysis of Mind (1921); IMP = Introduction to Mathematical Philosophy (1919): MPD = My Philosophical Development (1959); OKEW = Our Knowledge of the External World (1914): PLA = "The Philosophy of Logical Atomism" (1918-19), quotations are from the reprint in Logic and Knowledge; PP,= The Problems of Philosophy (1912), references are made to the 1959 edition by the Oxford University Press; RSDP = "The Relation of Sense-data to Physics" (1914), references are given to the reprint in Mysticism and Logic (Penguin edition, 1953); Reply = "Reply to Criticisms" (1944), in The Philosophy of Bertrand Russell, edited by P. A. Schilpp; UCM = "The Ultimate Constituents of Matter" (1915), references are to Mysticism and Logic.
- Bertrand Russell to A. J. Ayer, Bertrand Russell Archives (hereafter cited as R. A.) at McMaster University, letter 710, 047060, 19 Jan. 1957
- 2. The received view about Russell's logical construction is that it emerged in 1914, in OKEW, for the first time. But a close study of Russell's unpublished works, supplemented by his correspondence, show that this is mistaken. We have now conclusive evidence that Russell was a constructionist in 1912. For details see Sajahan Miah, "The Emergence of Russell's Logical Construction of Physical Objects", Russell: The Journal of the Bertrand Russell Archives, Vol. 7 (1987), pp. 11-24.
- 3. Ayer, Bertrand Rassell (New York, 1972), ch. III, esp. pp. 72-82; "An Appraisal of Bertrand Russell's Philosophy", Ralph Schoenman (ed.), Bertrand Russell: The Philosopher of the Century (London, 1967).

- p. 173; Sainsbury Russell (London, 1979), p. 241; R. E. Nusenoff, "Russell's External World; 1912–1921" Russell, no, 29-32 (1978), pp. 62-82; Broad, "Phenomenalism", Proceedings of the Aristotelian Society Vol. 15 (1914-15), p. 191.
- Cf. Russell, "Physics and Perception", Mind, Vol. 31 (1922), p. 480;
 Reply, 701, 718; The Athenaum, 4565, April 24, (1915), p. 385.
- 5. References to Russell's letters to Ottoline Morrell (hereafter cited as B. R. to O. M.) are to microfilms in the R. A. at McMaster University. The original letters are at the Harry Ransom Humanities Research Center, University of Texas, Austin. When a letter is dated by Russell himself the date is simply given, but when the date is taken from a postmark the fact is signified by "pmkd", while a date when inferred from other sources is given in square brackets. The numbers of these letters are those supplied by Lady Ottoline and her secretary.
- See R. B. to O. M. 241 [2 Nov. 1911]; 373, pmkd. 8 March 1912;
 [427] enclosed with 426, pmkd. 28 April, 1912; 435, pmkd. 2 May, 1912; 459, pmkd. 21 May, 1912. See also B. R. to Lucy M. Donnelly, 26 March, 1912.
- Unpublished manuscript, 1912, R. A. File 220, 011360, fols. 1-35. Russell started writing "On Matter" on April 27, 1912 and finished on May 13, 1912, cf. B. R. to O. M. [427] attached with 426, pmkd. April 28, 1912; 449, pmkd. May 13, 1912, Russell read this paper to the Department of Philosophy, University of Wales on May 17, 1912, cf. B. R. to O. M. 457, pmkd. 19 May, 1912. He changed and rewrote the paper on 16 October, 1912, cf. B. R. to O. M., 606, pmkd. 16 Oct. 1912.
- 8. B. R. to O. M. 427, pmkd. 24 April, 1912.
- 9. B. R. to O. M. [427] enclosed with 426, pmkd. 28 April, 1912.
- 10. "On Matter", fol. 35.
- 11. Although Russell introduces the term "sensibilia" in RSDP, in 1914, the doctrine is found in his philosophy from 1912. Thus in "On Matter" he states that "matter will be composed entirely of qualities of the nature of sense-data, but not only of those which one observer perceives; it will consist of all the sense-data which all possible observers would perceive in perceiving the same thing", fols, 31-2; see also 14, 35. The same view is also found in another unpublished manuscript entitled "Here and There in Sensation", R. A. file 220, 011420, fol. 4. Elsewhere Russell identifies "sensibilia" with "ideal" qualities or appearances, see OKEW. 116; "Matter, 2 Problems (1) Space (2) Things", unpublished manuscript in the R. A. file 220, 022370, fol. 1.
- Ayer, The Problem of Knowledge (Middlesex, 1969, Penguin edn.), p. 118.

- 13. Mill, An Examination of Sir William Hamilton's Philosophy (London, 1865), chapter II.
- 14. A. D. Armstrong, Perception and the Physical World (London, 1970), p. 48.
- 15. Ayer, The Problem of Knowledge, p. 118.
- 16. Russell, "On Matter", fol. 35.
- 17. This paper is published in PAS, Vol. 15 (1914-15), 227-51,
- 18, Ibid., p. 227.
- 19. The Athenaeum, 4565, April 24, 1915, p. 385.
- 20. Broad, "Phenomenalism", pp. 227-8.
- 21. The Athenaeum, 4565, p. 385.
- 22. Russell, "Physics and Perception". p. 480.
- Grover Maxwell, "Russell on Perception: A Study in Philosophical Method" in David Pears (ed.), Bertrand Russell: A Collection of Critical Essays (New York, 1972), p. 114.
- 24. E. R. Eames has developed a similar view in her Bertrand Russell's Theory of Knowledge (London, 1969), see chapters V & VI.
- Stace, "Russell's Neutral Monism", in P. A. Schilpp (ed.) The Philosophy of Bertrand Russell (La Salle, Illinois, 1971, 4th edn.), p. 371.
- 26. "Russell's Philosophical Development", in his Thoughts and Thinkers (London, 1982), p. 283.
- 27. E. R. Fames, "The Consistency of Russell's Realism", The Philosophy and Phenomenological Research, Vol. 27 (1967), p. 510.
- 28. Sainsbury, op. cit., p. 241.
- 29. See also "The Nature of Sense-data A Reply to Dr. Dawes Hicks". Mind, Vol. 22 (1913), p. 78; "Letter from Bertrand Russell to the Editor of the Journal of Philosophy, Vol. 12 (1915), p. 392; Theory of Knowledge: The 1913 Manuscript, The Collected Papers of Bertrand Russell, Vol. 7, edited by E. R. Eames in collaboration with K. Blackwell (London, 1984), pp. 22, 31.
- 30. Ayer, Bertrand Russell, pp. 72-82.
- For Wittgenstein's earliest criticism of Russell's epistemological position see S. Miah, "The Emergence of Russell's Logical Construction of Physical Objects", esp. sec. III.

- 32. For such a view see M. H. Salmon, 'On Russell's brief but notorious flirtation with phenomenalism" Russell, 16 (1974-75), p. 18; Bradie, "Russell's Scientific Realism" typescript (this paper was presented at the Russell Conference '84 in Toronto, Canada) p. 12.
- 33. Eames, Bertrand Russell's Theory of Knowledge, p. 192.
- 34. For a similar view see J. A. Shaffer, A Study of Philosophical Analysis With Special Reference to Bertrand Russell's Analysis of the External World (Ann Arbor, Michigan, 1970). pp. 143-7. See also Sajahan Miah "Russell on Logical Construction", Students' Supplement of the Indian Philosophical Quarterley, Vol XIV-2, pp. 1-25.
- 35. Thanks are due to Professor Nicholas Griffin for detailed criticisms of an earlier draft of this paper and to Bertrand Russell Archives (McMaster University) and Harry Ransom Humanities Research Center (University of Texas at Austin) for permission to quote from Russell's unpublished manuscript and correspondence.