

**CONSTRUCTIONISM: RUSSELL'S RESOLUTION OF
REALISM-EMPIRICISM DILEMMA***

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The main focus of this paper is Bertrand Russell's attempt at, what David Pears calls, the reconstruction of empirical knowledge¹ the foundation of which are sense-data with which we have direct acquaintance in perception. Russell is, by his own admission, an empiricist in the tradition of Locke, Berkeley and Hume. He agrees with these philosophers on many crucial matters, the most important of which is the view that knowledge of what exists must come directly or indirectly from sense-experience. Russell's position in epistemology is also a form of realism in that the object known is independent of being known; physical objects exist externally and independently of our perception.

There is a *prima facie* conflict between Russell's empiricist task of grounding all knowledge claims in sense-data and his realist view of the independently existing physical world of chairs, tables, trees, etc. and the scientific world of atoms, molecules and so on. Both of these are constraints. On the one hand, as a good empiricist Russell cannot claim to know any thing more than what he is immediately acquainted with and what he is immediately acquainted with are nothing but his own sense-data. So his empiricism naturally leads to sceptical solipsism. On the other hand, his realist view of perception is the denial of scepticism. These two opposite facts generate a serious dilemma for Russell, both sides of which he takes into account. It seems that there is a gap between what empiricism permits us to claim to know and the knowledge claim that realism allows us to have. More pointedly, the gap is between perception and physical objects. It is to resolve this dilemma between empiricism and realism and to bridge the gap between perception and physical objects that Russell introduces constructionism. The aim is to secure empirical knowledge from possible sceptical attack and to strike a compromise between his realism

and his empiricism. In constructing physical objects Russell tries to show that our knowledge of the external world beyond the immediate perception of the moment is not only legitimate but consistent with empiricism.

Russell's first serious attempt at a compromise between his realism and his empiricism is found in *The Problems of Philosophy*.² It appears that in *The Problem of Philosophy* Russell did not want to lose ground for either realism or empiricism., rather he wanted to embrace both. Although he honestly admitted that from a purely logical point of view sceptical solipsism was quite consistent (PP. 22) he found good, if not conclusive, reason for supposing that there really are physical objects independent of our perception. Here are some of the passages:

[T]here is no logical impossibility in the supposition that the whole life is a dream, in which we ourselves create all the objects that come before us. But although this is not logically impossible, there is no reason whatever to suppose that it is true; and it is, in fact, a less simple hypothesis, viewed as a means of accounting for the facts of our life, than the commonsense hypothesis that there really are objects independent of us, whose action on us causes our sensations (PP. 22-23).

It is rational to believe that our sense-data -- for example, those which we regard as associated with my table -- are really signs of the existence of something independent of us and our perceptions. That is to say, over and above the sensations of colour, hardness, noise, and so on, which make up the appearance of the table to me, I assume that there is something else, of which these things are appearances (PP. 27).

These passages indicate Russell's explicit commitment to two theses *viz.* the realist one that physical objects exist independently of our perception and the representationalist one that physical objects are causes of our sense-data. However, Russell's empiricist conviction forced him to admit that he could not prove that physical objects exist independently of perceptions, or, for that matter, that the external world exists independently of perception.

To some extent Russell accepted the sceptic's charge that unless a proof were forthcoming, exactly what we know about the external world would remain an open question. However, although he could not prove that there is an external world independent of perception, the supposition that there is such a world accords with both common sense and science. Considering his strong conviction

to realism, it was natural for Russell to step aside from scepticism and to accept the plausible alternative in the causal theory of perception. The assumption that sense-data have physical objects underlying them provide the simplest explanation of sense-data. Russell based his defence for inferred physical objects on the simplicity hypothesis (supplemented by inductive belief) that the existence of physical objects independent of perception simplifies and systematizes our account of empirical knowledge (PP. 22-26).

Russell's commitment to causal theory of perception in *The Problems of Philosophy* made his position self-refuting since it accepted that the facts on which it is based are strictly speaking unknown. What forced him to the situation is his empiricist-foundationalist position. As he confessed in 1944, the "empiricists (including at times, my former self) allow a great many shaky inferences in order to reconcile their faith in empiricism with everyday beliefs which they are not prepared to abandon" (Reply. 707). The fatal consequence of the position was that since all our direct perception is concerned with the effects of sense-data, we can never find out whether physical objects exist or what characteristics they have. This view makes physical objects unobservable and indeed unintelligible cases of perception.

Just three months after the publication of *The Problems of Philosophy* (it was published on 24 January 1912), Russell changed his view and took a complete sceptical attitude towards the inferred physical objects. This sceptical attitude is evident in his unpublished paper "On Matter" (written during 27 April to 13 May 1912).³ Before writing this paper, on 24 April 1912, Russell explained to Lady Ottoline what he was hoping to accomplish in it: "I have not 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'".⁴ Three days later, while reporting to Lady Ottoline that he had started writing "On Matter" and had reached page 9, Russell reiterated his position he had in mind: "I will shock people, especially those who would agree with me -- it [OM] is altogether too sceptical".⁵

It seems clear that "On Matter" is intended to upset any defence of our knowledge of physical objects. In *The Problems of Philosophy*, the argument by which Russell tried to bridge the gap between perception and physical objects "no longer appears to [him] to give any very overwhelming probability in

favour of matter' (OM. fol. 16; cf. also *AM*. 132). Russell admits that in some situations when we have nothing to choose between two hypotheses, there may be a practical reason to accept the simpler of the two. But "this affords no reason whatever for supposing that the simpler theory is actually true" (OM. fol. 16). Now since we have no means of identifying physical objects, we have reason to believe that they play any role in the production of our sense-data, or even that they exist at all. Considering Russell's refutation of his earlier view and his initial announcement to Lady Ottoline, this could be the final conclusion of "On Matter". But the story is quite different. Having realized that the defence of physical objects in *The Problems of Philosophy* cannot stand up against sceptical arguments, he does not join to the sceptics; rather he goes in a new direction to escape scepticism and assumes "that all that could be a sense-datum to any possible observer actually exists, and that collections of such actual and possible sense-data are bound together in ways which enable us to regard them as one 'thing'" (OM. fol. 35). This provides Russell with two advantages *viz.* "(1) that it avoids an unknown noumenon, since matter will consist entirely of things of the kind with which we are acquainted, (2) that it avoids rejecting our instinctive belief in the independent reality of qualities, without which it is hard to find any conclusive ground for retaining our belief in matter or the external world" (OM. fol. 22). This marks the beginning of Russell's constructionist theory of the external world and although he has not yet fully developed the theory, he is well aware of its possible uses: "to those who rebel against the sceptical conclusions to which we seem otherwise driven, I commend this hypothesis [that physical objects are constructed from actual and possible sense-data] as at least not obviously untrue, and as more in consonance with our instinctive beliefs than any other hypothesis which the facts permit" (OM. fol. 35).⁶

Although Russell has introduced the constructionist theory in "On Matter", he fully developed it in *Our Knowledge of the External World* and in "The Relation of Sense-data to Physics" where he claims that the supreme maxim of scientific philosophizing is: "Wherever possible, logical constructions are to be substituted for inferred entities" (RSDP. 148; *OKEW*. 106). Much of his philosophical activity during 1912-1927 was devoted to putting this maxim into practice. During this period, Russell approached the problem of our knowledge of the external world as a question of the verification of physics. The

gulf between physics and perception which Russell detected in *The Problems of Philosophy* generated some serious theoretical difficulties for physics. These difficulties arise from the fact that "physics is said to be an empirical science based upon observation and experiment" (RSDP. 139). But what actually do we know by observation and experiment? "Nothing.... except immediate data of sense, certain patches of colour, sounds, tastes, smells, etc with certain spatio-temporal relations" (RSDP. 139). At the same time physics says that the "contents of the physical world are *prima facie* very different from these: molecules have no colour, atoms make no noise, electrons have no taste, and corpuscles do not even smell" (RSDP. 139). Then how can we verify physical objects on the basis of sense-data? This difficulty makes it impossible for physics to justify its truth claim that it is "based on observation and experiment". For Russell, the "Only justification possible must be one which exhibits matter as a logical construction from sense-data" (OKEW. 106; RSDP. 140).

Initially Russell admits that ideally a "complete application of the method which constitutes construction for inferences would exhibit matter wholly in terms of sense-data and even we may add of the sentence-data of a single person" (RSDP. 150). But in the course of development the materials out of which Russell constructed physical objects are not limited to actual sense-data with which a single person is acquainted. In his own later admission he "became persuaded that this is an impossible programme and that physical objects cannot be interpreted as structures composed of elements actually experienced" by one person (MPD. 105). Physical objects are believed to exist for long period during which they are not observed. Now if they are interpreted as being composed of only sense-data, then, since sense-data are momentary and fleeting, they must cease to exist when not observed and those in the distant forest of Amazon (which have never been observed) must never have existed. Worse than this, the furniture, books and other materials in my office must apparently come into and go out of existence as I look at them or leave the office and no longer see them. To avoid this intolerable result Russell "gave up the attempt to construct 'matter' out of experienced data alone and contended [himself] with a picture of the world which fitted physics and perception harmoniously into a single whole" (MPD. 105). So in order to ensure the continued existence of physical objects, he admitted two sorts of inferences : (a) to the sense-data of other people, and (b) to unsensed sensibilia both of which are necessary if Russell is to escape

the charge of solipsism (cf. RSDP. 150-51). With these additions, physical objects are constructed out of actual and possible sense-data.

Now the question is: how far is Russell successful with the constructed objects? To answer this question, let us enumerate the main objections one might raise against logical construction and also consider possible replies on behalf of Russell.

1. Russell puts the problem of our knowledge of the external world as a question of the verification of physics and common sense. Strictly speaking, verification consists always in the occurrence of sense-data. Now since sense-data are, by definition, related to appropriately functioning sense organs, this tends to suggest that empirical verification includes the possibility of actual perception. Now the question: how far does the construction of physical objects from sensibilia satisfy this condition of verification? So far as the object is constructed in terms of sensed sensibilia, it does so fully. But in the actual construction, since Russell has included unsensed sensibilia, the constructed object is bound to remain unverifiable.
2. One can also attack the constructionist theory by criticizing the status of sensibilia. It might be objected that unless Russell has empirical evidence that there are sensibilia which are exactly like sense-data, except that they are not data, he has no right to assert that "what the mind adds to sensibilia, in fact, is merely awareness" (RSDP. 143). Now since sense-data are all that we are directly acquainted with in any perceptual experience, to assert the existence of sensibilia Russell has to make a speculative leap.⁷ One might even press the objection to a little further that Russell could no more assert the existence of sensibilia than Kant could assume the existence of *Ding an sich*.
3. The additional concession to the inferred sense-data of other people brings further weakness to the overall aim of construction. As a matter of fact, inference to other people's sense-data loses certainty claim on two counts. Inferring other people's sense-data implicitly assumes that there are other people's minds and that there are other people's bodies. But from strict logical and epistemological point of view, Russell is no more justified in inferring other people's sense-data than in inferring other people's bodies.

However, Russell might neutralize part of this objection by maintaining that he can construct other people's bodies as he constructs physical objects. But still he has to infer other people's minds. The critic might press that if other people's sense-data have to be inferred (via other people's minds) then why worry about having to infer physical objects? The physical object is not empirically verifiable, so neither is other mind. Therefore, he has no more right logically to infer other minds than he has to infer physical objects.

None of the above objections can be conclusively answered. Objection (1) is certainly right. The inclusion of unsensed sensibilia weakened the construction of physical objects considerably, since they lack the verifiability which the theory was initially committed to provide. But Russell was forced to include unsensed sensibilia into the construction, otherwise it would have been impossible for him to get out of sceptical solipsism, a position which he also wanted to refute. Without this concession, any claim to know beyond the sense-data of the present moment would be unjustified. The critic might argue that the construction ought to end in solipsism. If it is to be avoided, it can only be at the expense of refusing to carry its own principle to its logical conclusion. This is true, but the criticism is besides the point. Russell did not want to carry the construction to its logical conclusion because he realized that he had to let in unobserved things and events; only unsensed sensibilia could handle this situation.

As soon as Russell realized that he could not do without unsensed sensibilia, he revised the requirement of verifiability: "Verification consists always in the occurrence of expected sense-data [unsensed sensibilia]" (*OKEW.* 89). Now whether one should call unsensed sensibilia "verifiable" is a matter which largely depends upon how we should define "verifiable". But Russell finds it more reasonable to regard them as verifiable and this allows for degrees of verifiability and therefore degrees of certainty in respect of our belief about the external world. So accepting "verifiable" in a modified sense, his theory of construction may be said to fulfil the purpose of construction of physical objects out of verifiables only.

Objection (2) is also partially right. From a strict epistemological point of view Russell has no right to say that what the mind adds to the sensibilia is

simply awareness. But it is not difficult to see why Russell made this claim. Since the “metaphysical and physical status” of both sensed sensibilia and unsensed sensibilia are alike (RSDP. 142) their ontological status is not changed. The physical nature of sense-data makes them intrinsically objective and their relations to perceiving mind becomes more accidental. So they existed before they became data to a subject and continue to exist, when they cease to be data, as unsensed sensibilia. As Russell says, “a quality becomes a sense-datum by being given in sense, just as a woman becomes a wife by being given in marriage”⁸. Just as a woman becomes a wife by entering into the realtion of marriage, the sensible becomes a sense-datum by entering into the realtion of acquaintance. The woman certainly existed before she becomes the wife of a man and will certainly continue to exist if her marriage is dissolved. Similarly, the quality certainly existed prior to its being a datum and will continue to exist when it is not datum to any body. Russell’s “photographic plate” example produces the same result (cf. *PMD*. 106).

Russell must admit that since unsensed sensibilia are, by definition, not available to the senses, they are not actually experienced. So they do not have the same epistemological status as sense-data; they are not as certain as sense-data. But I think that Russell is right in denying that they are metaphysical postulations in any sense such as Kant’s “*Ding an sich*, [which is] something wholly remote from the data” (RSDP. 150). Since they cannot be available to the sense when they are not data, they are not strictly speaking verified as sensed sensibilia. Therefore, Russell certainly realized that inference to unsensed sensibilia undermined, to a certain degree, logical constructions. He even expressed some optimism about the possibility of eventually eliminating them (cf. RSDP. 170). But in the course of development, there was no way of avoiding unsensed sensibilia, since they played a major role in the construction of physical objects. The inferences to sensibilia, although Russell always kept “sensibilia” in quotes and italics, embarrassed him deeply. Without unsensed sensibilia the verification of physics would not be possible. Only after admitting them would it be possible to hypothesize as to “(a) how things would appear to a spectator in a place where, as it happens, there is no spectator; (B) how things would appear at times when, in fact, they are not appearing to anyone; () things which never appear at all” (*OKEW*. 116).

Russell’s dependence on inferred unsensed sensibilia has also been

objected to by many philosophers⁹ on the ground that if Russell is to admit unsensed sensibilia, he might better admit physical objects as he conceived them in *The Problems of Philosophy*. After all, they claim, the notion of unsensed sensibilia brings the concept of sensibilia too close to the concept of physical objects. But I think that these philosophers are mistaken. The reason is that where as the inference to physical objects from sense-data is what Ayer calls,¹⁰ a 'vertical inference', the inference to sensibilia is a 'horizontal inference'. Horizontal type of inferences are more secure than vertical type, since they consist in inferring the same sort of entities as those with which we start. In this sense, the conclusion of horizontal inference is "verifiable" empirically. By contrast, the conclusion of vertical inference can never be empirically known since it consists in inferring a completely different sort of entity from the one with which we start, i.e., sense-data.

So the status of unsensed sensibilia and that of physical objects are not the same. If they were, then why should Russell wish to replace physical objects by logical constructions out of sensibilia. The difference between inferred physical objects and unsensed sensibilia, also become clear from Russell's assertion that all sensibilia have the metaphysical and physical status as sense-data. While physical objects are by nature unobservable, unsensed sensibilia just happen to pass unobserved. But they are capable of being observed should there be an observer to do the job.

Objection (3) falls into the same category as objections (1) and (2) and Russell's reply to it would be in line with his reply to (1) and (2). Both unsensed sensibilia and other people's sense-data are inferred entities; both lose a certain amount of verifiability and certainty. The only difference is that whereas Russell's defence of unsensed sensibilia depends upon the principle of continuity (RSDP. 143.), the defence of other people's sense-data depends on other people's minds; and his defence of other people's minds is based on the argument from analogy. "Other people's bodies behave as ours do when we have certain thoughts and feelings; hence, by analogy, it is natural to suppose that such behaviour is connected with thoughts and feelings like our own" (*OKEW*. 102).

The reality of the constructed world brings us back to the question of testimony and the evidence from the existence of other minds. However, Russell conceded that "the argument from analogy in favour of the existence of other

people's minds cannot be conclusive'' (*OKEW*. 101). As a result one might well cast some doubt on the argument. Russell tried to make the argument cogent by maintaining that

[t] he hypothesis that other people have minds must, I think, be allowed to be not susceptible of any very strong support from the analogical argument. At the same time, it is a hypothesis which systematizes a vast body of facts and never leads to any consequences which there is reason to think false. There is therefore nothing to be said against its truth, and good reason to use it as a working hypothesis (*OKEW*. 103).

So the assumption that there are other minds may be used as a hypothesis which fits the facts. He cannot do without the inclusion of other people's sense-data, although it weakens considerably the certainty claim of constructions, as does the inclusion of unsensed sensibilia. He says :

In actual fact, whatever we may try to think as philosophers, we cannot help believing in the minds of other people, so that the question whether our belief is justified has a merely speculative interest (*OKEW*. 104).

Here the end justified the means. Given that there are other minds and that their sense-data are similar to our own and that we can rely on testimony, Russell can secure his realist position in extending knowledge "beyond our private data, which we find in science and common sense" (*OKEW*. 104).

Russell neither has a complete defence of, nor can he ensure absolute certainty for, the inference to other people's minds. Again I think that Russell is basically right in denying that the epistemological status of other minds and that of inferred physical objects are similar. They have similar status in respect of the fact that both are inferred and neither is strictly verifiable. But whereas inference to physical objects is never verifiable even in the extended sense, other people's minds and their sense-data are verifiable in the extended sense. We have no access to other minds, true, but we can frame the idea of other minds given that we have direct access to our own minds. By contrast, not only are physical objects not capable of being inferred from sense-data, also we cannot form any idea of what a physical object is like or what qualities it has.

Considering all the previous objections and my partial defence of Russell, it appears that Russell fails, at least in part, to achieve his goal. He is not

completely successful in verifying, in the strict sense, the claims of physics and common sense. I do not think that the theory could ever be completely successful given that he has to use certain items which fall short of complete verification. I also think that a complete application of logical construction is not only unattainable, but also undesirable. Russell certainly realized that his own strict standard prevented his programme from reaching its goal of bridging the gulf between perception and the external world. The only knowledge and certainty Russell's construction may safely be said to yield is knowledge about immediate sense-experience. In that case there is no possible way to prove that there is an external world. It seems that as long as Russell holds that our direct perception is limited to sense-data he cannot come out of the sceptical position. This seems to be an example of what George Santayana took to be Russell's basic limitation in philosophy which made him lose his "interest in Russell as a thinker" in 1914¹¹. Santayana repeats his regret to Fuller :

...of course I read what Bertie Russell writes, although as you know, I think he has relapsed into the British original sin of empiricism, and all his intelligence and keenness will not help him out of the consequent impotence and artificiality¹²

Santayana not only regretted Bertie's failure to come out of the empiricist trap but he even deplored his strict adherence to empiricism :

His radical solutions were rendered vain by the conventionality of his problems. His outlook was universal, but his presuppositions were insular. In philosophy he could not entertain the hypothesis that Berkely, Hume and Mill might have been fundamentally wrong.¹³

I think that Santayana is right in his insistence that Russell's adherence to empiricism generated a serious problem for him in reaching his goal of bridging the gulf between perception and the external world. His realist conviction vis-a-vis science and common sense, on the one hand, and his empiricist commitment to Locke, Berkely and Hume, on the other hand, generated an apparently inescapable paradox for him. The two cannot exist together although he required both. I believe that Russell was quite aware that he could not consistently hold both empiricism and realism. So he had to be a little inconsistent with respect to either of these two positions. Then which one is to pay the price? I also believe that Russell never wanted to become a

consistent empiricist at the cost of becoming an inconsistent realist. I completely agree with Anthony Quinton's remark that "in the theory of knowledge [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".¹⁴ So it is empiricism which is to pay the price. Since pure empiricism results in pure sceptical solipsism and since Russell desperately wanted to avoid that result, it was only natural for Russell to relax his strict adherence to empiricism by including unsensed sensibilia and other people's sense-data in the construction. The inter-subjective version of sensibilia is a realism of sorts. It does not infer the existence of physical objects as the causes of our sense-data, true, but it does make the following realist assumptions :

- (a) there are sensibilia which are publicly given ;
- (b) there are other people;
- (c) other people's sense-data are like our own.

I do not think that Santayana is right in insisting that Russell did not realize the limitations of empiricism. Russell certainly realized that strict empiricism was sure to fail (cf. *PP.* ch. II; *OKEW.* chs. III & IV; *OM.* fols, 1-35; *HK.* 496-507)¹⁵. It is only at the end of his philosophical career that Russell made it explicit that the empiricist method itself is inspired by the belief "that all human knowledge is uncertain, inexact, and partial. To this doctrine we have not found any limitation whatever" (*HK.* 576). Russell's realism not only upsets a strict adherence to empiricism, it also shows that empiricism as a theory of knowledge is fundamentally untenable.

As soon as Russell realized that there was no way of carrying logical construction to its strict verifiable level, he pulled back from his strict claim of constructing physical objects out of sense-data only. Now he regards constructionism only "tentative and suggestive". He also called it "hypothetical construction" (*OKEW.* 128-29; cf. also *RSDP.* 170). It is to perform certain functions but does not necessarily claim to be true. This makes the function of philosophy, for Russell, not so much a matter of searching for certainty in empirical knowledge, as it was in *The Problems of Philosophy* (p. 7) but of showing the possibility of hypothesis even it is not ultimately defensible (Reply.

707). The strict claim is now reduced to a modified claim; despite the fact that the claims of physics and common sense cannot be verified by reducing them to claims about sense-data, it is nevertheless possible to show their relationship with sense-data. Russell had to compromise his empiricism with his realism and the only possible way it could be done was by bringing unsensed sensibilia and other people's sense-data into construction and then regarding the construction as hypothetical.

It has yet to be decided whether the hypothetical construction is any better than *The Problems of Philosophy* theory of perception? Some People think that Russell moved from a bad position to a worse position given that he has to rely on more inferred entities than in *The Problems of Philosophy*. This is another way of saying that shifting from *The Problems of Philosophy* theory to the constructionist theory is something like, as Hirst says, "jumping out of the frying pan into the fire".¹⁶ That might be true for a direct realist like Hirst. But for Russell perception is certainly less direct than Hirst-type people ordinarily suppose it to be. Russell preferred the constructionist theory as more advantageous than *The Problems of Philosophy* theory in compromising between realism and empiricism. Let us recall, one more time, Russell's pre-constructionist account of physical objects as inferred entities. The notorious difficulty with this view is that it makes our knowledge of physical objects depend upon ever unobservable causes of sense-data. The constructionist theory is an alternative proposal which would dispense with the physical objects as inferred entities. This is an empirical undertaking the aim of which is to assume no entities which cannot be brought back to experience and a verifiable level.

Now the question is that how much is the sceptic satisfied with the constructed objects? Not that much. Russell is now ready to admit that since the constructionist theory falls short of the "absolute certainty" he sought earlier, the sceptic may not be satisfied. The sceptic might challenge the very core of our belief in the external world by challenging the justifiability of inferences to unsensed sensibilia and the sense-data of other people. He might ask why should we accept them, After all they might be just false. Then what reason can Russell assign for accepting the common sense scientific view of the external world? Russell's answer is straightforward enough : no reason can be assigned. (OKEW. 74).

Despite Russell's attempt to avoid scepticism concerning our knowledge of the external world, he felt unable to achieve some measure of security for human knowledge against scepticism. Russell certainly did not think that total security against scepticism was possible, but he thought that we have good reason not to be sceptical. The constructionist theory tried to minimize scepticism by constructing physical objects out of sensibilia. Although it has some defects, I believe that this was highly interesting *manoeuvre* for Russell to have made against scepticism. The introduction of sensibilia can be regarded as the heart of Russell's constructionism. It helped him not only to give a plausible reply to the sceptic, but also to forge a link between his empiricism and his realism, to act as a possible candidate for bridging the gulf between physics and perception and to retain a moderate use of empiricism. It helped him to remain faithful to his empiricist predecessors. No matter how far his realism takes him for experience Russell could fall back on the experiential foundation.

NOTES

- * Earlier versions of this paper were presented to the Dev Centre for the Philosophical Studies (Dhaka University) and to the Faculty of Philosophy (Cambridge University). The author is grateful to Professors Nicholas Griffin, Abdul Matin and Jane Heal for their valuable comments.

1. David Pears, *Bertrand Russell and the British Tradition in Philosophy* (London, New York, 1967), p. 11.
2. References to Russell's works are given in brackets after passages cited. These references are abbreviated as follows :

PP. -- *Problems of Philosophy*, A Galaxy book, New York : Oxford University Press, 1959. First published in the Home University Library, 1912.

OM. -- "On Matter". Unpublished manuscript, 1912, Russell Archives, McMaster University, Canada, File No. 220.011360.

RSDP. -- "The Relation of Sense-data to Physics", *Mysticism and Logic and Other Essays*. Melbourne, London and Baltimore : Penguin Books, 1953. First published in *Scientia*, Vol. 16 (1914).

OKEW. -- *Our Knowledge of the External World*. Revised Edition, 1926, London: George Allen and Unwin Ltd., 1949 (reprint). First Published in 1914 by the Open Court Publishing Co.

AM. -- *The Analysis of Mind*, London : George Allen and Unwin Ltd., New York : Humanities Press Inc., 1971. First published in 1921 by George Allen and Unwin Ltd.

Reply. -- "Reply to Criticisms", *The Philosophy of Bertrand Russell*, edited by P. A. Schilpp, 4th edition, La Salle, Illinois : Open Court, 1971. First published in 1944.

HK. -- *Human Knowledge : Its Scope and Limits*, London : George Allen and Unwin Ltd.; New York : Simon and Schuster, 1948.

MPD. -- *My Philosophical Development*, London : George Allen and Unwin Ltd., 1959.

3. Russell read this paper to the Department of Philosophy at the University of Wales, Cardiff, on 17 May, 1912. This paper is scheduled for publication in *The Collected Papers of Bertrand Russell*, Vol. 6, 1909-13, ed. John G. Slater.
4. Letter from Bertrand Russell to Ottoline Morrel (hereafter referred as B. R. to O. M.), Russell Archives (hereafter referred as R. A.), # 423, postmarked April 24, 1912. References to Russell's letters to Ottoline Morrel are to microfilm copies in the R. A. at McMaster University. The original letters are at the Harry Ransom Humanities Research Centre, University of Texas, Austin. When a letter is dated by Russell himself the 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 Ottoline Morrel and her Secretary.
5. B. R. to O. M. #[427] attached with # 426, pmkd. April 28, 1912. I think that it was due to Wittgenstein's influence that Russell developed a sceptical view about physical objects. Cf. Saïahan Miah, "The Emergence of Russell's Logical Construction of Physical Objects", *Russell*, Vol. 7, No. 1 (1987), pp. 17-22. See also B. R. to O. M., R. A., # 435, pmkd. 2 May, 1912; # 459, pmkd. 21 May, 1912; # 460, pmkd. 22 May, 1912.
6. This goes against the received view about Russell's logical construction that it emerged in 1914 in *OKEW.*, for the first time. For details, see Miah, *op. cit.*, pp. 11-24.
7. R. J. Hirst, *The Problems of Perception* (New York, 1959), p. 79.
8. Ernest Nagel, "Russell's Philosophy of Science", *The Philosophy of Bertrand*

Russell. Edited by P. A. Schilpp (La Salle, Illinois, 1971), p. 342; C. A. Fritz, *Bertrand Russell's Construction of External World* (London, 1952), pp. 177-79; W. T. Stace, "Russell's Neutral Monism" in Schilpp (ed.) *The Philosophy of Bertrand Russell*, p. 370.

9. A. J. Ayer, *Russell* (London, 1972), p. 39.
10. Bertrand Russell, "The Nature of Sense-Data -- A Reply to Dr. Dawes Hicks", *Mind*, Vol. 22 (1913), p. 77.
11. Letter from Santayana to B. A. G. Fuller, February 7, 1914, *The Letters of George Santayana* (ed.) Daniel Cory (New York, 1959), p. 137.
12. Letters from Santayana to Fuller, January 10, 1920, *The Letters of George Santayana*, p. 181.
13. Santayana, *My Host the World*, Vol. III, Persons and Places (New York, 1953), p. 30.
14. Anthony Quinton, "Russell's Philosophical Development", in his *Thought and Thinkers* (London, 1982), p. 283.
15. See also "The Limits of Empiricism", *Proceedings of the Aristotelian Society*, Vol. 34 (1935-36), pp. 131-50.
16. R. J. Hirst, *The Problems of Perception*, (New York, 1959), p. 79.