Russell's neutral monism

by Robert Tully

UNLIKE HIS THEORY of descriptions or theory of types, Russell's doctrine of neutral monism is not widely known among philosophers. Many who do know something about the doctrine hardly esteem it, while those commentators who have examined it more fully are in no agreement over its essential meaning. One opinion is that neutral monism was a temporary infatuation of Russell's which he celebrated in The Analysis of Mind but towards which he had cooled by the time he wrote The Analysis of Matter, so much so that despite protestations of continued loyalty his allegiance had shifted from neutral monism to scientific realism. Another view is that The Analysis of Matter represents a mature version of the doctrine which incorporates the Causal Theory of Perception, the neutral "things" being now identified as space-time events and no longer as sensations, which had been the focus in The Analysis of Mind. Yet another opinion is that Russell's acceptance of neutral monism consisted simply in his rejection of the act-object distinction and the concept of acquaintance which had played so extensive a role in his earlier epistemology. Finally, there is disagreement about whether Russell had ultimately abandoned neutral monism by the time he wrote Human Knowledge, some twenty years after The Analysis of Matter appeared.

The situation concerning neutral monism is—in short—beclouded, and in undertaking to offer yet another opinion about its "real" nature I run the obvious risk of merely adding to present confusion and thus, perhaps, of helping confirm the suspicion apparently held by many that neutral monism should be allowed to sink further into the depths of history under the weight of its own unforgivable obscurity. But this risk is worth taking, if only for the reason that a doctrine which figures so prominently in Russell's philosophical writings deserves at least to be understood before it can be fairly challenged, modified, promoted, or dismissed. So I have set myself the limited goal of trying to clarify what Russell understood neutral monism to be as well as what he believed its benefits were. I will say at the outset that I do not regard neutral monism as occupying a brief phase in Russell's thought; rather, I see it as a complex doctrine which he developed over a span of many years, making

use of certain ideas which go back at least to 1914, and to which he continued to adhere even in his philosophical autobiography of 1959. On the other hand, in support of this view. I must admit that Russell himself does not provide tremendous help. What I mean is that, for instance, when Russell explicitly mentions neutral monism it is as a particular theory held by others, such as James or Perry, so that his eventual conversion to it may give the impression of being merely the acceptance of their views instead of the commencement of a long period in which he consolidated and developed those views. More serious, however, is the fact that after The Analysis of Matter Russell stopped calling himself a neutral monist, although the label was certainly not repudiated. But against this must be weighed the more important fact that Russell incorporated central ideas from that work—ideas which clearly belonging to neutral monism-in his later philosophical writings, where he was less concerned to repeat the basic claims of neutral monism than to explore related themes, such as the construction of the notions of self and of space, and to investigate areas lying further afield, such as the nature of scientific induction.1

Before embarking on this upstream journey, however, I want to discuss one of the cross-currents of resistance mentioned earlier, namely that Russell's doctrine of neutral monism has not been highly regarded. What has brought this about? I will cite just two reasons, though probably there are more. The first is the general character of the doctrine. As Russell presents it, neutral monism is a synoptic metaphysics which seeks to reconcile the contrary tendencies of materialism and idealism, not so much through painstaking argument and proof as through its intrinsic appeal as a comprehensive theory which vindicates itself by the wisdom of its wider perspective. By characterizing it in this way I may well have succeeded in evoking some of the cold suspicion which I think is often felt towards Russell's doctrine. The synoptic approach he took has struck many as its very source of weakness, for the doctrine seems to rise above philosophy instead of engaging in it. Russell persisted in advancing systematic views at a time when the enterprise of metaphysics itself had become unpopular. Many of those whom this attitude has influenced must have been more than faintly puzzled to read Russell's endorsement of both Berkeley and modern physics in his "Present View of the World" published in My Philosophical Development, while his insistence both there and in earlier works that the data of experience belong to one's private world must have seemed an unregenerate stance in clear need of Wittgensteinian therapy. The other reason I want to give for neutral monism's poor reputation concerns its provenance. Since, as is well known, neutral monism was not originated by Russell himself but by other philosophers whom he faithfully acknowledged, critics may have chosen to steer around it, believing that it was not sufficiently genuine, in the sense of its not epitomizing his essential accomplishments as a philosopher. As to this second reason, I suggest that if neutral monism does indeed lie at the centre of Russell's mature views about perception and scientific knowledge, and is not just a restatement of Jamesian views about consciousness, then fairness requires that the doctrine be seen in close relation to the epistemology which became his chief concern after Principia Mathematica. As to the earlier point about metaphysics, I will say now only that Russell faced fundamental issues which are not easily made to disappear, and that his final position, far from being a strange and defective form of scientific realism, was seriously intended to show the limits of any version of scientific realism. I shall return to this point later on.

I apologize for the length of the "preliminary" remarks, but it seemed necessary to bring out that neutral monism is not an easy topic to make headway with and that the reasons for this lie both within the doctrine itself, as well as without. I now turn to describe, first, the thesis of neutral monism which Russell attacked at length before accepting, and next the doctrine of neutral monism as it evolved in his writings, once he had espoused it. Because of space I shall be limiting the second consideration mainly to two works, The Analysis of Mind and The Analysis of Matter.

I

In the rather fast-paced "Excursus into Metaphysics", which concluded his eight lectures on logical atomism, Russell candidly told his audience that he did not know whether the "American theory of neutral monism" is true or not, but, he continued, "I feel more and more inclined to think that it may be true." He surmised that ingenuity might resolve the difficulties preventing its acceptance. The problems he goes on to mention are ones with which he had confronted neutral monism in a much less conciliatory mood some four years earlier, in 1914; Russell presented them in a series of essays on theory of knowledge which he published in The Monist,4 and he had left no doubt that he considered these objections fatal to the theory.

What exactly was the theory which Russell was attacking, what objections did he think so devastating to it, and why did he take such trouble to overthrow it?

In Russell's words, neutral monism maintains that "the things commonly regarded as mental and the things commonly regarded as physical do not differ in respect of any intrinsic property possessed by the one set and not by the other, but differ only in respect of arrangement and context"; further, "the affinities of a things are quite different ... and its causes and effects obey different laws" (Collected Papers, 7: 15). From its monistic standpoint, "the whole duality of mind and matter ... is a mistake; there is only one kind of stuff out of which the world is made, and this stuff is called mental in one arrangement, physical in the other" (Collected Papers, 7: 15; Russell's italics).

This characterization of neutral monism is familiar, general and none too informative; indeed, it is also somewhat misleading, owing to the stress Russell gives to the ontological side of neutral monism which lends it a sense of depth and mystery. and our immediate reflex is to demand an account of the neutral stuff itself—what its intrinsic properties are, how it is to be indentified as such, how descriptions of it are to be framed, and by what additions this stuff takes on the character of being

¹ Elizabeth Eames quotes Russell as saying in June 1964: "I am conscious of no major change in my opinions since the adoption of neutral monism" (Bertrand Russell's Theory of Knowledge [London: Allen & Unwin, 1969], pp. 108, 135n.72).

² My Philosophical Development (London: Allen & Unwin, 1959), pp. 16-27.

^{3 &}quot;The Philosophy of Logical Atomism" in The Collected Papers of Bertrand Russell, Vol. 8: The Philosophy of Logical Atomism and Other Essays, 1914-19, ed. I.G. Slater (London and Boston: Allen and Unwin, 1986), pp. 234-44.

⁴ The first three of these were published under the general title, "On the Nature of Acquaintance", in The Monist, 24 (1914). The six constitute the initial chapters of Part 1 of Russell's manuscript, Theory of Knowledge, now Vol. 7 of Collected Papers, ed. E.R. Eames with K. Blackwell (London and Boston: Allen and Unwin, 1984).

something either mental or physical. But the early neutral monists were no more interested in exploring the nature of their stuff than they were in the problems of devising a language to describe it, while Russell's own criticisms of the theory, despite their great diversity, do not even hint at the charge of metaphysical obscurantism. The extensive quotations Russell gives from the writings of James and Mach before launching into those criticisms make it fairly clear that the neutral stuff was something overt, not hidden, that it consisted of the sort of items which we are said to encounter in everyday experience, such as colours and sounds, and above all that items like these constitute the ultimate data to which we refer in making any statement about either a physical or a psychological state of affairs. To these data Mach had given the name "sensations", while James preferred the phrase "pure experience". Because of the suggestions he rightly thought they carried, Russell was unhappy about both expressions.

In fact, however, the defenders of neutral monism looked upon their theory as embodying a strong, anti-metaphysical commitment to the methods and aims of empirical science. In this spirit they advanced a number of general claims, among which are three which I think should be singled out. They concern the alleged data of science, the goal of reductionism, and lastly the relation of philosophy to science:

- (I) At the level of observation, the sciences of physics and psychology do not investigate radically different objects. One and the same item—a particular colour, say—can be identified either as physical, i.e., as something which by virtue of its relations to other particulars is classified as belonging to physical space and as subject to causal laws; or as mental, i.e., as something which by virtue of different relations to other particulars is classified as constituting part of the sensory history of the observer by being part of that observer's momentary experience.
- Such items as colours and the like are not properties of some fundamental type of substance but are the very elements out of which physics and psychology construct the complex "objects" and phenomena with which they primarily deal, such as material objects and conscious states such as imagining and remembering. The concepts pertaining to such things are to be viewed as constructions, i.e., as being about systems of particulars related by causal or associative laws. Unlike the particulars or elements which they relate, these laws themselves may be heterogeneous.
- (3) Philosophy emphasizes the intersection of physics and psychology at the level of elementary data and has neither a separate class of data or a different kind of relation among them to investigate. Philosophy proceeds apace with science, and by using its results is able to reformulate certain traditional philosophical ideas like those of space, matter, the self or the subject of experience, and cognitive states such as believing and knowing. Such notions are to be given empirical content: in James's words (quoted by Russell), words like "consciousness" do not stand for something mysterious, "some aboriginal stuff or quality of being" (Collected Papers, 7: 17).

Without doubt, neutral monism reveals something of the modern temper of analytic philosophy. The principal figures associated with the theory saw themselves as breaking the hold of traditional metaphysics and as restoring vigour to philosophy through the increased ties with science. Such developments were of course evident on both sides of the Atlantic. Indeed, what Russell called the "Mach-James hypothesis" (Collected Papers, 7: 17) was typical of views to be found in a broad and amorphous philosophical movement which at the time was called "The New Realism". In a volume of essays bearing that very title which was published in 1912,5 five charter members of this movement had set forth their views on the analysis of mathematical concepts, the nature of illusory experiences, and a realistic interpretation of biology, among other topics. Russell himself quotes from this volume in the course of presenting his criticisms of neutral monism.6

It would be wrong, however, to say that the New Realists were simply neutral monists. In their lengthy Introduction to the volume, for instance, they jointly declared that "the simple constituents of the world comprise both sensible qualities and logical constants",7 and Russell at least never considered the theory he was criticizing to incorporate any thesis about logic. In any case, the five did not call themselves neutral monists in this volume (the title, Russell afterwards said,8 was suggested by H.M. Sheffer, who in fact was not one of this group), although they clearly seem to have been searching for a label. One of them (Montague) dubbed his theory "Hylopsychism",9 while another (Perry) described his own very similar view as a combination of "subjective monism" plus "realism".10

Matters of terminology apart, the views of the new realists unquestionably include the three claims of neutral monism listed a short while back, and since this theory is rather compendious, touching on a wide range of topics which concern the relations of physics and psychology to first-person experience, it is important to identify what Russell found so objectionable about the theory and to which of its parts his criticism applied. Instead of running through each of his objections, however, I shall do Russell a slight but unavoidable disservice of cutting across them, to bring out more concisely what I take the main points to be. There are, I have found, three.

First, Russell supposed that neutral monism, far from being the radical departure it appeared, had a close affinity with idealism. He speaks, for instance, of "the unconscious influence of an idealistic habit of mind" (Collected Papers, 7: 21) which shows itself in the choice of technical vocabulary such as James's favourite word "experience" (pp. 20-1). Much more serious is his charge that idealism and neutral monism share a common assumption which he takes to be wholly false. The assumption is that "if anything is immediately present to me, that thing must be part of my mind" (ibid., p. 22; Russell's italics). I find this charge grossly unfair. Since neutral monism holds that physical objects, or at least various physical properties, are immediately present to an observer, it would follow from this assumption that such properties are in that observer's mind; and exactly the same result follows for the neutral stuff itself, or which physical objects are claimed by the theory to consist. Yet all this is just what neutral monism denies. Being immediately present to an observer is itself a neutral relation and does not confer on whatever item is present the status of being either mental or physical, and so no item can be said to be "in"

⁵ E.B. Holt et al., The New Realism (New York: Macmillan, 1912).

⁶ Collected Papers, 7: 24. Russell quotes from W.P. Montague's essay, "A Realistic Theory of Truth and Error", The New Realism, pp. 251-300.

⁷ The New Realism, p. 35.

⁸ An Outline of Philosophy (London: Allen & Unwin, 1927), p. 293.

⁹ The New Realism, p. 281.

¹⁰ Ibid., p. 143.

the mind until its relations to further such items have been specified.

Nevertheless, I think there is something in Russell's objection, though it falls well short of showing collusion with idealism. The neutral monist faces the obstacle of having to devise a suitably neutral way of pinning down and characterizing these items which supposedly enter into mental and physical constructions, and this obstacle is made more difficult by the fact that, in the first instance, such items are to be picked out in reference to perceptual contexts. The redness of an apple, for example, is easily enough seen, but the attempt to construe the particular colour I see as something that essentially is neither a mere content of my experience, not yet entirely public and independent of that experience, requires a feat of analytical attention which the neutral monists never concerned themselves with, and which may not be possible at all. The problem is that such items are not perceived as neutral, but as physical or otherwise in light of their relations to other items, even though the person who makes the classification may be mistaken. On the other hand, the neutral monist cannot regard these items as merely inferred entities, reachable only through definite descriptions. Neutral stuff is supposed to occupy the other end of the scale: according to the way it is classified, it makes up the sensuous qualities of a physical object or the content of immediate experience. So there is a clear need for the neutral monist to come up with a suitable type of description which, say, would enable one to fix the reference of a term like "red" in a way that secures its neutrality. The words of Mach and James hardly seem capable of achieving this, and the emphasis they gave to talk of sensations and experience may well have impressed Russell as covertly reintroducing the idealistic epistemology which he had already rejected. Interestingly, the New Realists appear to have been aware of the problem and, officially at least, designated neutral items as "qualities"; but he paid no attention to this when he accused their theory of being tainted with idealism. Whether a word like "quality" would in fact achieve what is wanted may be questioned, just as it may be wondered whether Russell's own use of the expression "sense-datum" could ensure the degree of objectivity and independence he required for the construction of physical objects. The problem of basic descriptions is a common one for empiricists, not just for those who defend neutral monism.

It may be worth recalling here that when Russell first became a neutral monist he adopted the word "sensations" for the neutral stuff, and that when he looked back upon this epoch in his philosophical autobiography he confessed that he had not then appreciated the extent to which words like this would need to be redefined.11 He appears to have forgotten the criticism he made of neutral monism in 1914. In any case, as we know, "sensation" too was abandoned soon after for words like "percepts" and "qualities".

Russell's second general objection to neutral monism is its alleged flawed analysis of various cognitive relations like belief, knowledge and memory, as well as its related inability to give a convincing account of error. He declares that "no sensation ... no presentation of any kind, can give the same objective content as is involved in my belief" (Collected Papers, 7: 23). The content of a belief cannot be confused with some entity or other in the physical world, which is all the more evident when one considers the occurrence of abstract beliefs and of erroneous ones. Russell is obviously correct in pointing out that sensations (however this term is construed)

and beliefs are on epistemically different levels, and that no proper account of belief could avoid reference to states of affairs. But did the neutral monists think otherwise? Their analysis of cognitive states was not nearly so preoccupied with sensations and experience as Russell suggests. Where James and other neutral monists showed considerable invention was in their attempt to portray epistemic facts in a way which focused on action and behaviour, and on the causal efficacy of experiences instead of their qualitative content. Cognitive states, in other words, were to be reconstructed in physical terms. About all this Russell had practically nothing to say in his criticism of neutral monism; instead, he considers James's account of knowledge to be fundamentally defective because, he claims, it replaces knowledge of objects by "knowledge of propositions in which the objects do not occur, but are replaced by descriptions; and the constituents of such propositions are contained in the present experience of the person who is believing them" (ibid., p. 28).

In the 1918 lecture mentioned earlier, Russell noted that the theory of behaviourism "belongs logically with neutral monism" (Collected Papers, 8: 242). Yet even when Russell had finally accepted neutral monism he preferred to analyze the concept of belief in terms of a specific belief feeling (along with particular sensations and images), and further years elapsed before he began to make serious use of behaviouristic principles in the treatment of cognitive concepts. I point this out because I think it suggests the hold which a certain introspectionist orientations had on Russell's thinking. This matter relates directly to the final objection.

Fundamentally, Russell opposed neutral monism because he thought that it failed to portray accurately the nature of first-person experience: it ignored what he considered to be the intrinsic cognitive features of such experience. He writes: "It seems plain that, without reference to any other content of my experience, at the moment when I see the red [patch] I am acquainted with it in some way in which I was not acquainted with it before I saw it, and in which I shall not be acquainted with it when it ceases to be itself present in memory ..." (7: 23). That James and others should hold this to be just a matter of experienced relations to other contents Russell considers an "insuperable difficulty" to the acceptance of neutral monism (7: 21 and 31). What belongs to my experience is known directly, through what he calls "inspection". The neutral monists were in a sense looking in the wrong place, for no amount of knowledge concerning neutral processes will uncover for us the nature of the mind (7: 30-1). Russell returns to this theme later on: "What I demand is an account of that principle of selection which, to a given person at a given moment, makes one object, one subject and one time intimate and near and immediate, as no other object or subject or time can be to that subject at that time ..." (7: 40). The fact that the role of emphatic particulars like "this", "I", and "now" would be "impossible without the selectiveness of mind" affords in his eyes "a new refutation, and the most conclusive one, of neutral monism" (ibid.).

Despite the deep conviction Russell's words carry, the neutral monist was likely to have felt more repelled than refuted by this criticism. One has to assume that any neutral monist was as constitutionally fitted as Russell was to appreciate the immediacy of first-person experience; where they differed was in their conception of the form which the analysis of experience should take. For Russell, the basic phenomenon to be analyzed, which he called acquaintance, separates into a subject and an object bound together by an irreducibly mental relation taking many specific forms, such as perceiving. The neutral monist contrived a different analysis based

on objects rather than relations, and a much more ambitious one at that, since it required an account of selfhood and of what Russell called "knowing an object" which avoids assigning to these objects themselves any properties which would be incompatible with their becoming the terms of purely physical relations. In themselves, as we have seen, these objects are supposed to be neither mental nor physical, and Russell's criticism tends unfairly to equate them with perceptual contents, for even to classify a single neutral item as something with which I, the subject of experience, happen to be acquainted at a given moment involves a non-neutral description. The item is already being counted as part of my sensory history, and of such occurrences the neutral monist claims to be able to render an account mainly in terms of associative laws. It is not surprising that Russell should have regarded neutral objects as inadequate substitutes for the sorts of things which he believed are revealed by inspection. But then again, the neutral monist did not intend them to be substitutes.

Russell's objections to neutral monism in 1914 are by no means decisive, in the sense that he had detected deep logical flaws in the theory, nor did he stand by them for long. Moreover, there are several sides to neutral monism which he never challenged at all, such as its attempt to analyze the common-sense notion of material objects into classes of phenomenal particulars, and the strong emphasis it gave to the need of relating sensory evidence to the hypothetical constructs of science. At one point Russell suggested that the neutral monists suffered from a certain naïveté about science (7: 2), yet nowhere in his Monist articles did he do justice to their committed scientific outlook. Consider, for example, the words written by one of the New Realists, E.B. Holt:

These [neutral] entities are related by external relations, and man has as yet no just ground for doubting that the analytic method of empirical science can proceed without limit in its investigation of the universe. The dimensions of this universe are more than the three dimensions of space and the one of time: how many more is not known. The line that separates the existent and the non-existent, or the false and the true, ... or the real from the unreal, seldom coincides, and never significantly coincides, with the line that distinguishes mental and non-mental, subject and object, knower and known.12

Since Russell is likely to have sympathized with such a viewpoint in 1914, it has to be asked why he strove to put such distance between himself and the neutral monists at that time. I believe that the answer is his own deep commitment to the concept of acquaintance. It should be pointed out here that Russell's criticisms of neutral monism were hardly a self-contained effort but, formed the initial part of a substantial work entitled Theory of Knowledge which he never completed and brought to publication.¹³ The concept of acquaintance formed the keystone of that work, an epistemological model for his analysis of understanding, belief, memory, truth, and so on. To Russell, I think, neutral monism's rejection of an irreducible relation of acquaintance and of the need for a subject term in that relation stood as a threat

which needed to be swept aside to prepare the way for his own analysis of the various complex structures into which both subjects and objects enter as constituents.14 I am suggesting, therefore, that Russell saw neutral monism mainly as offering a rival epistemological model. Eventually, as we know, he abandoned work on this complicated and original analysis of the concept of acquaintance. I suspect that the stages of this change of heart can best be traced by considering what he has said about propositions and belief in the uncompleted work, in the lectures on logical atomism, and finally in his essay "On Propositions" of 1919 where he first endorses neutral monism.¹⁵ But that is a matter for separate study.

Ironically, while Russell was turning his back on neutral monism in some ways, he was helping to strengthen and articulate its position in others through further work he published in 1914. The analysis of experience which he offers in Our Knowledge of the External World and in essays such as "The Relation of Sense-Data to Physics" comes as close to neutral monism as it is possible for one to come who remains unwilling to yield on the issue of acquaintance.¹⁶ Here is a brief list of some prominent claims from the former work:

- (1) A sense-datum, considered as an aspect given in (say) perceptual experience, allows of a dual classification. In Russell's words: "Every aspect of a thing is a member of two different classes of aspects, namely: (1) the various aspects of the thing, of which at most one appears in any given perspective; (2) the perspective of which the given aspect is a member, i.e. that in which the thing has the given aspect. The physicist naturally classifies aspects in the first way, the psychologist in the second" (OKEW, p. 100).
- (2) For the science of physics, a thing is a series of aspects, which obey the causal laws of that science (cf. OKEW, pp. 115-17).
- (3) Physical space is a construction based on three-dimensional private perspectives, and is to be conceived mathematically as a multi-dimensional continuum which includes those perspectives (cf., e.g., OKEW, pp. 96-7).
- (4) The self or that which is acquainted with a sense-datum is—if it exists—"an inference, and is not part of the data" out of which the world is to be constructed (OKEW, p. 81).

I do not wish to suggest that there is a perfect harmony of views about the analysis of objects in Russell's various publications in 1914, or that his epistemological principles were merging imperceptibly with those of the neutral monists. His concept of acquaintance and the distinction between subject and object which it necessitated yielded no ground whatever to neutral monism at this time.¹⁷ Nevertheless, Russell clearly shared the neutral monists' desire to formulate a scientifically adequate epistemology, one that would use what they took to be the data of science to bind together the traditional concepts of mind and matter, and his use of mathematical

¹² The New Realism, pp. 372-3 (Holt's italics). (For clarity of punctuation I have inserted a comma after the second occurrence of "coincides".) There is a curious echo of Holt's sentiments in My Philosophical Development, p. 16.

¹³ Before publication I used a typescript of this manuscript prepared by the Russell Archives.

¹⁴ This was not the only threat Russell saw. He turns from neutral monism to take up some of Meinong's views for brief criticism (cf. Logic and Knowledge, pp. 169-73; Collected Papers, 7: 41-4).

¹⁵ Cf. "On Propositions: What They Are and How They Mean", pp. 306-7 in Logic and Knowledge, pp. 285-320; Collected Papers, 8: 278-306.

¹⁶ Our Knowledge of the External World (London: Open Court, 1914, revised 1926); "The Relation of Sensedata to Physics", in Mysticism and Logic (London: Longmans, Green, 1918), pp. 145-79; Collected Papers, 8: 5-26.

¹⁷ Cf. An Inquiry into Meaning and Truth (London: Allen and Unwin, 1940), pp. 50-1, where the concept of noticing seems to echo Russell's old allegiance to the doctrine of acquaintance.

techniques gave their ideas the precision and refinement which had been lacking. Seen against this broader background, Russell seems by the middle of 1914 to have drawn so close to the position of neutral monism that what then prevented his complete acceptance was a last disputed tenet in a creed he had lately been helping to define.

H

Some four years later, in his final lecture on logical atomism, Russell mentioned two difficulties facing neutral monism which would require ingenuity—doubtless he meant his own—to solve. These problems concern the analysis of belief and of the so-called egocentric particulars, but in fact Russell did not demand their solution before he could accept neutral monism. Not until An Inquiry into Meaning and Truth did he offer an analysis of demonstratives in terms of descriptions of compresent qualities, 18 while as for belief, his development of a behaviouristic account began only tentatively in The Analysis of Mind but did not reach a fuller form until An Outline of Philosophy, about six years afterwards. His behaviourism was of course tempered by the principles of neutral monism, which may seem incongruous, rather like proposing to anchor materialism firmly on a bedrock of phenomenalism. Yet Russell seems to have been always clear about his intention of pushing behaviourism as far as it would go, mindful (as he tells us) that "it had very definite limits" (My Philosophical Development, p. 130). In other words behaviourism served Russell as a method, not as a philosophical doctrine, and he resolutely objected to any attempt at eliminating or even avoiding such expressions as "sensation" and "image" in a philosophically adequate account of experience.

Russell's use of behaviourism should be left for separate consideration, but there is one important feature of his treatment of cognitive concepts like belief which needs to be mentioned, because it seems to introduce an anomaly into neutral monism. The difficulty has nothing to do with Russell's famous re-introduction in The Analysis of Mind of the act-object distinction for his analysis of belief.¹⁹ I think Russell had some justification in viewing that particular move as innocuous. As long as the act itself can be shown to consist of sensations and images related by causal laws (or mnemic ones), and as long as the subject term is itself constructible from elements which constitute what he calls a biography, then the act-object distinction can be thought of as a useful device which does not jar with the principles of neutral monism. The anomaly I have in mind concerns the kind of sensations which Russell required for his analysis of belief. With neither apology nor explanation he identifies these as feelings—a feeling of expectation, for instance. Similarly, he speaks of a feeling of discomfort in his analysis of desire, and one of pastness in the discussion of memory. The obvious question is: what are apparently sui generis sensations doing in the framework of neutral monism? In what sense can they be reclassified by means of purely physical descriptions? In what way is there anything identifiably neutral here at all? A feeling of expectation or of pastness can be attributed by me to another person, but then what I am referring to is numerically distinct from any qualitatively similar feeling I might happen to have at the same time, and in any case there seems to be nothing present in such occurrences which is attributable to

inanimate objects or which forms any part of neutral monism's construction of physical objects. Such feelings, it would seem, are purely mental and their introduction appears to contaminate, rather than merely complicate, the thesis of neutral monism which Russell had adopted.

Indirectly, at least, he may have been conscious of this problem, for in An Outline of Philosophy, after noting the Watsonian attempt to define emotions without recourse to introspection, Russell actually declares it an open question whether this could be applied to his own account of belief, in particular to what he now calls the "emotion" of expectation (p. 270). Open question or not, Russell seemed genuinely inclined in this work to look towards behaviouristic psychology for providing a satisfactory analysis of belief, but even if that were given it would only partly remove a theoretical difficulty and do nothing at all to solve a deeper philosophical one. Since Russell was determined to stand by the method of introspection, he would still need to integrate the occurrences of an emotion like expectation with whatever sequences of behaviour are intended to characterize a state of belief. But any such account seems to get no nearer to showing how the kinds of feelings revealed by introspection could furnish neutral material for a physical construction. I shall return to this problem briefly at the end.

Several commentators, including Stace, Sainsbury and even Aver, 20 look upon The Analysis of Mind as the highwater mark of Russell's enthusiasm for neutral monism. his interests thereafter apparently draining away into less metaphysical and certainly less doctrinaire channels. I have tried to show that this is a misinterpretation prompted by exaggerated attention to his earlier criticisms whose focus tended to be narrow, but I also think that several other factors have contributed to the misinterpretation. One is that Russell's own emphasis on the abandonment of the actobject distinction in The Analysis of Mind has been seen as typifying what neutral monism involves,21 whereas its comparative de-emphasis in The Analysis of Matter and An Outline of Philosophy may have suggested a noteworthy shift. Undoubtedly another factor has been his change of terminology. In the earlier work Russell was preoccupied with talk of sensations and images as the basic stuff of neutral monism. whereas in later works we hear only of percepts and events. This change in terminology fairly closely matches what I regard as Russell's progressive attempts to refine the theory of neutral monism so as to do full justice to the nature, scope and claims of physical science, even to the extent of his saying progressively less about the analysis of first-person experience. The Analysis of Mind was almost entirely concerned with just that. By describing The Analysis of Matter many years later as being "in some sense a companion volume"22 Russell seems to have regarded it as a continuation and development of the earlier work; and I suggest that reciprocally, the earlier work, despite the difference of terminology, should be considered as balancing somewhat the weight later given to the philosophy of physics. Together

¹⁸ Ibid., pp. 108-15.

¹⁹ The Analysis of Mind (London: Allen and Unwin, 1921), pp. 231-3.

²⁰ W.T. Stace, "Russell's Neutral Monism", p. 355 (text and notes), in The Philosophy of Bertrand Russell, ed. P.A. Schilpp, 3rd ed. (New York: Tudor Publishing Company, 1951), pp. 353-84; R.M. Sainsbury, Russell (London: Routledge & Kegan Paul, 1979), pp. 210-11, 268; A.J. Ayer, Russell and Moore (London: Macmillan, 1971), pp. 121-4.

²¹ Russell's own account of his acceptance of neutral monism (My Philosophical Development, pp. 139-44) tends to re-enforce this view, because he quotes extensively from The Analysis of Mind itself.

²² The Autobiography of Bertrand Russell, Vol. II: 1914-1944 (London: George Allen & Unwin Ltd., 1968), p. 152.

they provide significant evidence of continuity, though certainly not of uniformity, in his conception of neutral monism; indeed, in some respects the continuity extends back to Our Knowledge. I do not think that Russell's commentators have noticed how little revision Russell thought was actually needed, when he came to revise that work in 1926, in order to make it sufficiently conformable to neutral monism. It was substantially a matter of a single paragraph (see Our Knowledge, p. 83). But one thing Russell did give up after becoming officially a neutral monist was any attempt to determine whether or not it was true; instead, he described it variously as a hypothesis or a theory,23 to be assessed for its merit in organizing and helping to explain the nature of empirical knowledge. He began in fact to characterize neutral monism in much the same way he had previously done the so-called Leibnizian "model hypothesis" introduced in Our Knowledge (pp. 94-105).

Accordingly, what I referred to at the outset as Russell's doctrine of neutral monism begins to take clear shape in the essay "On Propositions" and especially in The Analysis of Mind, but is considerably filled out by The Analysis of Matter and An Outline of Philosophy. Some further important additions (which I shall not be considering) were made in An Inquiry into Meaning and Truth, but thereafter I do not think he made any significant alterations in the doctrine itself. The Analysis of Matter has sometimes been contrasted with its "companion" volume because of its distinct emphasis on scientific realism, particularly in connection with the causal theory of perception.²⁴ This, for example, was Stace's view, and apparently that of Broad as well who described Russell's position as "Mentalistic Neutralism". 25 However, I would argue that scientific realism makes its appearance earlier than The Analysis of Matter. It is certainly present in the 1924 essay "Logical Atomism"26 and there is even a case for its appearance a decade earlier in "The Relation of Sense-Data to Physics".27 However, in order to keep within the official period of his neutral monism, I want to examine a favourite example of Russell's which occurs in both The Analysis of Mind and in the 1924 essay, an example which may be all the more familiar because he repeated it in My Philosophical Development so many years later.28 The example concerns the manner in which a photographic plate would "observe" a star, and the similarity to someone actually perceiving that star:

... every particular of the kind relevant to physics is associated with two places; e.g. my sensation of the star is associated with the place where I am and with the place where the star is. This dualism has nothing to do with any "mind" that I may be supposed to possess; it exists in exactly the same sense if I am replaced by a photographic plate. We may call the two places the active and passive places respectively. Thus in the case of a perception or photograph of a star, the active place is in the place where the star is, while the passive place is the place where the percipient or photographic plate is.

We can thus, without departing from physics, collect together all the particulars actively at a given place, or all the particulars passively at a given place. In our own case, the one group is our body (or our brain), while the other is our mind, in so far as it consists of perceptions. In the case of the photographic plate, the first group is the plate as dealt with by physics, the second the aspect of the heavens which it photographs. (The Analysis of Mind, p. 130)

On a cursory reading of this passage it looks as though Russell is simply mapping out the obvious points of correspondence between perceptual experience and its physical basis: between the star as seen and the star in physical space, the percipient and the photographic plate, the mind and the brain of the percipient. But this was not the intention. His characterization of perception is given entirely from the standpoint of physics. The aspect of the star, or what he also calls its "appearance" (ibid., p. 131), is an item in a causal series whose conditions and effects are analogous in the case of brains and photographic plates, the main difference being that the sense organs of the percipient comprise a unique sort of intervening medium. Even the term "perception" itself is defined in physical terms (ibid.). The causal framework presented by Russell in The Analysis of Mind represents, I think, a major change from the phenomenalistic view he inclined towards in Our Knowledge29 and from similar views held by at least some of the early neutral monists such as Mach. Physical objects such as the star continue to be described as constructions—or "biographies", as he here calls them (The Analysis of Mind, p. 129)—only the particulars of which they consist are no longer characterized in sensory terms. Causal relations do not require to be elaborated in such terms. Russell's particulars in this work are, I believe, the forerunner of what he was later on to call events, of which he would give a much more sophisticated account. In the context of perception Russell was of course more interested in some particulars than others, namely those which enter into experience as sensible qualities. In The Analysis of Mind this subset of particulars was held to be made up of sensations and images, and when he adopted the terminology of events the members of the corresponding subset were called percepts. Nevertheless, in view of the status which Russell had begun to assign to causal relations lying outside the context of experience, it is natural to wonder what role might be left for the stuff of neutral monism.

On the face of things, the role of neutral stuff has been much diminished. This is reflected in Russell's paying considerably less attention to the observer as a subject of experience from the time he wrote Our Knowledge, where matter is constructed of real and ideal aspects called sense-data, to The Analysis of Matter a dozen years later in which our knowledge of matter is said to be inferential and known almost exclusively in mathematical terms. The descriptive viewpoint of Russell's earlier work right up through The Analysis of Mind was that of the traditional empiricist; what replaced it was the framework of modern particle physics. Sensations and images were displaced by percepts, but these are but one type of event, and the concept of an event belongs to physics. Precisely for this reason Russell's critics have considered his change in terminology to arise from a substantial change in his

²³ E.g., cf. "Logical Atomism", p. 341, in Logic and Knowledge, pp. 323-43, and Collected Papers, Vol. 9: Essays on Language, Mind and Matter, 1919-26, ed. J.G. Slater (London and Boston: Unwin Hyman, 1988), pp. 162-79; Analysis of Matter (London: Kegan Paul, 1927), p. 217; Analysis of Mind, p. 27.

²⁴ Stace (n. 20 above).

²⁵ C.D. Broad, The Mind and Its Place in Nature (London: Routledge & Kegan Paul, 1925), p. 649. Since this work was originally given as lectures in 1923, it seems likely that Broad was characterizing Russell's position in The Analysis of Mind.

²⁶ Cf. "Logical Atomism", Logic and Knowledge, pp. 341-3; Collected Papers, 9: 177-9.

²⁷ This is the view taken by Michael Lockwood, "What Was Russell's Neutral Monism?", p. 148, in "The Foundations of Analytic Philosophy", Midwest Studies in Philosophy, 6 (1981): 143-58.

²⁸ Cf. My Philosophical Development, p. 18.

²⁹ Cf. Our Knowledge of the External World, p. 116.

conception of neutral monism. One recent commentator, in fact, has claimed that events themselves are the successor neutral stuff of Russell's mature doctrine.30 Whether intended or not, the effect of any such interpretation would be to transform Russell's basic stuff into something physicalistic, thereby robbing it of its neutrality.

Such a view is made possible, I think, only by ignoring Russell's warnings against misinterpretation. Near the end of The Analysis of Matter he wrote:

So long as [my] views ... are supposed to be either materialistic or idealistic, they will seem to involve inconsistencies, since some seem to tend in the one direction, some in the other. For example, when I say that my percepts are in my head, I shall be thought materialistic; when I say that my head consists of my percepts and other similar events, I shall be thought idealistic. Yet the former statement is a logical consequence of the latter. (P. 382)

It is clear that Russell thought of neutral monism as a corrective to the other two varieties of monism which suffer from quite different but equally severe limitations, the one because it refuses to recognize the powerful role of inferential knowledge in science, the other because it fails to provide a systematic account of the ultimate dependency which such knowledge has on first-person experience. Russell's doctrine attempts to furnish that account, the burden of which is carried by percepts. Most misinterpretations of Russell's neutral monism arise from a failure to understand the nature of this concept and the role he intended for it in empirical knowledge.

In Russell's doctrine, the science of physics extends human knowledge to regions of space and to levels of internal complexity which are unreachable in perception, so that the scope of our mental life shrinks to a small portion of the physical universe, virtually to a point. Even so, the entities which constitute this universe and in fact the whole spatio-temporal framework in which they operate are inferred. What Russell calls "the stuff of the physical world" (ibid., p. 386), i.e., whatever in the eyes of physics these entities happen to be, never enters our knowledge as primary data: although we can be sure of their existence, because we accept physics, our degree of certainty falls below that which we have for our own experiences, and even below that which we have for those of others (p. 388). To these entities Russell gives the name "events". In themselves, their only known properties are spatiotemporal, but they form groups of enormous complexity called structures and as such are described by physics as possessing various quantized properties, although he insists that they are nothing but "elaborate logical structures composed of events" (p. 386).31 Russell is primarily concerned with the sort of densely packed

structure that is otherwise called the living brain, for among its component events are certain ones which have a crucial role to play in perception. These are percepts.

From the viewpoint of physics, percepts are terminal events in complex causal series by means of which the kind of structures external to the brain, which are commonly identified as material objects, make their presence known to an observer. They are not private occurrences but belong with those structures to the same framework of physical space. From the viewpoint of psychology, on the other hand, there is much more to be said about perception and in particular about percepts. As Russell puts it, physics "studies percepts only in their cognitive aspects; their other aspects lie outside its purview", and it is left to psychology to study percepts "for their own sakes" (p. 392). He does not have behavioural or experimental psychology in mind here, but only psychology in the limited sense of its being a science which, in contrast to physics, undertakes to study a special range of phenomena by means of introspection. These phenomena are of course qualitative in character experienced colours, sounds, tastes, and so on; images and feelings; and the combination of such things in law-like ways-and they are virtually what Russell had designated as sensations and images in The Analysis of Mind. When he declared there that sensations and images comprise "the stuff of ... the world of our experience" (p. 10), he was I think speaking from the same standpoint of introspective psychology, which figures much less prominently in the later "companion" volume. Commentators have generally missed the significance of the phrase Russell had used: "the world of our experience". It should be seen as balancing the emphasis he gave to "the stuff of the physical world" in The Analysis of Matter, which presents neutral monism chiefly from the standpoint of physics.

But neither the events of physics nor the sensations and images which are studied by psychology as mental phenomena are the neutral stuff of Russell's doctrine. To locate that stuff brings us back once more to percepts. Neutral monism stipulates that not only every percept, but every event of any sort whatever, has an intrinsic character which if it can be known by us at all is known directly. In the case of events which are not percepts, Russell holds their intrinsic character to be unknown to us (The Analysis of Matter, pp. 388, 400), while that of percepts takes the familiar form of sensible qualities. Thus the nature of of percepts in Russell's doctrine is highly complex, for they serve in a sense as the nodal point of reference for quite different and partly complementary accounts of perception. Like all inferred events, they are studied by physics in terms of their causal properties and form part of the most detailed, objective and successful system of explanation ever fashioned by mankind. Yet within this system the manner of knowing percepts, as with all events and their structures, is abstract: physics gives only what Russell calls "the causal skeleton of the world" (ibid., p. 391). Percepts accordingly belong to the brain in this account, where the brain itself is construed as no more than a structure of events. In contrast, the necessary fleshing-out of this skeleton is made possible by the intrinsic character of percepts, since it is by means of sensible qualities that observers come to know directly both the physical world and themselves. Such qualities are the primary focus of psychology, at least to the extent that it relies on introspection. They are also the primary focus in the common-sense view of the world of material objects, although it is well known that throughout his work in epistemology Russell could find no place for such a view in an account of empirical knowledge. However, from the viewpoint of psychology, sensible qualities furnish

³⁰ Lockwood, p. 153.

³¹ The complete phrase reads: "elaborate logical structures composed of events and ultimately of particulars" (Analysis of Matter, p. 386). Particulars are elsewhere described in Analysis of Matter as the "ultimate terms" of physical structure in relation to the "whole of our present knowledge" (p. 277). The differences between events and particulars are not clearly made out, although Russell emphasizes that as science progresses the specific meaning of "particular" will also change, so that it must not be thought to denote an "absolute metaphysical term" (p. 278). In contrast, his notion of events as units of space-time seems intended to have a relatively permanent meaning. Russell may well have meant the same thing by "particular" in both The Analysis of Mind and The Analysis of Matter; nevertheless, he says almost nothing about events in the former work, and only very little about particulars in the latter.

the raw material for all of those central concepts which Russell elaborated as a replacement of common-sense notions: they are constructed into the material objects of our perception, such as the star; into the sensations which are grouped together to form biographies; and into images which in company with sensations (and further items classified as being mental) help us to fashion complex notions of phenomena like memory and the self. Sensible qualities are the neutral stuff of Russell's doctrine.

It may seem from this description that physics and psychology proceed along separate lines which barely intersect, but neutral monism in fact conceives of their viewpoints as radically integrated. The claim is epistemological in nature, not scientific. Russell's neutral stuff is the means whereby they depend on each other. The fact that percepts are qualitative at all enables the observer to identify structures in space, and not only that but to conceive of a single public space containing other observers and things not perceived, such as the brain. Yet such qualitative aspects are precisely what is not physical in the physical scheme of things. On the other hand, by locating sensations and images in the causal framework of events and percepts, psychology becomes extensively enriched in its explanations and proportionately less dependent on introspection, at least as a method of investigation and at least as far as sensations alone are concerned. But some types of images and also feelings of the kind mentioned earlier could well be "the stuff of ... the world of our experience" for which introspection remains necessary. Perhaps Russell could have treated such things as unique instances of the intrinsic character of percepts whose status is no more neutral than that of those percepts themselves.

It will be recalled that Russell (like earlier neutral monists) had little to say regarding a specialized language for talking about neutral stuff. Interestingly, I think it follows from Russell's doctrine that one would not really need such a language in the first place, because most of what there is to say about neutral items would be said in a scientific way from the dual viewpoints just discussed, and thus it is that by deferring to the rigorous methods of science neutral monism believed that the gap between the mental and the physical created by the viewpoint of traditional metaphysics could be closed. Consequently, even if there were to be a language of neutral monism, a major class of its sentences would take the form of identity statements, like the following: "That which I now introspect (a colour quality, for example) is identical to that which is the intrinsic character of an event that has been caused in my brain by further events whose own intrinsic character is unknown."

What such statements help show, I think, is that however much the neutral stuff comes to be imbedded in a scientific theory there remains a straightforward and unmetaphysical sense in which the stuff transcends that theory. The word "that" in the two descriptive halves of this identity statement stands for something which is brought to the theory, something which prior to it is always able to be singled out by the resources of our language, something which philosophy must creatively and systematically wonder about. Considerations like this, I think, are what deeply motivated Russell as neutral monist to believe that the claims of any form of scientific realism could be successfully kept in check.

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