# VII. Phenomenological and Empirical Inadequacies in Russell's Theory of Perception

ACCORDING to Bertrand Russell—and phenomenalism in general—all the complex constructs of non-scientific and scientific thought are logically derivable from what are termed 'atomic facts' or 'atomic events'. These atomic facts totally constitute what is directly given in sensory experience, in contrast with those elements in knowledge which are logically constructed from these atomic facts. In line with this distinction between the sensory and the conceptual, Russell made a corresponding distinction between 'knowledge by acquaintance' and 'knowledge by description'. Russell stated this two-fold breakdown in the following way.

> . . . I shall say an object is 'known by description' when we know that it is '*the* so and so', i.e., when we know that there is one object, and no more, having a certain property; and it will generally be implied that we do not have knowledge of the same object by acquaintance.[1]
>
> [Furthermore] Many universals, like many particulars, are only known to us by description. But here, as in the case of particulars, knowledge concerning what is known by description is ultimately reducible to knowledge concerning what is known by acquaintance.
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> The fundamental epistemological principle in the analysis of propositions containing descriptions is this: Every proposition which we can understand must be composed wholly of constituents with which we are acquainted.[2]

For methodological purposes Russell's theory of 'logical atomism' can be separated into two conceptual areas: first there are questions concerning the *logical* program of logical atomism; for example, questions as to truth functional analysis, the quantification of

1. Russell, B, 'Knowledge by Acquaintance and Knowledge by Description', *Proceedings of the Aristotelian Society,* New Series XI (1910-1911) 108-128. Reprinted in *Mysticism and Logic* (New York: Doubleday, 1960) 207.
2. *Ibid.* 211.

existential propositions and the analysis of molecular propositions. Secondly there are questions which deal with *perceptual* rather than logical considerations, questions as to the nature, content and characteristics of the sensory given as distinguished from the phenomenologically given in general; what distinguishes perception from sensation and cognition, vital distinctions for logical atomism as we will see; the notion of 'immediate sensory experience', or knowledge by acquaintance, and so forth. In this paper I will be exclusively concerned with the theory of perception within Russell's position, what this theory says about perceptual and sensory experience, and whether such a position is at all tenable. The problem here of course is what kind of evidence is relevant to such an enquiry. Some, as A J Ayer and D Hamlyn, have taken the position that for the epistemologist little if any empirical evidence, either psychological or neurological, has any relevance to the philosophical discussion of perception.[3 4]

I strongly disagree with this thesis and will attempt to show that given Russell's theory of perception a number of fairly serious problems do arise just because he either failed to consider or simply ignored some fairly basic empirical and phenomenological findings quite relevant to any theory of perception. This is especially true with regard to the atomistic conception of perception sketched by Russell. Let us now turn to Russell's views on perception, reserving our criticisms for later.

Russell's distinction between 'hard' and 'soft' data was fundamental to his position:

> I mean by 'hard' data those which resist the solvent influence of critical reflection, and by 'soft' data those which, under the operation of this process, become to our minds more or less doubtful. The hardest of hard data are of two sorts: the particular facts of sense, and the general truths of logic.[5]

Another way of making this distinction between hard and soft data is in terms of greater and less certainty in knowledge. For Russell that datum is most certain which is the least removed from immediate sensory experience; as more and more conceptualization and imagination is brought into play i.e. as the originally hard data become further removed from their 'presentational immediacy' (my term), they become more open to error and doubt.

> The first thing that appears when we begin to analyze our common knowledge is that some of it is derivative, while some is primitive; that is to say, there is some that we only believe

3. Ayer, A J, *The Problem of Knowledge* (Baltimore: Penguin Books, 1956).
4. Hamlyn, D W, *Sensation and Perception* (New York: Humanities Press, 1961) 185.
5. Russell, B, *Our Knowledge of the External World* (New York: Mentor Books, 1960; originally pub. in 1929) 60.

> because of something else from which it has been inferred in some sense, while other parts are believed on their own account, without the support of any outside evidence. It is obvious that the senses give knowledge of the latter kind: the immediate facts perceived by sight or touch or hearing do not need to be proved by argument, but are completely self-evident. . . .
>
> What does not go beyond our own personal sensible acquaintance must be for us the most certain: *the 'evidence of the senses' is proverbially the least open to question.*[6]

Of the two types of hard data let us concentrate on the 'facts of sense (i.e. of our own sense-data)'[7]—assuming that the other, the general truths of logic, are not sensory but conceptually immediate and therefore need not concern us here. The above account of hard and soft data Russell recognized as being 'a somewhat vague distinction and . . . a matter of degree, and must not be pressed'.[8] At first glance it would seem that Russell's notion of 'knowledge by acquaintance' would help here since it is by acquaintance that 'hard' data are known to begin with. A number of years earlier Russell had written: '. . . We shall say that we have "acquaintance" with anything of which we are directly aware, without the intermediary of any process of inference or any knowledge of truths. . . . Thus the sense-data which make up the appearance of my table are things with which I have acquaintance, things immediately known to me *just as they are*'.[9]

In this earlier account we find the practical equivalence of 'sensory immediacy' with 'knowledge by acquaintance'. In neither account, though, did Russell satisfactorily distinguish between *sensory* immediacy and *phenomenological* immediacy in general. One can fully appreciate how pressed Russell must have been to make this crucial distinction, especially since Husserl in the *Logical Investigations* (1901) had purposely intended *not* to draw such a distinction, nor did he feel that such would be philosophically valuable. However, Russell and logical empiricism in general had to clearly distinguish between knowledge derived from sensation and knowledge based on non-sensory factors such as the effects of memory and imagination, if the distinction between 'hard' and 'soft' data was to be tenable.

Russell's distinction, or at least attempted distinction, between 'hard' and 'soft' data (and in turn between their corresponding ways of being known) follows the attempt since at least the time of Plato to distinguish between sensation and reflection or, in Locke's terms, between sensation and reflection on sensation.

6. Ibid. 57-58.
7. Ibid. 61.
8. Ibid. 60.
9. Russell, B, *The Problems of Philosophy* (New York: Galaxy Books, 1959; originally pub. in 1912) 46-47.

Without going into the various ways in which this distinction has been drawn—and not drawn—we can see Russell himself attempting to distinguish between what is sensory immediate and what is conceptual or ideational in knowledge. He did, however, recognize that this distinction is at bottom psychological and subjective.

> Psychologists, however, have made us aware that what is actually given in sense is much less than most people would naturally suppose, and that much of what at first sight seems to be given is really inferred. This applies especially in regard to our space-perceptions. . . . Thus the first step in the analysis of data, namely, the discovery of what is given in sense, is full of difficulty. We will, however, not linger on this point; *so long as existence is realized,* the exact outcome does not make any very great difference in our main problem.[10]

*An Inquiry into Meaning and Truth* added that

> . . . in any perceptive experience, the sensory core has higher inferential value than the rest. . . . While, therefore, none of the inferences from the perceptive experience is certain, the inferences drawn from the sensory core have a higher probability than those drawn from the other parts of the perceptive experience. . . .[11]

There are two points I would like to examine in these statements: (1) the statement ' so long as existence is realized ', and (2) Russell's distinction between sensation and perception.

(1) I am not at all clear what Russell intended by this statement. If he meant that so long as we can correlate (perhaps ' identify ' is too strong here) the sensory given with what objectively exists then serious problems arise, as we will see. If, on the other hand, the term ' existence ' refers not to the object of a sensation but to the sense data, then we are still left with the problem of the relation between the sense-data and the physical object. It was the failure on the part of the introspective psychologists of the 19th century to discover any criteria whatsoever for determining when a particular sensation referred to or intended an existentially independent object, and when a given sensation was merely a product of the ' workings of the mind ', that inevitably resulted in Brentano's ' act psychology '.[12]

Essentially ' act psychology ' said the following: the Wundtian or structuralist approach to the study of mental activity is inadequate for at least two reasons. First, it seeks artificially to analyze any given sensory experience into its simple constitutive elements, following the Lockean tradition of simple ideas and

10. Russell, B, *Our Knowledge of the External World,* op cit. 58.
11. Russell, B, *An Inquiry into Meaning and Truth* (Baltimore: Penguin Books, 1962; originally pub. in 1940) 116.
12. Brentano, F, *Psychology from an Empirical Standpoint* (1874). Unfortunately this important work has not as yet been translated into English.

simple impressions. Secondly, the structuralists sought to separate the *act* of knowing from the *content*; that is to say, structuralism or ' content psychology ' had attempted to drive a wedge between the act or intention and what is being intended—in phenomenological terms, between the noesis and the noema. Now I contend that Russell has done exactly what the Wundtians did, or at least attempted to do: to distinguish, merely on the basis of reflective analysis, between act and content. I will return to this point below.

(2) There are numerous other passages where Russell had also attempted to distinguish between sensation and perception. Russell clearly stands in the tradition of those philosophers from Locke and Hume to Mach and James who had sought to find criteria by which clearly to distinguish ' ideas of the imagination ' from ' ideas of the senses '. Hume's criterion of ' force ' or ' vivacity ' and Mach's notions of ' intensity ' and ' quality ' nevertheless remained vague, imprecise and unconvincing to other introspective psychologists. Such criteria—which were a little too physicalistic to be of coincidence—revealed to those not particularly sympathetic to the Lockean account of perception the impossibility of determining in any a priori fashion which sensations were due to imagination and memory, and which derived from present sensory experience. The attempt to separate act from content, and the proposed distinction between sensation and perception, are therefore actually two sides of the same epistemological coin, as we will now see.

Perhaps, Brentano had asked, if instead of seeking to differentiate artificially between consciousness, acts of consciousness and the contents of consciousness, we rather were to examine the various relations within consciousness that obtain between our images, sensations, meanings and intentions *without regard to their origin*, then an answer to the question ' Which of our sensations have existential reference? ' may be forthcoming. That is to say if, instead of beginning with the question ' Which of our sensations are physical in origin and which are merely psychological? ', we start by examining the various intentional relations between consciousness and its objects, then we may be able to draw the distinctions Locke, Mach and Russell were seeking. Hence, the initial step in this phenomenological approach would be to ' bracket out ' any existential assumptions and to focus our attention on what is immediately experienced, apart from questions of reference and origin. As Husserl expressed it in the *Ideas*:

> . . . We put out of action the general thesis which belongs to the essence of the natural standpoint, we place in brackets whatever it includes respecting the nature of Being: this entire natural world therefore which is continually ' there for us ', ' present to our hand ', and will ever remain there, is a ' fact-world ' of which we

> continue to be conscious, even though it pleases us to place it in brackets. . . .
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> The whole world as placed within the nature-setting and presented within experience as real, taken completely 'free from all theory', just as it is in reality experienced, and made clearly manifest in and through the linkings of our experiences, has no validity for us, it must be set in brackets, untested indeed but also uncontested.[13]

Without going too far afield into phenomenological techniques, let me briefly suggest where this *epoché* will lead us. Once the bracketing out and the phenomenological reduction have been accomplished, then merely by inspecting the data found in consciousness certain characteristics or 'meanings' will separate themselves out. In this way the mind-originating-data should become distinguishable from the senses-originating-data. As Merleau-Ponty expressed it in his *Phenomenology of Perception*:

> Sensationalism 'reduces' the world by noticing that after all we never experience anything but states of ourselves. . . . If I said, as do the sensationalists, that we have here only 'states of consciousness', and if I tried to distinguish my perceptions from my dreams with the aid of 'criteria', I should overlook the phenomenon of the world. For if I am able to talk about 'dreams' and 'reality', to bother my head about the distinction between imaginary and real, and cast doubt upon the 'real', it is because this distinction is already made by me before any analysis; it is because I have an experience of the real as of the imaginary, and the problem then becomes one not of asking how critical thought can provide for itself secondary equivalents of this distinction, but of making explicit our primordial knowledge of this 'real', of describing our perception of the world as that upon which our idea of truth is for ever based. . . .
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> My field of perception is constantly filled with a play of colours, noises and fleeting tactile sensations which I cannot relate precisely to the context of my clearly perceived world, yet which I nevertheless immediately 'place' in the world, *without ever confusing them with my daydreams*.[14]

This quote from Merleau-Ponty should suggest to the reader that phenomenological approach to perception advances beyond Russell's analyses in its recognition that act and content cannot easily be separated, at least not in the initial stages of inquiry. For Russell the notion that the sensory given is 'hard', whereas the non-sensory is 'soft', is a distinction that is simply posited at the outset. I have thus far attempted to show that, though

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13. Husserl, E, *Ideas* (1913), tr. by W. Gibson (New York: Humanities Press, 1931) 110-111.

14. Merleau-Ponty, M, *Phenomenology of Perception* (1945), tr. by C Smith (New York: Humanities Press, 1962) x and xvi.

this distinction may at times be made in the course of experience and that Russell's distinctions are to some extent clear enough (at least before we begin to analyze them), he nevertheless failed to provide us with any adequate criteria for understanding *how* we make this distinction. That we make the distinction is obvious and uninteresting; the *criteria* we employ in doing so are what most interest the epistemologist.

In this respect the phenomenologists were much more sophisticated than Russell for they explicitly recognized the essential psychological or intentional factor in all perceptual activity, veridical or otherwise. By recognizing and emphasizing this psychological component or ' intending act ', whether or not the content of an act of consciousness has existential reference, the act psychologists were able to construct their phenomenological program and systematically explore the various phenomenological techniques mentioned above. Russell was not entirely blind to the psychological or intentional element in perception, though he did very little with it. He did mention that until 1918 he had '. . . originally accepted Brentano's view that in sensation there are three elements: act, content, and object '. But he added: '. . . I became gradually more doubtful as to this relational character of mental occurrences. In my lectures on Logical Atomism I expressed this doubt, but soon after I gave these lectures I became convinced that William James had been right in denying the relational character of sensations '.[15]

One major reason why Russell later dropped the ' relational character of sensations ' interpretation is that this position required a subject, a *cogito*. In the meantime Russell had come to see the subject as but a '. . . logical fiction, like a mathematical point '. It would have been historically interesting if Russell had picked up the theme of the intentionality of consciousness, for this rather than James's account of the ' relational status among sensations ' is the core thesis of the phenomenological view of perception. Yet in none of Russell's works does he even make mention of either Husserl or of phenomenology; in fact Russell's remarks on Brentano's approach are mentioned in but one place and in one line. I would now like to further discuss Russell's attempted distinction between sensation and perception.

In *An Inquiry into Meaning and Truth* Russell held that perception is merely

> . . . a certain kind of event resulting from a stimulus, and not being assumed to have any cognitive status. [Furthermore,] in our reaction to a sensory stimulus there are two theoretically dis-

15. Russell, B, *My Philosophical Development* (New York: Simon and Schuster, 1959) 134.

> tinguishable elements, first, that due merely to the stimulus, second, that due to its habitual concomitants.[16]

Later, in his intellectual autobiography, he added:

> ' Perception ' as opposed to ' sensation ' involves habit based upon experience. We may distinguish sensation as that part of our total experience which is due to the stimulus alone, independently of past history.[17]

It is interesting to note here that three quarters of a century earlier the great experimental psychologist Hermann von Helmholtz had made an important distinction which is quite relevant to Russell's statement above. According to Helmholtz we must distinguish between two types of images: *Vorstellung* and *Anschauung*. The former is '. . . the image of visual objects as retained in the memory, without being accompanied by any present sense-impressions '.[18] The latter is defined as perceptions which are accompanied by a sense-impression. Helmholtz recognized that *Vorstellung* and *Anschauung* may at times occur together in a single experience where, for example, memory or previous experience enables us to recognize what is presently being perceived. In any given perceptual situation the previous memory-images may at times even come to be more relied upon by the perceiver than his present visual cues. Helmholtz gives as an example of this a semi-darkened room where we only half recognize objects, though by drawing upon our previous perceptions we are able to find our way about. A completely darkened room, on the other hand, requires us to rely entirely upon *Vorstellungen*. Hence, according to Helmholtz, it is not possible to draw a sharp line between the effects of the one or the other type of image. The influences of previous and present sensory experience are always mutually present; what is due to previous visual experiences and what to the supposed ' immediately given ' in perception cannot easily be demonstrated.

> My conclusion is, that nothing in our sense perceptions can be recognized as sensation which can be overcome in the perceptual image and converted into its opposite by factors that are demonstrably due to [previous] experience. . . .
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> Whatever, therefore, can be overcome by factors of experience, we must consider as being itself the product of experience and training. By observing this rule, we shall find that it is merely the qualities of the sensation that are to be considered real, pure

16. Russell, B, *An Inquiry into Meaning and Truth,* op. cit. 113-114.
17. Russell, B, *My Philosophical Development,* op. cit. 143.
18. von Helmholtz, H, *Treatise on Physiological Optics* (1860), tr. by J P C Southall (Rochester, New York: Optical Society of America, 1924) vol. 3, 10.

> sensation; the great majority of space-apperceptions, however, being the product of experience and training.[19]

We can only speculate what Russell's reaction to this would have been, though I think we can assume he would not have been overly enthusiastic. Let us now turn to another criticism of Russell's conception of sensation and perception as distinct modes of experience.

According to sensationalism or phenomenalism the mind is an essentially passive receptor which statically receives data through the senses, organizes this data through association and apperception, then relates such complexes of ideas to other sensory experiences. This conception of mind has died hard in some quarters and continues to exert no little influence. This is especially true in the case of Russell, who in many ways culminates the Lockean heritage, in both the doctrine of association and the doctrine of elements. At the turn of the century, the experimental inquiries conducted by the Würzburg School and Carl Stumpf (who greatly influenced Koehler and Husserl), along with the Gestalt psychologists, cast suspicion on this conception of mind. Their studies strongly suggested that the notion of a pure or uncompounded sensory datum was simply a fiction, a philosopher's fiction, postulated by those who sought to construct an ' atomization ' of sensory experience, paralleling the nuclear models that were then winning such favor among physicists such as Rutherford. Perhaps the most extreme, and certainly one of the most influential statements of the sensationalist thesis, was that formulated by the physical scientist Ernst Mach during the 1880's.

> Nature is composed of sensations as its elements. . . . The thing is an abstraction, the name a symbol, for a compound of elements from whose changes we abstract. . . . Sensations are not signs of things; but, on the contrary, a thing is a thought-symbol for a compound sensation of related fixedness. Properly speaking the world is not composed of ' things ' as its elements, but of colors, tones, pressures, spaces, times, in short what we ordinarily call individual sensations.[20]

In actual fact, there seems to be little if any empirical evidence supporting the notion of simple, unstructured sensations. This view is nothing more than a mere hypothesis on the part of Mach, Russell and others in the Lockean tradition, as to what supposedly occurs in sensory experience. Contrary experimental find-

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19. Ibid. 13.

20. Mach, E, *The Science of Mechanics* (1883), tr. by T J McCormack (LaSalle: Open Court, 1906) 579. This thesis was systematically developed by Mach in his *Analysis of Sensations* (1886, 1st edition) tr. by C M Williams (New York: Dover Publications, 1959).

ings were not long in coming. In this case purely philosophical considerations had to give way or else required restatement in more convincing terms. On the subject of Russell's account of perception there is very little if any empirical support. In his *Philosophical Theory and Psychological Fact,* Wallraff made the following criticism of phenomenalism in perceptual theory:

> Plausible as this view may be, it receives little support from the practicing empiricists of the laboratory who have investigated the matter experimentally. . . . Standard textbooks on psychology maintain that sense-perception is an active response, and that the immediately presented world derives from the spontaneous interpretation of sensory stimuli which function primarily as ' cues ' or ' signs '. The idea of bare sensations passively received by a mind that will subsequently elaborate them corresponds to nothing that laboratory research can discover. Exteroception is evidently active from the very beginning. This lack of corroboration from the laboratory suggests the advisability of a review and reassessment of the traditional doctrine in connection with recent experimental findings.[21]

A few years earlier, Ernst Cassirer had anticipated these criticisms of phenomenalism and sensationalism:

> . . . even for the very ' description ' of the novel phenomenon with which the theory of perception has confronted us it is necessary to abandon the pattern of sensation and association, laid down by the classics of sensationalism. . . . The interpretation of perception as a mere mosaic of sensations, a ' bundle ' of simple sense-impressions has proved untenable. It has been laid down as a general ' principle ' of psychological research that the soul and the psychological organism of stimuli-reception are not ' receptors ' like mirrors or cameras, i.e., receive separate ' stimuli ' and combine them into comprehensive wholes that have the character of mere aggregates.[22]

In summary, then, we have seen a few of the more outstanding shortcomings of Russell's theory of perception. His original distinction between two types of data, ' hard ' and ' soft ', was admitted even by Russell himself not to be a very happy statement of what constitutes the actual content of our perceptual experience. This is also true with regard to his breakdown of the two ways in which knowing occurs, by acquaintance and description, which he

21. Wallraff, C F, *Philosophical Theory and Psychological Fact* (Tucson: Univ. of Arizona Press, 1961) 133. I have developed this thesis of Wallraff in a soon to be published paper entitled ' Traditional, Experimental, and Phenomenological Accounts of Perception '. I also refer the reader to my edited book *Perception: Selected Readings in Science and Phenomenology* (Chicago: Quadrangle Books, 1969), esp. Part II.

22. Cassirer, E, ' The Concept of Group and the Theory of Perception ', *Philosophy and Phenomenological Research,* V (1944), 25-26. Reprinted in Tibbetts, op. cit, 279-292.

admitted to be 'subjective and psychological'. One of the problems in his position directly followed from these attempted distinctions: his fatal separation of the content or subject matter of thought from the manner in which this content becomes known. At this point I introduced Brentano's insight into the inseparability of act from content in actual experience. Husserl later wedded this thesis to the doctrine of intentionality, thus drawing together the intentional activity of consciousness with the object of thought.

It is my contention that the phenomenological account of perception is far more sophisticated than is the Lockean view propounded by Russell, both conceptually and empirically. The gross and glaring inadequacies of Mach's brand of sensationalism or 'doctrine of elements' should have suggested to Russell the need for a more experientially adequate and empirically supportable approach to the problem of perception. It is at this point that findings from the psychology and phenomenology of perception would have greatly helped Russell and other advocates of the Lockean account of perceptual experience.

My last major criticism against Russell was with regard to his attempt to separate the effects of sensation from those of perception, with the former somehow presenting us with a more direct, non-inferential account of the phenomenal world, with the latter being responsible for the conceptual and ideational elaboration of sensory experience. I hope I have suggested to the reader that this is a fatal and entirely artificial distinction, one receiving no empirical support whatsoever.

If the criticisms I have raised in this paper are at all defensible, then the notions of 'atomic facts' and 'atomic events' are themselves highly questionable and, consequently, so is the entire *perceptual* foundation of Logical Atomism. Finally, if conceptual and ideational factors cannot in general be sharply separated from sensory factors, then it would seem to follow that a clean separation between logic and sensory experience could also not be drawn. That is to say, if sensation never occurs apart from the influences of perceptual and ideational factors, then the traditional distinction between 'truths of reason' and 'truths of fact' would also be questionable. Another way of stating this—and now adding a qualification—would be to say that though purely conceptual activity may occur independently of sensory experience the reverse would not appear to be the case. The latent Kantianism in these suggestions will not, I trust, detract from whatever other merit the critique I have given of Russell's theory of perception may have for the reader.

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