Lord Russell being, at least in his later years, a philosopher with a lively sense of humor and a fondness for startling or puzzling his readers, often quizzically enunciates propositions which he appears to believe true, in terms which the uninitiated are likely to seem the baldest of paradoxes. Thus his latest exposition of his philosophy, or of the part of it pertinent to the present problem, begins with a concise announcement of the author's purpose, namely, to show the falsity of the traditional "dichotomy of the known world into two categories, mind and matter."

This metaphysical dualism, which is due, he thinks, to the unfortunate influence of "Plato, reinforced by religion," has long been waning among men of science, but is not yet extinct; for though many modern psychologists have eliminated the notion of mind from their science and most physicists have expunged the notion of matter from theirs, the result has been "a curiously paradoxical situation:" the psychologists continue to believe that matter exists, and tend to become materialists, and the physicists to believe that mind exists, and tend to become idealists. (This is hardly an accurate description of the contemporary situation in the two sciences; as a generalization quite untrue; but it is a paradox which Russell finds pleasing). But, he continues, "the truth is, of course, that mind and matter
I now pass on to Russell's most sensational and (I believe) entirely original thesis: that our percepts—visual and other—are "in our heads" or brains! No previous philosopher, so far as I know, had specifically asserted this, though it was perhaps implicit in the pure and simple materialism (which Russell does not accept) of various earlier writers and in the avowed "materialism" of William James, in his essay of 1904 which has already been discussed in Chapter III. But in Russell's case it was not a deduction from simple materialism, but was arrived at through novel reasonings distinctively his own, and may therefore be called The Great Russellian Paradox. It made its first appearance in his *The Analysis of Matter* and *The Outlook of Philosophy* writings in 1917, and though Russell is not one of those metaphysicists who are never able to give up a belief which they embraced in their speculative youth, and is, in fact, notable among contemporary philosophers for a laudable readiness to reconsider and reject views he had previously held, he apparently for many years never saw reason to relinquish this doctrine; and he has unequivocally said that he has come to regard it as erroneous. It cannot be said to have been a curiously equivocal essay on "Matter and Matter" published in 1956, he seems at ease to reaffirm it and to present arguments for a view inconsistent with it. To this essay I shall return a little later; at present I shall summarize his original formulations of the thesis of the intra-cranial location of our visual percepts, and examine his reasons for adopting it.\[Footnote 11. Published in the United States with the title *Philosophy*]
footnote: Published in Great Britain under the title *An Outline of Philosophy*. My quotations from it are from the American edition, New York, 1927. Quotations from *The Analysis of Matter* are from the British edition, 1927.
though not demonstrable," and is therefore "preferred" by Russell "to that of
correspondence advanced by the Cartesians." After admitting that it is not demon-
strable, Russell at once offers an ostensible demonstration of it. "Those who
reject this view" do so because they "confuse material objects with those that
I experience in sight and touch. These latter are parts of my mind. If I
allow myself to talk the language of common sense," what I see—"the furniture
of [my] room, trees waving in the wind, houses, clouds, the sun—all these
common sense imagines to be outside me." But here common sense is (as usual)
wrong. All these objects "I believe to be causally connected with physical ob-
jects which are outside me. And as soon as I realize that the physical objects
must differ in important ways from what I directly experience,...and take account
of the causal trains that proceed from the physical object to my brain before my
sensations occur, I see that from the point of view of physical causation the
immediately experienced objects of sense are in my brain and not in the outer world."
Russell concludes with a characteristic wise-crack at the expense of the author of
the Kritik der praktischen Vernunft: "Kant was right to put the starry heavens and
the moral law together, since both were figments of his imagination."

The theorem when expressed in this summary form is not entirely unequivocal. It has consequently sometimes been misunderstood. We must therefore try to determine more precisely what it means. To this end, we must ask three preliminary questions: (a) What (according to Russell in 1927) are percepts, and, in particular, are they "mental" or "physical" entities, or possibly both at once? (b) What are human brains? (c) Are our percepts and our brains in the same space, or are there two spaces, one "physical," the other "perceptual."

(a) To the first of these questions Russell then thought it difficult, if not impossible, to give concise, precise and unqualified answers. For the notion of "matter" has "quite definitely come down in the world as the result of physics."

By this Russell means, as he goes on to explain, that we can no longer say "that matter is the cause of our sensations"—as Dr. Johnson supposed when he sought to refute Bishop Berkeley by kicking a stone and finding it impenetrable. We can say only that "the events which cause our sensations usually belong to the sort of group that physicists regard as material"; this group consists of "complicated systems of wave-motions." This, no doubt, tells us something about the causes of our sensations, viz., that they are physical events, but it does not answer our question about percepts. However, Russell had previously explained that sensations must be included in the class of physical events, and also that
percepts are made up of sensations plus certain other components, presently to be mentioned. So far, then, as the sensory part of our percepts is concerned, they also are "complicated systems of wave-motions"; in short they are physical events. And the sensory part, what I literally "see" with my eyes while I am experiencing a percept, is the major part, the only part that is immediate and indubitable datum. Percepts, then, it appears, are mainly, though not exclusively, physical events.
Such is, I believe, the latest edition of Russell's argument for placing our percepts inside our brains. Certain peculiarities of the reasoning have doubtless been noted by the reader. It all rests upon an assumption not explicitly stated, namely, that visual percepts, which are mental "events" not occurring outside the experience of the percipient organism, must occur at the same place as the last of the physical events constituting the antecedent "causal chain" from the distant object to the optical centre in the brain. But, as experienced, my percepts are, admittedly, outside my head. The furniture, the trees, the sun that I "see" are, Russell admits, perceived as outside my head, and are extremely unlike any of those antecedent physical events. This fact is not falsely "imagined," a delusion of "common sense"; it is an immediate and indubitable fact of everyone's "everyday" immediate experience. But Russell, disregarding this patent empirical fact, substitutes for it a conclusion pertinent only to the hypothetical entities in the "causal chain," which are, by hypothesis, never sensibly experienced by anyone, and thus arrives at the astonishing self-contradiction: "the immediately experienced objects of sense are in my brain"—where they are immediately experienced as not being, since they are actually experienced as in front of my head. No one ever "sensibly experienced" the sun as inside his head.

It is, then, not surprising that the cherished paradox which Russell supposed
This has already been pointed out by Professor H. H. Price in an admirable analysis of the phenomena of visual perception. "It is obvious that all visual sense-data have the characteristic of depth or 'outness.' This characteristic, of them is just as much given as colour or shape, whether we can explain it or not." And again, "only inspection of sense-data themselves can tell us what qualities and relations they actually have; and if it follows from some theory that they ought to have other ones, so much the worse for the theory." (Perception, p. 213, 242.) Cf. also G. D. Broad's Scientific Thought, p. 298.

"Depth is a sensible quality, not a sensible relation. Visual distance is a sensible relation between two visual sense, founded upon the difference of their respective visual depths."
he has proved by this sort of logic has found few converts. It has, so far I
have noted, been little discussed by other philosophers, though, in view of its
author's high reputation and wide influence and of its far-reaching and revolutionary
implications, one might have expected it to receive a good deal of critical attention.

But Russell himself has jocosely reported that "I horrified all the philosophers
by saying that their thoughts were in their heads. With one voice they assured me
that they had no thoughts in their heads whatever, but politeness forbids me to
accept this assurance."

Recently, however, at least one other philosopher has come to the support of

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Russell's intracranial theory of percepts was critically examined by the
present writer in his *The Revolt Against Dualism* (1936) chapter VII. To these
criticisms, Lord Russell has never replied, either because he has never read
them or because he has not thought they merited a reply. I venture to hope that
the present comments on his theory may, in both respects, be more fortunate.

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P. and E., p. 161.
2. Our actual visual experience, then, could never lead anyone to believe that the objects we see are inside our brains; every man's experience shows that they are not. What, then, can have led Russell to assert, in defiance of the evidence of experience, to assert that they are? He is led to do so by the following course of reasoning. (a) Visual experience also shows that there are immeasurable objects or "events" which in some sense we actually see, not only outside our brains but outside our bodies altogether—chairs, the sun, the moon, planets, stars beyond our solar system, and even leaves—those that we see hanging from twigs of a tree in the garden when we look out the window. It would be absurd to say that we never "see" the sun (if prudent through smoked glasses). Astronomers now show us (relatively) "close-up" photographic pictures of its "spot." (b) The objects are all distant from our organs of visual perception. In the case of the chair, or even the leaves outside in the garden, the distance may be regarded as negligible; in the case of the sun, we now know it to be... miles; in the case of extragalactic stars it is billions of miles. (c) There must, therefore, be some vehicle of transmission from the place where the distant object (sun, star, whatever it be) is to the place where our eyes and the rest of our optical mechanism are. That vehicle is what we call light. (d) But light does not transmit little images, replicas, on a small scale, of the distant star to the
inside of our retinas. For light, according to theoretical physics, consists of either movements of photons (electrons) or of continuous rays; the physicists have not yet decided which; in either case, these physical entities do not have the characters or spatial relations which we perceive when we "see" the sun or the extragalactic star. Nevertheless, these movements of particles or rays between the distant object and our retinas are, according to the hypothesis accepted by contemporary physicists and astronomers, the necessary causes of our having the visual percept which more or less (depending upon the distance) enables astronomers to infer the character of the object existing or the event occurring in the distant place from which the movements took their start. In short, physics provides us with a "causal theory of perception," an account of the nature of the series of physical events (never seen by anyone) which are the indispensable antecedents to the occurrence of the event of our perceiving distant objects. (e) Accepting these premises Russell concludes that "the percept is one of the series of events emanating from the place in physical space where physics places the [object perceived]." Russell says "the leaf," but the same conclusion should, of course, hold for any visual percept.
The foregoing summary will, I hope, have enabled the reader to discern for himself the fallacies in Russell's argument for his thesis concerning perception; but it is perhaps advisable to indicate those not hitherto mentioned explicitly.

The initial error in his reasoning has already been pointed out: his extraordinary disregard of the obvious fact that a visual percept is just what, at some moment, we actually see, an immediate datum of sense-experience, and that no one ever sees, or can see, percepts in his brain, or even see his brain.

But there are ..... further errors of reasoning, confusions of ideas, conjoined with this primary false statement of empirical fact.  

Russell's thesis is a generalization; it applies to all visual percepts. He naturally wishes, however, to cite concrete particular examples of percepts which we see in our brains. But he wisely (for his purpose) refrains from citing as examples our seeing the sun, moon, stars, which everyone vividly realises he never sees in his brain and chooses his illustration from the vegetable kingdom—a leaf (where seen with what qualities we are not told); and, since we do not see leaves, any more than "sun, moon, stars," etc., inside our brains, he assures us that when we suppose we are "looking at a leaf," our "seeing the leaf consists of the existence in a certain region of
our brain of a green patch," which "is not 'out there' where the leaf is."

"Our percept is part of the stuff of our brains, not part of the stuff of
tables and chairs, the moon, sun, stars." Now all this would be delightful
if taken as a typically English piece of playful humor. Not since Alice in
Wonderland have so many things so suddenly turned into something else. But
the reader, groping for an intelligible and coherent meaning in these assertions
finds Russell apparently saying that what one perceives, in the experience in
question, is not a leaf but a green patch; that this percept must therefore be
in our brains, that the leaf is not in our brains, but is "out there," where the
moon, sun and all physical entities are, so that what we perceive is outside of
our brains; and that this percept is composed of the same "stuff" as those extra-
corporeal entities and not of the same "stuff" as our brains. But of course the
green patch we actually see is the leaf we see or an aspect of it; the green
patch does not float about in space detached from the leaf; it is perceived as
"out there" in our visual field; the same space as are all the objects which we
ever visually perceive. It may well be—I assume that it is—true that Russell
did not intend to assert this medley of contradictions, but it is what the
propositions he lays down do assert.
...perception gives us the most concrete knowledge we possess as to the stuff of the physical world, but what we perceive is part of the stuff of our brains, not part of the stuff of tables and chairs, sun, moon, and stars. Suppose we are looking at a leaf, and we see a green patch. This patch is not "out there" where the leaf is, but is an event occupying a certain volume in our brains during the time that we see the leaf. Seeing the leaf consists of the existence, in the region occupied by our brain, of a green patch causally connected with the leaf, or rather with a series of events emanating from the place in physical space where physics places the leaf. The percept is one of this series of events, differing from the others in its effects owing to the peculiarities of the region in which it occurs—or perhaps it would be more correct to say that the different effects are the peculiarities of the region.
Let us examine this passage point by point. We shall find it a medley of false statements about matters of fact and of propositions inconsistent with other parts of Russell's philosophy.

1. Russell's thesis is about our visual percepts. What is a visual percept? It is what we see when our eyes are open and functioning normally. It is precisely the content of our visual experience at the moment when we are seeing something—whether it be a leaf or anything else. And the percept is exactly what we see.

If we say we are seeing a leaf hanging from the branches of a tree we are seeing a leaf and a tree, along with numerous other objects making up our momentary visual field. About its characters we cannot be in error. The percept may be hallucinatory; we may make false inferences about its causes or its effects; but qua percept it is simply what we are seeing. Russell tells us that this object which we actually see is "in our brains." But no human being ever saw a visual percept in his brain, nor, in everyday experience does he ever see his brain. Russell's statement is therefore a patent contradiction of an empirical fact constantly verified by the experience of every man who is not blind.
2. Russell, of course, does not deny that we experience visual percepts—that we do see objects having the characters, shape, color, striated surface, etc., connoted in English by the word "leaf." He holds, however, that philosophy should provide a causal theory of perception, that is to say an account of the causal processes outside our bodies which are necessary for the occurrence of visual percepts. These causal "events" are antecedent in time to the occurrence of a percept and he necessarily assumes that they take place outside of our bodies.