

against Hegel, that he forces the advance from certain categories to others, is really the criticism that he has made erroneous reinterpretations. This is, in fact, what Hegel would call the logical sin of 'external reflection.' A clear recognition of this factor of possible error is an effective antidote for any too ready belief in the infallibility either of Hegel's dialectical procedure or of any attempt to make a systematic deduction of the categories. For every such deduction, if it is to be other than an aggregating of mechanically related factors, that is, if it is to involve *synthetic* relations, must provide, at each stage, for a reinterpretable change. But here is the Achilles heel of all deductions.

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## DISCUSSION

### IDEALISM AND REALISM

#### I. THE PHYSIOLOGICAL ARGUMENT

DR. MONTAGUE'S acute and interesting paper in this JOURNAL for May 26 entitled 'Two Recent Views of the Problem of Realism' affords me an opportunity, of which I am not sorry to take advantage, to offer some remarks on two aspects of the question, namely, the physiological argument for idealism, and the nature of the distinction we all of us make between the physical object and the mental state by which we perceive it. In the course of his article Dr. Montague states my position and certain of my arguments in a form which I can not accept. He is led to do so, in my opinion, by a certain peculiarity and, as it seems to me, confusion in his own conception of the problem, which I shall try to point out. He agrees with Dr. Alexander<sup>1</sup> in holding that the physiological argument involves a contradiction, being valid only on the presupposition of that reality of the physical world which it sets out to disprove: I hope to show that the physiological argument can be stated in a form in which it will not be open to this criticism. He opposes my 'psychophysical idealism,' as he calls it, to the 'naïve realism' of Dr. Alexander:<sup>2</sup> I hope to show that these theories are not so opposed as they

<sup>1</sup> See Dr. Alexander's article on 'The Concept of Consciousness' in this JOURNAL for March 3.

<sup>2</sup> Neither of these phrases seems to me well-chosen. What I in 'Why the Mind has a Body' call 'psychophysical idealism' is a theory, not of the nature of matter, but of the relation of mind and body; the theory, namely, that the brain-process is the phenomenal symbol of the mind. For my theory

at first sight appear; that Dr. Alexander's theory, so far as it is tenable, is only another side of mine; and that it is neither so naïve nor so realistic as Dr. Montague conceives it as being.

Dr. Montague says that I 'limit the scope of immediate or direct perception to the states of the psychophysical organism,' and that I even consider this 'axiomatic.' He says that Dr. Alexander and I agree in assuming that the sensible qualities of which we are immediately conscious must be 'either exclusively outside or exclusively inside the psychophysical organism.' What are we to understand by 'the psychophysical organism'? The phrase is none of mine; I never inquired whether sensible qualities were outside or inside anything but the mind. Now, I know what the physical organism is, and I know what the mind is, but a compound of the two, formed by putting the mind and the physical organism together, much as one might put together a feeling of amusement and a piece of india-rubber, seems to me a very curious thing to ask whether sensible qualities are inside or outside of. Is not the first essential of clear thinking on this subject to keep the mind and the physical organism carefully separate, and to realize always with regard to which of the two the question of 'inside' and 'outside' is asked?<sup>3</sup>

The fallacy that must result from not keeping them separate appears in Dr. Montague's arguments for what he calls 'the psychophysical theory of perception.' He says: "If I am real I am somewhere. . . . How can I conceive a thing that is at a distance from me making itself known to me, causing in me a perception of it, without projecting itself through the intervening space in the form of an effect on my organism? If I do not perceive the effect of the fixed stars upon my organism; if I perceive the real stars themselves, I and they must interact at a distance, *i. e.*, must be in two places at once. . . ." Evidently here the pronoun 'I' covers the confusion of the mind with the body. The 'I' that must needs be somewhere in order to be real (if indeed it be the 'I') is the body. This, truly

of the nature of matter 'idealism' simply is a sufficient designation; the fact that I support it in part by the physiological argument does not make it 'psychophysical' in its essential assertion. Why, on the other hand, I think Dr. Alexander's realism not truly 'naïve' will appear in the second portion of this article.

<sup>3</sup>The better to succeed in this, I have in 'Why the Mind has a Body' substituted for the ambiguous word 'external' the terms 'extra-mental' and 'extra-bodily,' after first carefully explaining that the former is not to be understood in a spatial sense. It still seems to me that these terms are admirably suited to their purpose. Is there anything more scandalous than the ambiguity of that stock phrase, 'the external world'? I ask any reader to say whether, on hearing this phrase, he at once knows whether the externality intended is to the body or to the mind.

enough, can not be in immediate relation with distant objects such as the stars, but can be connected with them only by a long series of causes and effects. The 'I' that perceives the stars, on the other hand, is the mind, and to this no similar disability applies. We do in fact, perceive the stars immediately and directly. To urge the necessary physical intermediaries between the two in proof that we do not is, first, to contradict the plain facts of consciousness, and secondly (as Dr. Montague rightly sees), to make it impossible we should ever directly perceive any extra-bodily object at all. Dr. Montague, of course, tells us that what he immediately perceives is certain events within his body; I congratulate him on this, as it seems to me it should qualify him to be a better physiologist than I, with my merely externally directed vision, can ever hope to become.

Dr. Montague's point about the necessary *time*-disparity between distant objects and the brain-events that accompany our perception of them—that these objects are distant not only in space, but in time—is a very clever and important one, though it does not prove what he takes it to prove, that the objects we immediately perceive are events within the body. The time needed for light-rays to pass from the object to the eye and call forth the organic process to which perception corresponds has this result, that we perceive a slightly earlier state of the object than that which coexists with the perception. Where the object is near at hand, the difference of time is so slight as scarcely to reveal itself in practice, and to have escaped the attention of most theorists. Dr. Montague's device of taking the case of the stars magnifies this slight difference, as it were, with a microscope, till it assumes immense proportions. The starlight I see left the star years and years ago. But do I then really see the star itself at all?

In considering this question, it is important to bear in mind that there is no middle ground between our perceiving the star itself and perceiving merely events within the organism. Admit that we do not perceive the star itself, and by precisely the same process of reasoning you will be forced to admit that we can not directly perceive an object near at hand, such as a tree. Now, I know of but one way of determining what we perceive and what we do not perceive, and that is to consult the facts of consciousness. When I do so, I find that what I perceive is *not* an event within my body, but an object outside it, a tree or a star. For *what I mean* by a tree or a star—the 'impression' to which this 'idea' corresponds, to use Hume's terms—is something of which I am immediately conscious. You can not, therefore, in the endeavor to adjust the facts of experience to one another, be led to the conclusion that objects are *beyond* that of which you are immediately conscious, without having

lost contact in some way with the firm ground of experience from which you set out. I am far from denying that there is an apparent antinomy here, which it is the business of a theory of perception to clear up. The beauty of the panpsychist theory is that it enables us to clear it up quite completely; to show how it is possible that we should perceive extra-bodily objects immediately, and yet that our perceptions should be directly correlated with brain-events.

Grant, of course, that there is such a thing as the 'psychophysical organism'—that the brain is real independently of consciousness, and that consciousness is either enclosed within it or somehow outwardly attached to it—and the conception of Dr. Montague immediately follows. Dr. Montague deserves credit for being perfectly logical here. But I think he commits himself to an unnecessarily crude method of statement when he takes up the defence of the view that consciousness is 'confined within the skull.' Even if it were true that the objects of which we are immediately conscious are events within the body, it would not follow that consciousness is 'confined within' the body. Consciousness is not in space, and it can not, therefore, be either inside or outside the body. Dr. Montague thinks that Dr. Alexander is not successful in refuting the notion that consciousness is 'enclosed within the skull.' In my opinion he is only too successful. His success is so great as to blind him to the fact that there is another relation between consciousness and the brain which he has not refuted, and which has a direct bearing on the problem of perception. For, quite independently of any view as to the mode of existence of matter, *it is an empirical fact* that our perceptions are conditioned on and vary concomitantly with brain-events. *It is only on a realistic theory of the mode of existence of matter*, as I shall go on to show, that this fact involves the consequence that they can not vary directly with, and so be immediately cognizant of, extra-bodily objects. If Dr. Alexander, instead of travestyng the fact of correlation, of putting it in a shape in which it could occur to no idealist to hold it, would set himself to prove, either that our perceptions do not vary directly with brain-events, or that this fact does not, on a realistic theory, prevent their varying directly with and so being immediately cognizant of extra-bodily objects, he would have a somewhat more difficult task on his hands than that which he has actually attempted.

It is instructive to note the different attitudes of Dr. Montague and Dr. Alexander, as realists, toward the fact of correlation. Dr. Montague accepts this fact, and is led by it—with perfectly valid logic, as a realist—to the monstrous conclusion that the objects we immediately perceive are events within the body. He fails only to see that he has made this conclusion inevitable by conceiving the

correlation in a realistic sense. Dr. Alexander, to avoid coming to so impossible a conclusion, can see no recourse, as a realist, but resolutely to shut his eyes to the fact of correlation. Hence his opinion that the wise course for metaphysics is to have nothing to do with facts of physiology which, if she considered them, might lead her in a wrong direction; that if she considers them she is condemned to a 'sorry course,' a 'loss of wind,' etc. Dr. Alexander's fundamental difficulty is a rooted inability to conceive the fact of correlation otherwise than in a realistic sense.

*But the fact of correlation does not necessarily imply any particular theory as to the mode of existence of matter.* I have sometimes tried to state this fact in such a way that it should be clearly seen not to involve any particular metaphysical theory. This may be done by saying that, when the extra-bodily object is an actual perception, the brain-process is a possible perception. Or, better still, it may be done in the following way. Any possible perception may be conceived to have become an actual perception. We may, therefore, conceive the brain-process to be actually perceived. Suppose that I am conscious of a large field, containing many other objects and processes, and among them the brain-process. A peculiar difference would then be noted between the brain-process and all other processes. Arrest any other process, and in place of the perception of the process going on you have the perception of the process arrested. That is, the masses and molecules which before were moving are now perceived at rest. Arrest the brain-process, and in place of the perception of the brain-process going on you do not have the perception of the brain-molecules at rest, but *you cease to have any perception at all*—your consciousness is extinguished.<sup>4</sup>

We have now reached a point where I can explain myself with regard to the validity of the physiological argument with some chance of being understood. Dr. Alexander considers, and Dr. Montague agrees with him, that this argument involves a contradiction. "The amazing thing about this argument," says Dr. Alexander, "is that any one could fail to see that it is based upon the tacit assumption of knowledge of that very extra-conscious world the possible existence of which it is so strenuous to deny." I assume that by 'extra-conscious world' he means a world of *matter* existing independently of the mind; for if he meant a world of things-in-themselves, I should fully admit the point, but it would not justify

<sup>4</sup>This account of the facts is, I think, accurate except in a single point. Your consciousness would be extinguished, not at the precise moment when your brain-process came to a stop, but a moment or two before. Those who have grasped the panpsychist theory of the relation of mind and body will see why this must be so.

him in his contention that the physiological argument involves a contradiction.

*In reality, what the physiological argument rests on is the fact of correlation, and not the realistic interpretation of that fact.* I can quite understand the difficulty which realists must have in grasping this distinction, or at least in seizing quickly the intent of those to whose reasoning it is vital. It is one of the inadequacies of human speech that you can not speak of a stimulus calling forth a brain-event and of the brain-event being accompanied by a perception without being thought to assert that these physical events have reality apart from the perception, or apart from any perception. Certainly I never meant to base the argument on this realistic assumption, but on the facts themselves in the sense in which every one must admit them to be such.

Let me now restate the physiological argument, and try to make the exact force of it plain. This argument is not so much a direct proof of idealism as a disproof of naïve realism. It disproves naïve realism by showing that this theory is in hopeless contradiction with the facts of physiology. According to naïve realism, the tree I see is a reality external to my mind. But, if this is so, it follows that the brain-event which accompanies my perception of the tree is a reality external to my mind. Now, in order that I may correctly perceive the tree, my perception must vary with the tree, and with the tree alone. But the facts of physiology prove that my perception varies with the brain-event, and with the brain-event alone. Hence, if physical objects are realities without the mind, it is impossible, consistently with the facts of physiology, that we should have direct perception of them. The physiological argument is thus, in its exact force, a *reductio ad absurdum* of naïve realism. Whereas, if we take the tree and the brain-event simply as phenomena, there is no difficulty whatever in that correspondence between the phenomenon we call a tree and the phenomenon we call a brain-event which we actually find to be a fact.<sup>5</sup>

To put the same thing in another way: the physiological argument starts from the fact of correlation, and asks whether it is more reasonable to interpret this fact in a realistic or in an idealistic sense. To interpret it in an idealistic sense is to assume two phenomena, perception-of-tree and perception-of-brain-event (the latter merely

<sup>5</sup>This, I gladly recognize, is the position towards which Dr. Alexander in his really able article shows himself to be progressing. He would have no difficulty in recognizing such a correspondence to be a fact. But it would put an end to his 'realism'; and, when he came to explain it, I venture to think that he would be led beyond the mere phenomenalism which is enough for his intellectual needs at present.

possible), in a relation of correspondence. To interpret it in a realistic sense is to split the first of these phenomena (since the brain-event is not an actual perception) into two things, the tree on the one side and the perception on the other; and you have then three things to deal with: the tree, the perception of the tree, and the brain-event. You are now in the following dilemma. The perception is shown by the facts of physiology to correspond to and vary with the brain-event. But, if this is so, it is impossible it should at the same time correspond to and vary with the extra-bodily tree, as it is required to do by the theory of naïve realism. How shall we get ourselves out of the difficulty? The true course is not to hold fast to the extra-bodily tree but deny that we have direct acquaintance with it, as Dr. Montague does; for this is to allow your theories to alter facts. It is to recognize that you were wrong in assuming the extra-bodily tree to be without the mind. Instantly the brain-event too ceases to be without the mind, the correspondence between it and the perception becomes a mere correspondence of phenomena, and the difficulty in the correlation of perceptions with brain-events ceases.

To sum up: the argument does not in the least deny that we immediately perceive extra-bodily objects; it only asserts that if those objects are realities without the mind, then the brain-event too is a reality without the mind, and the facts prove that our perceptions vary with the latter and not with the former. Whereas, if extra-bodily objects are merely mental modifications, there *is* no object, real apart from the perception, to which the latter is bound to correspond, and the correspondence between brain-events and perceptions is simply a correspondence between one mental modification and another. Otherwise put, the perception has not any longer *two* things, the extra-bodily object and the brain-event, to which it is bound *per impossibile* to correspond, but the 'object' is only another name for itself, and the only thing to which it is bound to correspond is the brain-event.

I hope I have now succeeded in vindicating the physiological argument from the charge of involving a contradiction, and in showing that it is a valid refutation of the naïve type of realistic theory. This, however, is not the last word of the matter. Dr. Alexander is not wrong in thinking that the physiological argument implies the extra-mental reality of something which is the cause of our sensations, though he is wrong in thinking that it implies the extra-mental reality of matter. When, in obedience to this argument, we have recognized that matter has no existence apart from our sensations, we have merely *formulated* the facts of perception, but we have not *explained* them. The argument leaves us with a phenom-

enal tree somehow conditioned upon and varying with a phenomenal brain-event. The lazy phenomenalism which is so popular at present is content merely to register this surprising fact. In reality it is a datum for metaphysics, an *explicandum*, and the test of the soundness of any metaphysical theory is its ability to explain it. The impotence of realism shows itself nowhere more clearly than in its total inability to do this. And no wonder; for, make the body a reality external to the mind, and their conjunction is bound to be an ultimate and inexplicable fact. Idealism, on the other hand, paves the way for the panpsychist explanation. To state that explanation in a word: the phenomenal relation between the extra-bodily tree *quâ* physical and the brain-event is the symbol (in mine or any consciousness) of a real relation between the thing-in-itself that appears as the tree and the tree *quâ* perception. If thinkers who at present stand helpless before the relation of mind and body, and are driven by the facts either to the denial that we ever perceive extra-bodily objects at all, or to a position which amounts to the denial that mind and body are related—if these thinkers would devote a little more attention to the panpsychist theory, I am convinced that they would find nine-tenths of their difficulties disappearing.<sup>6</sup>

I shall take up the question of the nature of the distinction between the physical object and our perception of it in a later instalment of this article.

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#### REVIEWS AND ABSTRACTS OF LITERATURE

*Les Principes des Mathématiques: I. Principes de la Logique.* L. COUTURAT. *Revue de Métaphysique et de Morale*, January and March, 1904. *Kant et la Mathématique moderne.* L. COUTURAT. *Bulletin de la Société française de Philosophie*, May, 1904. *Les Principes des Mathématiques d'après M. Russell.* G. MILHAUD. *Revue Philosophique*, March, 1904. *L'Objectivité intrinsèque des Mathématiques.* P. BOUTROUX. *Revue de Métaphysique et de Morale*, September, 1903.

The papers of M. Couturat summarize the main results of modern logic, defining the concepts and axioms on which exact or mathematical reasoning is based. The general position is that of Mr. Russell's 'Principles of Mathematics,' though the exposition is much clearer than that of Mr. Russell's. This criticism does not go into details, but considers

<sup>6</sup> A good way to begin is to read Professor Royce's essay on 'Self-Consciousness, Social Consciousness, and Nature,' in the *Philosophical Review* for September and November, 1895, reprinted in his 'Studies of Good and Evil'; and Professor Stout's chapter on 'Body and Mind,' in his 'Manual of Psychology.'