ON BODY AND MIND.

Anything approaching a complete answer to Mr. Stout's questions in the No. of MIND for last July would involve a lengthy discussion; indeed, his questions seem to me in large measure unanswerable on any theory of the relations of body and mind. I can, therefore, only indicate what line of reply I should wish to have pursued in considering them, so far as they seem to offer objections to the particular theory set forth in my *Elements of Physiological Psychology*. In doing this I will adopt the numbers and order in which the objections of Mr. Stout were made.

1. Mr. Stout thinks that, in refuting materialism, I have implicitly refuted my own views. This is because, although I assert that the entire "doing" of material atoms consists in changing their relations in space to other material atoms, and deny that mental phenomena can be spoken of as the "product" of neural phenomena, I still maintain that we have ground for believing in the reality of the interaction of body and mind. That all physical phenomena, including those called neural, can be interpreted and indeed, as such, conceived of only in terms of motion, is an assertion, I suppose, which would command the assent of the entire system of modern physics—or, rather, if you please, the metaphysics of physics. But when I argue against the theory which considers mental phenomena as the "product" of neural phenomena (as I do at length in the third part of my book), I am emphasising my dissent from any of the several current uses of that word "product," as a term fit to summarise the relations which exist between body and mind. If Mr. Stout, or anyone else, wishes to defend the employment of this term, he must accomplish this by interpreting the term in some consistent and intelligible fashion. In other words, we cannot say that mental phenomena are a "product" of neural phenomena, unless we can show that this word is a fit one, in some special and definite meaning, to sum up the relations empirically shown to exist between the two. But if the word "product" be used as signifying that body and mind are interacting, that they fall under the great law under which reason brings all uniformity of observed sequences, then, of course, I too am an advocate of the view embodied in the word. Only I still consider the word, as currently used by all materialism, not only misleading but also utterly impossible to make intelligible. We may, for example, fitly call the physical resultant of a chemical combination of oxygen and hydrogen atoms, under given circumstances of temperature, pressure, &c., a *product* of those atoms; it is quite another matter, however, to use the given term for the relations between a state of consciousness, with its reference or referableness to an Ego, and the combination of those or other atoms.

But Mr. Stout throws his objection to my view into the form of the following question: "If the material atom as such does nothing but change its spatial relations, how can it act on something which is not in space at all?" (There may be lurking in the words "do" and "act" as here employed, an ambiguity; and to this point I shall refer again in a moment.) Now, if Mr. Stout means by the word "how" to ask me for a description of the *modus operandi* of the action of the atom, which is in space, upon the mind, which, according to the question, "is not in space at all," I cannot furnish an answer. Indeed, I hold that the question itself is idle and unanswerable. But the terms of his inquiry seem to be framed so as to suggest, or even to force, a negative answer. The answer required by the question seems to be: Such action *cannot* take place at all; it is inconceivable. But this conclusion is nothing but the declaration of the old Cartesian and post-Cartesian metaphysics. The truth is, of course, that all action and interaction are, ultimately con-

sidered, inexplicable mysteries—are just somewhat that has to be posited and left unexplained and resting on metaphysical necessities. We cannot for ever go on putting-in more mechanism to lighten up the mystery. At last we must rest in the confession, that the observed world, the world of phenomena, is underlain by a world of real beings, which act and are acted on by each other:—"how?" we know by discovering the uniform modes of their related action; but "how?" we know not, and never can know, if by asking we mean to inquire into the *modus* of interaction in general.

Now my theory amounts to the claim, that we need a real being called the "mind," in order theoretically or speculatively (if you will, metaphysically) to account for the sum-total of those phenomena called mental. That this mind is interactive with a certain system of material beings—the so-called atoms of the brain—is no more difficult to admit, on proper scientific evidence, than the interaction of the different elements of the material system. Both admissions are alike necessitated by facts; both quickly land us in the ultimate mystery of all interaction.

2. In answer to Mr. Stout's second objection, a brief mention of it, with a single hint, must suffice. I am judged inconsistent because I deny that there can be any "interchange of energy between brain and mind," and yet maintain interaction between the two resulting in a given direction of the bodily organs. Now I do not know precisely what Mr. Stout means by the term "interchange of energy". Properly speaking, there is no such thing as *interchange* (or *transitus*) of energy anywhere. What I do deny—and in this I suppose that the great majority of all materialists even would unhesitatingly agree with me—is, that the law of the conservation and correlation of physical energy can be maintained between states of consciousness and states of brain. To admit its existence here would disprove its accuracy in the sphere of body alone—just where it must be maintained, if we are to bring even the neural phenomena under it at all.

Mr. Stout seems to think that, by the foregoing denial, I render myself liable to suggest some "mode of interaction, which is not in like manner absurd". The particular mode which he thinks I am bound to advocate is, that the mind acts like "a condition of mechanical constraint". Now, here again I decline to be compelled either to abandon the view that mind and body interact at all or else to describe their "mode" of interaction. In some sense, my entire book is a description of the mode, or rather modes, of the interaction of body and mind. These modes are nothing but the uniform ways in which the two behave under their different relations to each other. More simply said, the uniform related ways of acting *are* their modes of interaction. Further than this, to ask after a "mode" is to raise the same old unanswerable inquiry. I can easily agree, then, with Mr. Stout when he says: "It is as difficult to conceive the soul acting as a condition of mechanical constraint as it is to conceive it receiving energy from the material system and returning it again". Both are so difficult of conception that both are quite inconceivable; and there is not the slightest real warrant for either.

3. Mr. Stout's last objection to the views of my book is by far, to me, the most surprising. He finds "serious ground for complaint" against me because I have nowhere taken account of the Kantian criticism. If this be true, I certainly cannot plead that I have sinned in ignorance: for several years it has been no small part of my annual task to study and teach the *Critique of Pure Reason*.

The particular matter in which I have not sufficiently deferred—so Mr. Stout thinks—to the *K. d. r. V.*, is in arguing "from the unity of

consciousness to the existence of a real unitary being as the subject of consciousness". This argument Kant is deemed to have sufficiently exploded. What argument Kant did really explode, so far as he aimed to explode any argument and accomplish his aim, is a matter to be discussed on other than the present grounds. But that I have repeated the inferences of the old rational psychology, which attempted to demonstrate the natural immortality of the soul by showing that it must be some kind of incomposite (and therefore indecomposable) monad or atom, I utterly disclaim.

The two places in my book where I have dealt at any length with, or even prominently assumed, the unity in reality of the mind, are the chapters on perception (Part ii.) and the chapter on the mind as a real being (Part iii.). In the chapters on perception, the metaphysical basis of the theory which I advocate (so far as this theory has any such basis), is substantially identical with a certain Kantian view advocated in the 'Deduction of the Categories'. This I feel called on to confess in deference to those of my critics who, unlike Mr. Stout, find that I take *too much* account of the Kantian criticism. That is to say, I hold that, back of all appearances, in consciousness, of one, or two, or of any other number of phenomenal things, stands the postulate of the unifying *actus* — the one-making power — of mind.

The definite treatment which I give in my book to the unity in reality of mind is very brief. As I understand it, this treatment differs almost *toto cælo* from that argument of the old-fashioned rational psychology which Kant undertook to overthrow (to overthrow, at any rate, as a demonstration making and needing no appeal to faith). I say, indeed (p. 683): "It must be admitted that the question of the unity of mind has given rise to much fruitless and by no means pertinent debate". A unity in the substratum of mind, conceived of after the analogy of an incomposite material atom, even if such a conception were mentally possible, would throw no light on the unity of consciousness. To be self-conscious, to appear to oneself at all as having states or as subject of states, this *is* to be really one (a unitary real being), in the highest meaning which can be given to the words.

At the risk of seeming to speak lightly of a grave psychological and philosophical question, let me affirm: A wise man does not care whether he be reckoned as one or as more than one, according to the reckoning employed by the student of physics in counting up his atoms, or of the housewife in counting up her things. Thus to be a unitary real being (if it were possible) would be no boon, if one could not appear to one's self as one in consciousness. And thus to be two or more real beings would be little hardship, if one were still the subject of a rational self-consciousness.

Is it not I, my mind, that makes the one and the two, of the atoms and of the things? How have they number except as they get numbered, or set over against the mind?

In conclusion, let me say that Mr. Stout's courteous and searching questions convince me more than ever that metaphysics will creep into the study of mind (and ought to be cautiously and intelligently admitted as necessary to a theoretic treatment of the phenomena) from whatever point of view it be pursued.

GEORGE TRUMBULL LADD.