SUGGESTIONS FOR A COMPROMISE OF EXISTING CONTROVERSIES IN PSYCHOLOGY

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The present situation in psychology is an interesting commentary on the possibilities of accepting diverse major premises and of applying them with all seriousness in the development of a science. As compared with twenty-five years ago when I first became interested in theories of psychology, or when I first had sufficient knowledge to be presumably an intelligent witness of the condition, the contrast is striking. Then every one was sufficiently dominated by the assumptions of Wundt and James, which for our purposes can be assumed as in agreement on fundamentals, to believe that a crass materialism as it was then called and a primitive animism were alike relegated to an historic obscurity. It was respectable only to believe in some sort of parallelism and if the actual thought of real causes nearly always took us to a primacy of the nervous system that boded ill for the efficiency of the mental process, still we saved facing difficult questions, and kept at peace with the idealistic philosophers of the day by a facile hypothesis that permitted body and mind to run on along parallel lines without having the one influence the other.

Today all is conflict and we find represented every fundamentally diverse point of view that has prevailed since man began to think. Still the various schools that are represented today are after all only modifications of the schools that have been represented since the beginning of time and will necessarily be represented as long as man continues to be as he is. The history of behaviorism shows that it is the legitimate and direct descendant of materialism. The revival of materialism by Loeb for the lowest forms, where of course it would be readily accepted, led to the application

of the same principles to constantly higher forms, until it was an obvious next step to apply it to man. The behaviorist might fairly claim an agnostic position with reference to the fundamental explanation on the ground that it is a descendant from Jennings's work rather than Loeb's, and that Jennings's work or explanation was a protest against an extreme chemical explanation of the activities of the lower animals. The concepts which it makes primary, too, are instincts and habits rather than chemical reactions or even the activities of neurones. In so far the behaviorist might insist that his explanation is indifferent to the final explanation of reflex, instinct, or habit, and so would accept an animistic or parallelistic explanation of the response, if it should prove necessary to give it.

One may readily see that the behavioristic view is an expression of the same fundamental demands for an explanation of vital phenomena that drove Leucippus to the assumption that mind is a collection of fine and highly mobile atoms, or that impelled de La Mettrie to regard man as much a machine as Descartes had made the animals. The development from Descartes to La Mettrie is almost exactly analogous to the progress from Jennings to Watson, although unlike Descartes, Jennings had no theory, or had propounded none, concerning man and would be undoubtedly ready to accept a complete behaviorism. In all men of this type the essential factor is a demand for an explanation in as simple terms as possible, and the feeling that the simplest thing in the world is the push of one block against another or, in the biological world, the response of a muscle to a sensory stimulus. I suppose that the feeling is shared by all, and that in one attitude, at least, every one would be willing to admit that an explanation of this type would be highly desirable and to give it assent so far as it can be shown to be in harmony with all other factors and considerations.

At the other extreme much the same claim may be made for the animistic belief, although it probably has a less strong appeal for the trained scientist. This can be shown to have just as definite a descent from the Orphic mysteries or even

from the first thinking of primitive man as the behaviorist has from the first prescientific explanation of the atomist. There is no doubt that it is an expression of the anthropomorphic impulse, which in turn arises from the widespread if unanalyzed belief that man knows himself better than he does anything else, better at least than he knows any physical thing or any mechanical force, and that it is always possible to explain everything in the world about in terms of human beings. The attempt to explain man himself in terms of similar human characteristics is just as common and seems to last much longer than a similar explanation of natural forces. Whenever the primitive scientist meets difficulties in explanation he is inclined to introduce into his series a human term to fill the gap. Ancient physiology was helped out by the animal spirits which were the carriers of messages between different parts and seem to have been half way between mere subtle inanimate vapors and living, thinking messenger boys. When the discovery of the circulation and of the function of nerves reduced the field of ignorance, animal spirits gradually disappeared to have their place taken by waves and electric currents. But still there seemed to be difficulties in the explanation of details. There were for years different problems that did not fit into mechanical or other simple explanations, and when these presented themselves the simplest explanation was always to bring in an animate something which might think and make the changes that could not be pictured in simpler terms, by some sort of voluntary decision. Thus the vital force solved in a word the hard problems of Müller who was otherwise a rigidly mechanistic thinker, and the entelechy, which is after all a spiritual or thinking and self-directing agency, solves the same difficult problems for Driesch.

As compared with materialism or behaviorism it seems to the scientific thinker that all forms of animism are at a disadvantage because the final units in terms of which it works are themselves unknown. One could raise this objection with considerable force against the early savage who was explaining physical changes and processes in terms of

his own feelings about himself. He could not say why in the last analysis he did anything, but because he had the illusion of fore-knowledge concerning his own activities he ascribed the same forces and activities to the outside forces. When the modern psychologist attempts to say that instinct is the result of a change wrought in the developing nervous system by the activity of an unknown force similar to himself, he is making an explanation in terms of a force even more unknown than the change which he attempts to explain. The same may be said with greater force of the explanations of the Freudians which consist in placing a second self, by name and admission entirely unknown, in the unconscious, and making that responsible for the activities which are not otherwise understood. It follows the principle of explaining the unknown by the more unknown, and also attempts an explanation of one thing which is by the very fact of attempted explanation admitted to be unknown by a second force or factor of exactly the same type. This is of course on the assumption that the animal is a replica of the human mind.

Whatever one may say about the logic of the animistic explanation, and probably the less said about it the better, it is undoubtedly an explanation that appeals to the multitude and we are all to be counted among the multitude in our blinder and less critical moments. However much we may struggle with the attempt to understand our own selves or the selves of others, we always seem to feel that after all we must know our own selves thoroughly just because they are ourselves and so close to us. When we are told that a reasoning thinking being like ourselves is guiding the development of an embryo, or is formulating our thoughts for us when we are not thinking of formulating them for ourselves, we are not at once likely to ask what is that thinking being, how does it get into the organism, or even how do you know that any thing of the kind would be able to guide the development any more than you can, by taking thought, add a cubit to your stature. Many otherwise careful men do not ask how a self hidden in the basement of the soul could be any

more effective in controlling fundamental activities than the soul which we commonly think we know, but which if we did know would leave no problem open for explanation by the subconscious or unconscious. From all, the suggestion that some thinking being is an explanation of whatever offers difficulty, meets a ready if temporary acceptance. One constantly forgets that the great unknown of modern science is how what we know by name as 'thought,' in spite of the fact that we know it mostly by name alone, can guide a physical force, or in any way manipulate matter. When one says glibly that thought molds a regenerating limb, one is momentarily thrown off one's guard and forgets that you cannot understand and have not yet thought clearly how you move your finger in writing or your tongue in speech.

It must be said then that rightly or wrongly every man is likely to respond both to an explanation in terms of simple physical forces and to an explanation in terms of a known or unknown replica of the human individual with a feeling of assent and to accept either explanation as a real explanation. The fundamental reason for the acceptance of anything as an explanation is that one has developed a habit or that there is a deep-seated satisfaction due to instinct or fundamental nature that makes anything seem settled when it is safely stowed away in some familiar category. We understand by referring the unknown or new to the known and the familiar. At first sight and through racial habit we believe that the two simplest categories of action are the simple thrust of body against body on the one hand and the action of a thinking being in moving his hand or other physical object on the other. The first reference is the one that the materialist asks us to make; the second that which the animist asks of us. We make either with somewhat the same readiness and about the same resulting satisfaction.

If then as crude human thinking machines we are as ready to accept one as the other and are quite as well pleased with one as with the other as the final solution, is there no way of deciding between them? We can at least weigh

the relative advantages. The materialist's explanation (and the behaviorist's is like it) goes as far as it can at the time with the detailed facts at its command and then asserts that with the advance of knowledge the same principles will enable me to explain what is now not clear. Its results are always satisfactory as far as they go in psychology as in biology or in physics. Where adequate knowledge is lacking its answer is an expressed hope that the same type of answer will satisfy, when ready for the as yet unknown. The animistic theory always gives us a word and always the same word as explanation for all problems. It always says some mind like your own does whatever act you desire to have explained. For science this has the disadvantage that it never leads to any further thought. It is a soporific for inquiry rather than a stimulus. It also has the logical defect of assuming that its answer is itself a known term, when it is merely the great puzzle of all time.

The two explanations are different, too, in that one always satisfies up to a point and while it may make hypotheses from that point on, it is willing to admit that they are hypotheses which need amplification as well as justification. It succeeds very largely by positive contributions and its arguments are always positive arguments. It points to what it has already done as a warrant for confidence in the results that are to come. The arguments of the animist are nearly always negative. He points out the failure of the mechanist beyond a certain point, and then says that since this poor fellow has failed here he can no longer be trusted. My wares may have little to be said for them, but your instincts incline you to accept them, and the failure of my antagonist leaves you no alternative.

One may reduce the conflict between the various forms of structuralism and functionalism to a similar impasse. All mental problems, like all physical problems, may be approached either by asking what a thing is or what it does. Most minds insist on asking both questions. The latter question has a definite answer. Whether there be light or mind the fact that we are illumined is not to be doubted.

What it is that is the substance behind the enlightenment, physical or mental, is not so easy to come to grips with. Whether the ether or electrical oscillations of some type is to be the explanation varies with the fashions. Still almost everyone seems happier when he has something substantial to act with or upon as well as action itself.

Similarly there can be no doubt that I withdraw from certain things and approach others and that the withdrawing is correlated with an intellectual functioning different from that which accompanies the approaching, although time and again it has been questioned whether a structural element of pleasure or pain has a real existence. On the intellectual side too there seems little doubt that in some way we can intend and mean, can designate and be aware that certain things are true, while there is skepticism on the part of many as to whether a mental element exists and exactly what it is if it does exist.

I am not holding a brief for either functionalism or structuralism any more than for animism or behaviorism or materialism. My only point is to insist that these problems are real problems, that as problems they are unsolved, probably insoluble since they are rooted in attitudes of mind which all possess and which are largely incompatible.

My answer then to the question asked in the title of the paper is a negative. The conflicting tendencies are not to be harmonized. They are differences that have existed since the beginnings of thought. They are not amenable to investigation, because they are not matters of fact but of attitude. The conflicting attitudes are rooted in something like instinct or in the nature of things themselves and of the thinking beings that have been evolved because of the nature of things.

You will notice that most of the discussion about these fundamental positions is not logical argument but emotional exhortation, not so much evidence in favor of one's own view as denunciation mixed with ridicule of the other's view, and not infrequently of the other who holds the view.

It is not to be denied that these discussions contribute to the gaiety of nations or at least to the interest in meetings of psychologists, and this interest now and again leads to investigations that are not without value in advancing the science. Still they decide nothing, certainly not the point at issue. The dogmatism of one side usually breeds a more vigorous action on the other. The bad temper engendered is mostly pure waste and if the time and energy used should be devoted to the accumulation of data, the science would advance more rapidly. Still I have no confidence that controversy in these fundamentals will ever cease. Probably it would be a dull world if it did. All that can be desired is that one should have serious moments in which one can look *sub specie æternitatis*, and see that it is a game that must be played because man is what he is, not that the result which is foredoomed to be a draw will make any great difference to the actual content of the science. The nature of man is the same whatever we call it, and the facts we enumerate and describe are the same no matter into what categories we fit them.