

## AN IMPORTANT ANTINOMY.<sup>1</sup>

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It not seldom occurs that the presence in an individual's mind of cognate problems leads by slow process of assimilation to a new view-point in which what was before separate, gathers fresh import in a larger whole. Such is, undoubtedly, the genesis of all constructive inference; the hewing of wood and drawing of water being but preliminary to the synoptic vision without which the weary task-work avails little. It is in the hope that I may indicate a fruitful synthesis to others with keener or more trained perceptions that I undertake the labor of the following presentation of the relationship of the mind-body problem and an antinomy.

In his chapter on nature<sup>2</sup> Mr. Bradley discovers an insoluble contradiction which leads him, not unwillingly, to the altar of the Absolute. Without calling in question his other journeys to the same shrine, I must acknowledge that this one seems unjustified. Before going further let me state the antinomy and its meaning as nearly as possible in his own words. “(a) Nature is only for my body; but, on the other hand, (b) my body is only for nature.” A slightly different form of this antinomy including the traditional Kantian emphasis on man's reason as the law-giver to nature is given by Professor Royce:<sup>3</sup> “But we, of course, all recognize a sense in which man is to be conceived as a part of nature; while, on the other hand, nothing is clearer than that for us, all our beliefs about nature are determined by conditions which belong in one respect to the mind of man.” Preparatory to the development of the two sides of his dilemma, Mr. Bradley points out what may be called the natural realism of common sense. We get the notion of a world consisting of primary and secondary qualities and extended in space and this world strikes us as

<sup>1</sup>The MS. of this article was received May 3, 1908. — ED.

<sup>2</sup>*Appearance and Reality*, ch. 22.

<sup>3</sup>*The World and the Individual*, Vol. II., Lecture IV., p. 158.

not dependent on the inner life of any one. Our bodies with their organs are taken as the instruments and media which should convey it as it is and as it exists apart from them (p. 262). But as a result of the antagonistic growth of the physical and mental sciences doubts arise, the physicist and the psychologist being forced by the pressure of their data and methods to pass far beyond this naïve position. The result is the conflict between impersonal scientific objectivism which knows no peculiar starting-point, such as the individual's body and the tendency to a pluralism, on the part of the psychologist, who deals perforce with individuals and their perceptions and ideas as mediated by their bodies. In brief, this conflict is due to the fact that physics knows nothing of the individual whereas psychology does.<sup>1</sup> To sum up the difference antithetically: while things are looked upon as at least relatively permanent collocations of matter, consciousness is considered a flux of presentations somehow cognizant of these things; while physics deals with the extended in space, psychology has to do with the unextended; while, in the external world, individuality is unknown, the distinctive characteristic of consciousness is its unity; while in nature, as the term is used, mechanism seems provedly to rule, mind is teleological; while matter in motion gives no heed to values and ideals, this heedfulness and selectiveness is markedly true of mind. These groups of science, dealing respectively with what is usually called mind, on the one hand, and matter and energy, on the other, have developed naturally enough, nay seemingly inevitably, different norms and categories which clash relentlessly when brought in contact. And this antinomy of Mr. Bradley seems to me to express this contrasted development.

Examining the two sides of the dilemma, we discover that "the proper consequence of (*a*) appears to be that everything else is a state of my brain" (p. 263). This brings out the prerogative character of the brain as in some, so far unexplained, way the center of *my* physical universe. It would be possible to use the metaphor of a hub from which spokes radiate in all

<sup>1</sup> "The material world shows us no real individualities; these are first known to the psychological standpoint from which inner centers of memory, action and endurance are discovered." Höffding, *Psychology*, p. 66, note.

directions, or of a spider's web whose strands run inward to where the spider awaits.<sup>1</sup> But if the world is my brain-state, then what is my own brain? "To me my own brain in the end must be a state of my own brain," or, combining the two sides with Mr. Taylor<sup>2</sup> "the physical order as a whole, must be a 'state' of my nervous system which is itself a part of that order." Turning now to the second thesis, facts as obvious and undeniable confront us. "Most emphatically, my organism is nothing but appearance to a body. It itself is only the bare state of a natural object. It is clear that for the existence of our organism, we find the same evidence as for the existence of outer objects. . . . Both nature and body exist necessarily with and for one another" (p. 265). Body and nature, then, are on the same level for this position, and naturalism might easily take the bit in its mouth, were it not for the warning voice of the psychologist who stands sponsor for the earlier thesis. We are obliged to include our own body as a member in this impersonal and common world of things which we have constructed in social intercourse, and the prerogative which attached to our bodies while we were looking at the first side of the antinomy disappears. For our perceptual experiences, nature focuses itself in our bodies; a certain perspective is shot through all our immediate experiences of the world; there is a definite 'here' and 'now' as a point of departure and this 'here' is where my body is situated at the time. Logically this is witnessed to by the difference between perceptual and hypothetical universal judgments. Moreover, physiology, and in particular that of the sense-organs, emphasizes the rôle played by the organism as the hero of the piece. In the distinctively conceptual view of the physical world, on the other hand, the 'meanings' of 'common' and 'independent' attach; the 'here' and 'now' has been largely abstracted from and the impersonal scientific 'I' rules

<sup>1</sup> "The consciousness of self is a relatively permanent factor of our experience and that important constituent of it, the consciousness of the body, is perceived to be a condition of the occurrence in consciousness of other experiences. . . . The body — a something of which we are conscious — is perceived to be a condition of our having other experiences." Fullerton, *Metaphysics*, p. 199, note.

<sup>2</sup> *Metaphysics*, p. 199.

the outlook with the fixed stars as points of reference and even our body is engulfed in this continuous, all-embracing world.

To what conclusion does this antinomy, which seems so suggestive, lead Mr. Bradley. He infers that the "physical world is an appearance; it is phenomenal throughout." Again, "the physical world is an abstraction which for certain purposes is properly considered by itself but which if taken as standing in its own right becomes at once self-contradictory" (p. 267). To me this is no satisfactory resting-place. Certain questions arise inevitably. Does it not signify that the physical world *as we perceive it* is not self-supporting apart from our perception of it, yet that we have strong motives to make such an hypostatization? On the one hand, the body is simply one thing in the world with no special primacy; on the other hand, for me the world can well be considered the adjective of my body, especially of my sense-organs and brain. Is it possible to do justice to both sides of this antinomy? I think it is. Suppose nature to have a different meaning in the two statements; they would, then, no longer contradict one another.

"Nature is only for my body." This judgment has its *raison d'être* in the fact that *my* conscious experience is, in some sense, an ultimate for me. On the basis of perception, by means of constructive inference and memory, I laboriously build up what I call my world. A great deal of this construction is either unconscious or else socially mediated, coming to me not in the raw but in a prepared condition. The facts of communication must be accepted but we must also never forget that each individual is active, that he must interpret what he receives through the eye and ear. The recognition of this apperceptive function is the achievement of logic and psychology which can be least disputed. Consequently, though each individual is aided in the formation of his world by others, yet he must be the main factor in the work and the final result, giving the perspective of his peculiar purposes and selective interests, has always a unique character which proclaims this fact.<sup>1</sup> The logic of value is especially insistent on this uniqueness of each individual's experience. "Nature is only for *my* body," then,

<sup>1</sup> Cf. Stuart, in Dewey's *Studies in Logical Theory*, p. 319.

stands for this pluralism of experiencers. Nature, here, must be looked upon *idealistically* as a construct of mine, based upon, and growing out of, my experience, which seeks to include all my experiences of physical things and all my possible experiences as indicated by the statements of others. The desert of Sahara forms part of my nature because I have read about it and have no reason to disbelieve that it is continuous with the soil on which I now stand. That the extent of each man's 'nature' varies directly with his education and training or, to put it succinctly, with his development scarcely needs detailed elucidation. But while the analysis of the obvious is not required the import of the obvious is. And if evolution has any epistemological significance, it lies here, in the fact that the increasing complexity of the brain runs parallel with increasing intelligence and intelligence with the organization of the individual's experience in space and time, or, in other words, with his 'nature.' But what can this mean, if not that each individual has its own kind of nature? That of the fish gazing out of the pool must have hardly a semblance to ours, and the dog's 'nature' constructed so largely on the data of scent, must also even in its elemental character differ widely from that of the fish or from ours. Cannot comparative psychology with all its labor force philosophy to a wider prospect in which human egotism may sink itself? Surely Buddhism would be more hospitable to this truer humility than Christian thought has shown itself, except, perhaps, in the mystic love of St. Francis for his brothers, the birds. The relativism, then, that comparative psychology teaches carries but to a more scientific expression the first thesis of our antinomy, "Nature is only for *my* body."

In this idealistic sense, then, there are as many 'natures' as animals even though in the more highly developed consciousness of man the meanings of 'commonness,' 'betweenness' or 'independence' may attach themselves so that nature is thought of as independent *in some sense* of *my* nature. It is this struggle of realism to be born from idealism that has so puzzled philosophers who could see only one side of this antinomy or who, seeing both sides, could not reconcile them. Not only does the solution

of this apparent contradiction lie in the two meanings of 'nature' but it focuses in the mind-body relation giving an additional proof of what I have called the fourth progression.<sup>1</sup> By a study of the mind-body relation in connection with this antinomy, moreover, I think we can convince ourselves that realism involves personal idealism and that personal idealism would be meaningless without realism.

"My body is only for nature." It seems impossible to exclude my body from nature just because I learn of its existence in the same way that I learn of the existence of other things and other bodies. Furthermore, as the conceptual view of the world grows clearer, the impersonal standpoint, that of 'experience-in-general,' supersedes the concreter outlook, at least in certain reflective attitudes, and (may philosophy pardon my vulgarity!) the food question prevents hesitation. Every dish of porridge bears witness against any *alibi* for my body. More seriously, and with more academic dignity, let me refer to the exact experiments of Rubner and Atwater on the conservation of energy in the human organism. Admitting, then, nature's right to take my body unto herself in pursuance of her universal imperialism, we shall do well to ask ourselves some of the formal characteristics of this nature which engulfs the body. First, it is continuous. My body is in functional relation with the things around it and these, also, are in unceasing interaction with each other. Only the fairy-hand of science can reveal much of this delicate interplay and interdependence and only the eyes anointed by her can witness the subtle weaving of nature's living garment. The vital equilibrium of the organism with its surroundings, its stern struggle for ever fresh supplies of energy, its purposive self-maintenance, and, still more impressive, because more inclusive, the reciprocity of all part of nature with all, deserve recognition better accorded in the term *dynamic continuity* than in that of monism with its vague idealistic inclinations or number symbolism. Second, conservation of energy, capacity or power of doing work, obtains in the transformations that unweariedly occur. This conservation makes meaningless any question of absolute origin. Third, nature is a universe in the

<sup>1</sup> Cf. PSYCHOLOGICAL REVIEW, September, 1907.

sense that it is self-sufficient, no influx nor efflux being required or thinkable. Though Mayer and Helmholtz, perhaps Joule and Atwater, have proved this as far as experiment can reach, yet only if this formally-conserved universe can include consciousness will its complete self-sufficiency be assured. But how can this be done? Even while we are duly impressed by these tremendous and apparently proved facts, personal idealism as representative of the other side of our antinomy whispers doubt in our ear: "It cannot be the body as an experience of yours which is swallowed up in this 'macrocosm' called nature nor can this nature be identical with your construction which you have labelled with the same name." Harkening to this voice, must we not take a realistic attitude towards the body and towards nature in the second thesis of this dilemma? "My body is only for nature," yes, but for nature as 'macrocosm,' as reality. Does not this satisfy our antinomy and resolve the contradiction? But this was precisely the conclusion of a former study of the mind-body relation, where we saw that, corresponding to the psychical attitude towards another's mind, a realistic attitude towards his body must be taken.

What, however, is realism, and what is a realistic attitude towards a thing? This we are in a position to define more clearly. Starting, as I believe metaphysics must, from an individual's conscious experience, realism signifies that things are independent for their existence of his experience of them. In short, my experience does not affect the things around my body in any way unless it leads to an overt action on the part of my body. I may think about the book before me in any manner I choose but, until I take it up, an act mediated by my body, it is not changed. This does not mean that the book is as it is experienced as independently of my experience of it. That would be naïve realism, which, like idealism, is a stuff-theory of reality. Realism, as I have defined it, is not concerned, at least at first, with the character of the stuff of reality but with the relationship of the 'microcosm' of the individual's experience with the 'macrocosm' of reality, and the conclusion we have been forced to arrive at from a study of the dilemma is that nature has two meanings, my nature, a construct in my experience, and nature as *other than* my experience.

Now these 'microcosms,' or minds, seem to be intimately associated with certain peculiarly differentiated and organized nodes of this 'macrocosm.' This primacy of the brain was expressed above in the first thesis, "the proper consequence of (*a*) appears to be that everything else is a state of my brain." Consequently our problem has changed into the brain-mind relation, for, in the brain, microcosm and macrocosm meet. Can any clue be found to rede the riddle? I think so — *consciousness is a variant*.<sup>1</sup> An experience, once gone, is gone forever. The Heracleitean flux is surely true of the stream of consciousness. My approach, then, has led me to a possible solution of the old problem of change and permanence, or change and conservation. Reality is a process but a stereometrical and conserving process and a careful reflection finds no reason why activity should involve destruction of the capacity for action on the part of reality, every reason, however, why activity should imply changes. As a matter of fact, conservation of the capacity of reality (conservation of energy) exists and there is also change, since transformations of energy are as evident as quantitative identity. Now change involves variability of some sort. But consciousness, as we have seen, is a variant. Does this not lead us to the position that consciousness is the variant of the change-process of that part of reality called the pallium or cortex? The macrocosm thus embraces consciousness, does not reject it as alien. This result is further enforced by the facts of death and sleep. When the brain ceases to function, consciousness disappears. Such a functional identity is hinted at by Höfding though his double-aspect theory prevented his realization of it. "Sensations, thoughts and feelings are mental activities which cannot persist when the definite individual connection in which they occur, has come to an end. *They correspond to the organic functions* (italics mine), but not to the chemical elements. If the organism is resolved into its elements, organic function is impossible."

It is highly probable that a question may arise in some reader's mind with respect to the relation of variant and in-

<sup>1</sup> Cf. *Journal of Philosophy*, etc., Vol. V., No. 9, 'Consciousness and Conservation.'



variant, so I hasten to make my position clearer on this point. It is, in a certain sense, the application of a double-aspect theory to reality. Reality is a process, everything in modern science cries this aloud, but it is somehow a self-conserving process. Dynamics precedes statics. "From motion we attain the notion of force or energy, by means of which equilibrium becomes intelligible."<sup>1</sup> But dynamics in no wise precludes change nor does it negate permanence and lawfulness. The category of process, then, contains in itself both attributes in peaceful contiguity. The invariant is not a thing somehow related to another thing called the variant in a most paradoxical fashion, it is not an atom or a piece of so-called energy, and any question as to whether the variant or invariant is effective in the process of reality is, therefore, absurd and results from a misunderstanding. Reality, as a process, may be regarded from the side of conservation, and this gives its invariant aspect, for us stated in terms of phenomenal energy; or from the side of change or variancy and here we are, fortunately, direct participators, we experience change immediately. We are, in short, dealing with distinctions, not with things, and there is no reason why we should reify these aspects of the reality-process and thereupon bewilder ourselves in the attempt at their relation.

What, however, is the consequence of this doctrine of functional-identity or variancy? It is that the question of the efficacy of consciousness has ceased to contradict the principle of conservation of energy. Conservation having become a formal characteristic of reality and this reality including consciousness, there can be no objection raised of influx or efflux. The first movement is towards what I would call temporal 'parallelism.' The old way of raising the problem of the effectiveness of consciousness was dualistic. Interaction was dualistic. The physical and the psychical, really abstractions of the impersonal scientific logic and methodology of physics and psychology, glared sullenly at each other across a yawning chasm. Even in so stating it I overreach myself and lapse into spatial imagery for the gulf between mind and matter was one of quality like that between the king and beggar-maid and the marriage could

<sup>1</sup> Höfding, *The Problems of Philosophy*, p. 91.

be consummated only by God (Cartesianism). A restatement is now possible in this monism which I have advanced. We may ask, Is consciousness efficacious, has it any function? And this launches us upon the hitherto treacherous sea of ontological or real causation. I realize how impossible it is to treat adequately this extremely technical problem in brief space, so I shall content myself with a condensed outline.

Are there any facts that point toward the efficacy of consciousness? If so, an analysis of these may give us a hint of great value. First, evolution seems to demand the effectiveness of consciousness. Thus Darwin speaks of the sense of hunger and the pleasure of eating as, no doubt, first acquired in order to induce animals to eat.

He also thinks we may safely infer that the parental, filial and social affections have to a large extent gained place through natural selection.<sup>1</sup>

Second, the relation of consciousness to habit seems to be that of changing function to fixed function. Consciousness, like attention with which it is closely related, attends the reorganization of habits. It thus allies itself with function-in-the-making and, at the present, the inclination of biologists is towards the temporal priority and moulding character of function in relation to structure. Function, in the higher and more complex organizations precedes structure and makes it possible. But, as we saw, consciousness as a variant corresponds to function.

Third, consciousness is selective and practical in its primary character. So much is this the case that everything points to its adaptive character and work in the economy of the organism, only the impersonal logic of science, which, at the expense of an infinite series, negates individual initiative, could for a moment believe that blind mechanism could react so effectively to a continually changing environment. Biology with its doctrine of 'organic selection' reveals this necessity,<sup>2</sup> and modern sociology demands the play of intelligence even more earnestly.

Fourth, "it is a well-known fact that pleasures are generally associated with beneficial, pains with detrimental experiences.

<sup>1</sup> *Descent of Man*, Vol. I., p. 8 ff., quoted from J. Ward.

<sup>2</sup> Cf. Baldwin, *Development and Evolution*, p. 117.

But if pleasures and pains have no efficacy, one does not see (without some such *a priori* rational harmony as would be scouted by the 'scientific' champions of the automaton theory) why the most noxious acts such as burning, might not give thrills of delight and the most necessary ones, such as breathing, cause agony."<sup>1</sup> So strong is this argument when examined carefully that so stern an upholder of the so-called physical world and its laws as McDougall concludes that "the evolutionist finds himself confronted with the following dilemma: Either pleasure and pain are efficient causes of appetite and aversion and therefore have played in biological evolution a part of incalculably great importance, or we must postulate divine interference with the course of evolution at some early stage of the development of the animal kingdom."<sup>2</sup> Those who know McDougall recognize how much this admission means.

Fifth, the development of the trial-and-error theory in connection with excess-discharge or uncoordinated functions demands teleological selection.

We have gleaned two things, at least, from this enumeration. There are weighty reasons for belief in the efficacy of consciousness and the clue seems to rest in the relation of function and structure and thus to growth and organization. But death and disease or disintegration of any kind show that *organization is also a variant in the process of reality*. What could be more natural than to conclude that these are related directly? What stands in our way? Not conservation of energy, for we have surmounted that, but mechanism. And here is where the doctrine of grades of causal relation comes into use.<sup>3</sup> Reactions are undoubtedly selective in organisms, enzymes<sup>4</sup> and even in chemical elements. I have not decided yet whether resonance in physics can be brought under the same idea. The type of causal process depends apparently on the organization of the interacting nodes of reality. This is what one would expect, and only the atomism of mechanical

<sup>1</sup> James, *Principles*, Vol. I., p. 143.

<sup>2</sup> *Physiological Psychology*, p. 160.

<sup>3</sup> Cf. 'Consciousness and Conservation,' *Journal of Philosophy*, etc., Vol. V., No. 9.

<sup>4</sup> Cf. *Science*, February 14, 1908, Chittenden.

theory can have prevented its recognition for so long. Man, of course, with his tremendously delicate and complex functional organization presents the highest type of causal reaction, ordinarily called teleological. If we look at the process temporally and call the antecedent, conceptually delimited in a continuous process,<sup>1</sup> the cause, and the consequent, the effect, there is of course in such a system no loss or gain of energy or capacity. But this is true of any such system and represents the aspect of conservation in a process. It, therefore, misses some vital aspect since it has, no qualitative differentia for different processes, only differences in time coming to the fore. But if we pay attention to space and to the time during which certain amounts of energy are transformed and to the organization of the interacting 'nodes' of reality in any causal process system, marked differences appear. Ostwald, quantitative mechanicalist that he is, cannot see this, though he has his hands upon it time and again.<sup>2</sup> Höffding also has this view almost in his grasp when he says, "Maxwell himself recognizes that geometrical as well as dynamic concepts are indispensable to the explanation of nature. In contrast to the dynamic, the geometric denotes simultaneity."<sup>3</sup> This explains in part why I have always called reality a stereometrical process with grades of organization and kinds of differentiation and, hence, degrees in selective reaction and influence. This in no wise conflicts with conservation, which is a temporal idea. Here is, I believe, a theory which may give articulation to the dissatisfaction with mechanism so widely current in late years among scientists themselves.

To sum up. By means of a study of an antinomy and the mind-body relation, I have sought to prove that we can handle reality as it is about our body even while it is independent for its existence, of our consciousness. This position affirms that the true starting-point for metaphysics is the individual and his experience, not experience-in-general, and that in the mind-body problem nearly all the critical questions can be seen to

<sup>1</sup> Cf. Bradley, *Principles of Logic*, p. 488.

<sup>2</sup> V. *Vorlesung über Natur-Philosophie*, p. 325, 'Regelung der Reaktionsgeschwindigkeit durch räumliche Bedingungen.'

<sup>3</sup> *Problems*, p. 93.

focus. The realism we obtained is not a stuff-theory and is perfectly compatible with personal idealism, since consciousness is embraced by reality. Just because it is not a stuff-theory, in the old sense, it cannot be called materialism or energism, for these are logical realisms, *i. e.*, result from the reification of concepts. It is not an idealism, in the old sense, also, *because there may be kinds of variants* of which consciousness is but the one concomitant with that peculiarly organized and differentiated part of reality called the nervous system. Furthermore, this position is pluralistic in regard to the acknowledgement of separate centers of the experiencing. The doctrine of functional identity or variancy implies this. I cannot have your experience, *i. e.*, my experience cannot be numerically identical with yours, any more than my body can be your body. This position makes *communication on the basis of interpretation* possible. The monads, if one wishes so to call these 'microcosms,' thus get their windows through the body and its dynamic relations to other bodies. This agrees with logic, apperception, language and comparative psychology.