

However, he asks whether I do or do not hold that no positive doctrine in philosophy is theoretically indisputable. Yes I do, but only if to complain of tautology in a so-called positive doctrine is a way of 'theoretically disputing' it. I admit that a tautologous statement makes no assertion, and is therefore not open to the kind of attack to which only assertions are liable; it cannot be called *false*. Nevertheless the condemnation of it as empty verbiage is complete enough to satisfy all my disputatious desires. And I hold, further,—not as an unquestionable truth, but as a reasoned opinion which I should like to see directly met and questioned—that any statement which does convey an assertion may need correction to an extent which no wisdom before the event can determine.

It is clear that these two points constitute an essential difference between our modern undogmatic kind of 'scepticism' and Mr. Bradley's cut-and-dried notion of what 'scepticism' is compelled to be. We do not attempt to *deny* inapplicable axioms, but we complain of their lack of meaning and value; and we do not claim for our view any other presumption of truth than what may come from its being supported by reasons which no one has yet even attempted to face and overthrow. So long as this position continues the view remains uncorrected, whatever its errors may be; and, while it thus holds good, what matter whether one of its champions is 'self-elected' or elected by some other process not yet invented in philosophy? The question how far the view is true seems to me prior to the question whether this or that person ought to express it,—if indeed one can raise an interest in the latter question at all.

A recent account of the reasons on which the view is based is given in my book on *The Use of Words* (especially § 51), but I shall be glad at any time to supplement them so far as their defects of expression—when these are pointed out—may require. And I shall even be glad to modify the main view itself when any one suggests a reason for doing so. If our opponents' position were strong this ought to be an easy task for them; as things are, their leader's continued preference for imaginary issues compels one more and more to suppose it weak. Perhaps some other member of his party will now volunteer? For though Mr. Bradley is evidently sincere in regarding the discussion as mainly a personal matter, there is no reason why the rest of us should do so.

In conclusion, I am glad to note that Mr. Bradley still thinks it better not to mention what the phrases were which led him to fancy that I regard Mr. Schiller's view as assured beyond the need of further improvement; and he will, I hope, now be able to see that my scepticism is not of a kind that precludes a strong 'benevolent interest' in this new constructive attempt. The question remains how far the pragmatist method will continue to fulfil its promise. Will it help us not only to growtired of empty oracles, but also to make other movements forward?

ALFRED SIDGWICK.

NOTE CONCERNING THOUGHT AND REALITY.

It may be worth while to explain how it is that, to a physicist, even though he be unsmitten with any taint of solipsism, a well-elaborated scheme which is consistent with already known facts necessarily seems to correspond, or have close affinity, with the truth. It is the result of experience of a mathematical theorem concerning unique distributions. For instance, it can be shown that in an electric field, however com-

plicated, any distribution of potential which satisfies *boundary-conditions* and one or two other essential criteria must be the actual distribution; for it has been rigorously proved that there cannot be two or more distributions which satisfy those conditions, hence if one is arrived at theoretically, or intuitively, or by any means, it must be the correct one; and no further proof is required.

One method of constructing a theory is by the use of analogies and working models: of which it is a commonplace to say that, however good they may be, they must fail in representation at some stage, or else they must be no analogy but the thing itself. This making or imagining of models (not necessarily or usually a material model, but a conceptual model) is a recognised way of arriving at an understanding of recondite and ultra-sensual processes, occurring say in the ether or elsewhere. As an addition to evidence derived from such experiments as have been found possible, and as a supplement to the experience out of which, as out of a nucleus, every conception must grow, the mind is set to design and invent a self-coherent scheme which shall imitate as far as possible the results exhibited by nature. By then using this as a working hypothesis, and pressing it into extremes, it can be gradually amended until it shows no sign of discordance or failure anywhere, and even serves as a guide to new and previously unsuspected phenomena. When that stage is reached it is provisionally accepted and tentatively held as a step in the direction of the truth, though the mind is always kept ready to improve and modify and enlarge it, in accordance with the needs of more thorough investigation and fresh discovery. It was so for instance with Maxwell's electromagnetic theory of light; and there are a multitude of other instances.

In the transcendental or ultra-mundane or super-sensual region there is the further difficulty to be encountered, that we are not acquainted with anything like all the boundary conditions, so to speak; we only know our little bit of the boundary, and we may err egregiously in inferring or attempting to infer the remainder. We may even make a mistake as to the form of the function adapted to the case. Nevertheless, there is no better clue, and the human mind is impelled to do the best it can with the confessedly imperfect data which it finds at its disposal. The result therefore, in this region, is no system of definite and certain truth, as it is in the domain of Physics; but emerges either in suspense of judgment altogether, or else in a tentative scheme or working hypothesis, to be held undogmatically in an attitude of constant receptiveness of further light, and in full readiness for modification and improvement.

OLIVER LODGE.

EXISTENTIAL IMPORT.

May I ask the Boolean logicians who still maintain that their formula ($0A = 0$) is necessarily true, whatever the class A may be, to point out the error (if error they find) in the following reasoning?

According to their symbolic conventions, the statement ($XA = X$) asserts that "Every X is A," whatever X and A may represent. By their conventions also the symbol 0 represents *non-existence*. Let A represent *existent*. It follows that the statement ($0A = 0$) asserts that "Every *non-existence* is *existent*," an assertion which is self-contradictory. Hence, the statement ($0A = 0$) is not always true for all values (i.e., meanings) of A.