CORRESPONDENCE

TO THE EDITOR OF THE *Journal of Philosophical Studies.*

SIR,

In his article on "The Philosophical Background of Ethnological Theory" (pp. 182 *sqq.*) Professor Elliot Smith lays emphasis for the purpose of his argument upon "the spread of great religions, Christianity, Mohammedanism, Buddhism, from a single original centre." These words furnish a typical example of the difficulty which I, for one, experience, when, with the best will in the world, I endeavour to appreciate the standpoint which he has long been attempting to force upon us. We have only to consider the many religious sects of greater or less significance and their vicissitudes to perceive how frequently the divergencies and variations are due to temporary, local, or national conditions, and to realize that the spread of the religions in question is by no means the simple process that his argument suggests. If we observe, for example, the influence of Persia upon Islam, or the form which the Mahayana Buddhism assumed in China, it is evident that instead of a mere diffusion we have a fusion in which Persian and Chinese factors can obviously be recognized. Moreover, his argument ignores the factors which went to construct even the earliest stages of Christianity and Islam. Hence, although the three religions may be schematically traced back to a "single original centre," their rise and development are really of extreme complexity, and Professor Elliot Smith's words are hardly less misleading than those tendencies against which his article inveighs.

In the Semitic field in which I am interested we recognize both diffusion and independent development, even as in all societies men receive ideas from without and also independently develop what they would regard as their own—a fact which is, to use his words, of "daily and common occurrence." The influence of Egypt upon other lands is not more significant for us than their influence upon her; and I am bound to confess that the methods of Professor Smith and his allies do not seem to me to facilitate research, at all events in our field, and that their views, undoubtedly interesting if true, do not simplify our most important problems. I admit that I have long felt that the "evolutionary" method of treating beliefs and customs stands in need of reconsideration, and in the forthcoming new edition of Robertson Smith's *Religion of the Semites*, I am developing my own theory; but in spite of Professor Elliot Smith's criticism of modern "evolutionists" (p. 185), *some* evolutionary treatment proves indispensable, if not for his purpose, at all events for the special problems which confront some of us.

Further, I venture to think that Professor Smith should restate his case, I will not say more temperately, but more carefully. Let it be freely granted that the dogmas of "psychic unity" and the rest (p. 184) have been pursued to excess, but does he, or does he not, allow that there is *some* fundamental unity of a nature more psychological than physiological? And even if it be granted that Dr. Robertson's offending sentences (*ibid.*) deserve all his remarks, are we to suppose that, let us say, tribes living on the banks of rivers would not, on that account, however widely severed, have *something* in common? To deny this is surely contrary to common experience and common sense. Does Professor Smith wish to deny this? Or, if he is only protesting, and quite justifiably, against exaggerated arguments based upon what are indubitable similarities, would it not be a more helpful contribution to anthropology for him to proceed to discuss how far we may go?

Finally, I must confess that, although I have often been stimulated by the Diffusionist School—though more often bewildered by its attacks upon the men of straw whom it sets up—I find it difficult to believe that there is any real

advantage in such a *tour de force* as Professor Smith's detailed exposition "on sound diffusionist principles" of the origin and development of the hostility to the diffusionist case (p. 185). It would be equally easy and useful to demonstrate at no less length that the origin of the Diffusionist School is to be found in the book of Genesis with its story of the diffusion of the human race from "a single original centre." It would be possible to enlarge upon the modern "Diffusion-myth," or upon the strange resurrection of the old Greek tendency to find in Egypt the source and origin of all wisdom (cf. Hopfner's *Orient und Griechische Philosophie*). But life is too short and the problems of anthropology much too complicated for mere controversy; and I would venture to express the hope that Professor Elliot Smith and his allies will realize why some of us, at all events, are not so impressed by the "diffusionist case," as, in his opinion, we ought to be, and that the rather uncharitable explanations which he sees fit to offer of our obscurantism are wide of the mark.

Yours faithfully,

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TO THE EDITOR OF THE *Journal of Philosophical Studies*.

DEAR SIR,

Mr. Braithwaite's caustic comments on my book on *The Philosophical Presuppositions of Mathematical Logic* in the April 1927 number of this *Journal* have just come to my attention. I note, with what dismay and humiliation you may imagine, that the reviewer discovers on my part an "amazing ignorance of mathematics"; a "naïveté" that "would be disarming if it were not so offensive"; and (by implication) complete ignorance of "the main progress of mathematics during the last century!" After such a thorough intellectual chastisement it would probably be the better part of valour on my part to maintain a discreet silence. At all events I cannot hope successfully to vindicate my work—if at all—in the brief space here at my disposal. Instead, I prefer to appeal to editorial generosity for enough space to present one or two considerations, which may appear to some readers, even if not to the reviewer, to be of some significance in this regard.

Mr. Braithwaite asserts that "what mathematical logic sets out to show is how the whole of pure mathematics can be deduced from a few primitive ideas and axioms which are of a general logical nature. It tries to show that mathematics does not use any specifically mathematical conceptions or methods of proof, so that its line of demarcation from formal deductive logic is rather an arbitrary matter. In this it has been successful: the general correctness of the method would not now be disputed by anyone competent to judge."

Now such a round statement seems to the present writer to be, at the very least, highly questionable. In the first place, it is a point of some difficulty to determine just who is "competent to judge." Are leading creative mathematicians —those who occupy themselves, among other things, with the foundations of the science? Many of them would and do dispute all or part of the thesis affirmed above. Amongst leading logicians, also, not a few have raised some very pertinent questions with regard to the tenets of the mathematical logicians. Certainly the authors of *Principia Mathematica* (and Mr. Braithwaite) may be asked to give more attention than they have yet seen fit to accord to criticisms of their general conception of "formal deductive logic," and especially of their analysis of the process of deductive inference. Deduction, for the mathematical logician, is a mechanical process of subsumption, based, according to Mr. Russell, upon tautological assertions —only that and nothing more! I strongly suspect, by the way, that the embarrassment of certain thinkers (like Mr. Russell and Mr. Broad) concerning the problem of induction is due in no small part to mistaken ideas about deduction—to a confusion of the deductive aspect of scientific inference with mere formal subsumption, long ago thoroughly condemned by both Bacon and Descartes as a

barren and worthless procedure. At all events, it is the conviction of many who are presumably "competent to judge" that no one can render or has rendered an intelligible account of the nature and procedure of pure mathematics in terms of such a "linear" theory of inference. For example, Cassirer and others charge Messrs. Whitehead and Russell with the fallacy of reasoning in a circle; in particular they maintain that the pretended "deduction" of "cardinal numbers" from "logical" notions is a glaring example of this fallacy. Perhaps also I may refer Mr. Braithwaite and other students to such works as Fraenkel's *Einleitung in die Mengenlehre*, Hölder's *Die mathematische Methode*, Cassirer's *Substance and Function* (English translation), Hobson's *The Domain of Natural Science*, and Brunschvicg's *Les étapes de la philosophie mathématique*, for various divergent estimates of what constitutes "the main progress of mathematics during the last century," as well as for several penetrating criticisms both of the general point of view and of various special theses upheld by *Principia Mathematica*. And is it not of some significance that these interpretations and criticisms are inspired in the first instance, in many cases, by the writings of thinkers like Poincaré, Bôcher, Weyl and Hobson, who can lay claim to the title of mathematicians in virtue of definitely constructive work in the field of pure mathematics—something which can hardly be said for the chief exponents of mathematical logic, unless indeed we grant them full credit for what is certainly by no means as definitely established as Mr. Braithwaite would have us believe?

The reviewer's casual remarks on my book are in many respects misleading, and some are even grossly erroneous. For example, he charges me with the doctrine that mathematics is the science of quantities "(such as lengths)," whereas what I really urge is that before rejecting *in toto* the category of quantity as a totally inadequate determination of the subject-matter of pure mathematics, mathematical logicians would do well to inquire (as Mr. Braithwaite evidently has not) as to what fairly competent students of the logic of science (*e.g.* Leibniz, Hegel, Bosanquet, Bergson) have meant by this category. Certainly few besides Josiah Royce and Mr. Russell and some of their uncritical and perhaps over-enthusiastic young disciples have ever construed quantity in the narrow sense of being synonymous with measurable magnitudes.

So many reviewers nowadays permit themselves to express their uncritical *approbation* of a mediocre work in such disgracefully unmeasured terms, that it strikes one as a not altogether unhealthy novelty that Mr. Braithwaite should have chosen to express his hearty *dis*approbation of my work in a similar manner. The only drawback to such a procedure is, that thereby readers inevitably fail to get a just idea of the import of the work under review. To give expression to such an idea in the present instance, however, would require, as an adequate background, some knowledge of the "main progress," not only of "mathematics," but of logic and philosophy in general, for a considerably longer period than merely "the last century."

Faithfully yours,
HAROLD R. SMART.

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