

be both scientific and popular, the former comprising (a) technical meetings in Washington and such other centers as may be desired, and (b) a technical publication distributed primarily among the fellows to serve as a record of original geographic work, and the latter comprising (a) popular lectures not only in Washington, but in other cities, and (b) an illustrated magazine of largely popular character, but designed to serve as a convenient medium for geographic publication. Should the plan for the technical memoirs fail of approval by the Society at large, the publication committee propose including the technical matter in the monthly magazine.

It is, perhaps, unfortunate that later developments in the National Geographic Society have not been more promptly and widely announced; yet it is by no means to be regretted that the delay has led to expressions from other quarters which seem to be precisely in line with the plans and policies of this organization.

W J MCGEE,

Vice-President National Geographic Society.

BALDWIN'S SOCIAL AND ETHICAL INTERPRETATIONS.

TO THE EDITOR OF SCIENCE: I have received, evidently in common with many other sociological *confrères*, a printed copy of a letter addressed by Professor Albion W. Small, of the University of Chicago, to both Professors Baldwin and Giddings. This publication gives renewed impetus to the unfortunate controversy raised by Professor Baldwin in an article published in the January number of the *Psychological Review*. May I be allowed to express, on the subject, the opinion of an outsider, which is also the opinion of the majority of workers who think that the advancement of social science is in no way promoted by such personal quarrels?

The facts of the case are known. In answer to a fair and, let me say, pertinent and conclusive criticism of his work on 'Social and Ethical Interpretations' by Professor Giddings, Professor Baldwin found no better answer than to cast upon his critic the reproach of 'poaching' upon his preserves. Professor Baldwin's answer was conceived in such

a way as to convey the impression that the word 'poaching' was simply a quotation from a review of Professor Giddings' 'Elements of Sociology,' previously published by Dr. Small. But the latter, besides showing that the word in question was contained only in a *private letter*, openly and frankly disclaims all responsibility for the construction placed upon it by Professor Baldwin, and clearly states that by using it he did not mean "anything more than 'out of bounds,' *i. e.*, plowing in a field that belongs more properly to another" which is *eine ganz andere Sache*.

In the face of Professor Small's statement, Professor Baldwin is, of course, left to take the whole responsibility for the offensive construction which he has placed upon the word of his colleague. That is what he has done in the 'Correction' published in the March number of the *Psychological Review*. It is to be remarked, however, that the terms of this 'Correction' are strikingly ambiguous. The reader might be led to believe that Professor Small considers Baldwin's mistake in the interpretation of his word, 'immaterial.' As a matter of fact, as shown by Professor Small's letter, he refers very distinctly the 'immateriality' of the mistake, not to the use of the word, but to its source, which is, again, *eine ganz andere Sache*.

What remains, after this, is a clear implication of plagiarism against Professor Giddings.

Let us say, once for all, that Professor Baldwin can lay no claim whatever to the discovery that has changed our view of social life by lending a definite support of facts to the psychic conception of social relations. The discovery is that of 'imitation' by Tarde. In spite of Professor Baldwin's futile attempt to minimize Tarde's merit by associating the name of the latter with that of Bagehot, Tarde is and will always be, for every unprejudiced student, the discoverer of imitation as a great psychological force underlying both social and mental development. Bagehot only gave us vague hints and tentative guesses. Tarde gave us the clear notion of the elementary social fact, the unit of social investigation. Professor Baldwin has undoubtedly the merit of

having diligently and industriously followed the path shown by the French master, of having seized his original intuition and carried it into his own psychological field as a vivifying ferment of research. An important contribution of Professor Baldwin to knowledge is the genetic study of imitation as the typical form of organic and mental accommodation to environment, as the method through which the mental development of the individual is accomplished. But, beyond this distinctly psychological work, mainly embodied in his volume on 'Mental Development in the Child and the Race,' Professor Baldwin has never brought to light any fact in the line of social evolution that had not been previously intimated or actually mentioned by Tarde. His 'Social and Ethical Interpretations' is undoubtedly an extremely interesting work. But, apart from the 'Dialectic of Personal Growth' which is practically a chapter belonging to the earlier volume, the remainder of the book is substantially a *transcription of Tarde in another key*. This can be conclusively shown by actual comparison of certain chapters and passages of Professor Baldwin's book with Tarde's 'Les Lois de l'Imitation' and, especially, 'La Logique Sociale.' Even the distinction between the *matter* or content of social organization and its *functional method* or process, so much emphasized by Professor Baldwin, is his own only in so far as the scholastic turn of the formula is concerned. Apart from the Aristotelian terminology adopted by Baldwin, the distinction had been clearly made by Tarde long ago. We must say, furthermore, that, while Professor Baldwin limits the social matter to *thoughts* or intellectual states—a conception justly criticized by Professor Giddings as insufficient and incomplete, Tarde showed the contents of social organization to be not only thoughts, but feelings—'*croyances et désirs*'—not thought merely nor feeling merely, but a combination of the two, a view which, as Professor Giddings remarks, is 'most consistent both with evolutionary hypotheses and with psychological conclusions' ('Democracy and Empire,' p. 39). This, of course, is not intended to underrate in any way the value of Professor

Baldwin's work. The advancement of science is not only promoted by the discovery of new facts, but also by the verification and propagation of other men's discoveries. Professor Baldwin belongs to the latter class of scientists. His book on 'Social Interpretations,' while bringing forward no new facts, has just the great merit of having helped to propagate the substance of Tarde's doctrines. This work of vulgarization has been so thorough and painstaking as to justify the statement that Professor Baldwin's book is one of the most important contributions of American thought to the advancement of social science.

Since, however, Professor Baldwin has no claim to any discovery in the field of sociology, it becomes interesting to see how he can prove that Professor Giddings—a sociologist—has 'poached' upon his preserves.

The evidence brought forward by Professor Baldwin in support of his charge of dishonesty against Professor Giddings consists:

1. Of a reference to Professor Small's review of Giddings' 'Elements.' This is ruled out because Professor Small himself has distinctly repudiated the interpretation placed upon his word 'poaching,' and moreover because in the passage of his review quoted by Baldwin, Professor Small explicitly acknowledges that Baldwin's 'ejective stage' is one thing and Giddings' 'ejective interpretation' is another thing. In the face of Professor Small's statement, the whole question becomes one of due credit rendered for the term and the concept 'eject.' These, as all well-informed students of psychology know, originated, not with Professor Baldwin, but with the lamented William Kingdon Clifford, and to Clifford, as shown by Professor Giddings' essay on 'The Psychology of Society,' credit was given in the most explicit manner.

2. Of a specific fact mentioned in the following passage of his article (p. 69, footnote):

"To cite a case, besides those pointed out by Professor Small * * * Appendix D in my book may be referred to as putting in my way certain things that Professor Giddings puts in his own way in the SCIENCE article. Even certain of my terms (as Professor Caldwell

also notices), such as 'socius,' 'organic' and 'reflective' sympathy, are used with no intimation of their origin.

'My terms,' Professor Baldwin calls 'socius,' 'organic' and 'reflective sympathy.' We do not suppose that he claims to have coined the word 'socius,' while the specific concept to which Professor Giddings has attached it, if we understand his language, he repudiates. The terms 'organic' and 'reflective' sympathy might conceivably be claimed as inventions in technical nomenclature. But on page 220 of Professor Baldwin's 'Social and Ethical Interpretations' we find the following quit claim:

"Psychologists are generally agreed in finding a distinction necessary between 'organic' and 'reflective' sympathy, similar to the distinction which has been made in considering modesty."

But terms are, of course, minor matters. Let us turn at once to the pure essence of Appendix D. Here it is:

"Whenever the situation depicted by Adam Smith's 'Illustration' was realized—cases involving the sight of both an aggressor and an addressee with their respective claims upon the onlooker B for sympathy—the creature whose shape, movements, postures, cries, etc., *were like those of B* would be the one which would supply B's copy-system and the one with which his cooperations would arise; that is *the animal of the same kind*. So subjective sympathy would at once be a 'consciousness of kind' and the objective reactions would be indicative of 'kind.'"

The quality of Professor Giddings' dishonesty is now revealed. In a review of Professor Baldwin's book Professor Giddings has put in 'his way' certain things that Professor Baldwin had put in 'his way' in Appendix D, and Professor Baldwin's way—in Appendix D—consists in putting quotation marks about Giddings' way.

In conclusion I would repeat with Professor Small 'there is glory enough to go round.' This means that it is not necessary to vilify other scientists' efforts and work in order to raise the value of one's own contributions. If Professor Baldwin would only remember what

he owes to M. Tarde he would certainly hesitate to accuse others of plagiarism.

NEW YORK CITY.

GUSTAVO TOSTI.

CARNEGIE INSTITUTION.

THE Advisory Committee in Astronomy will be glad to receive information or suggestions, regarding investigations in astronomy which should be aided by the Carnegie Institution. It is advisable that applications should be made as soon as possible. They may be addressed to the Chairman of the Committee, Cambridge, Mass.

EDWARD C. PICKERING, *Chairman*.

LEWIS BOSS.

GEORGE E. HALE, *Secretary*.

S. P. LANGLEY.

SIMON NEWCOMB.

CAMBRIDGE, March 29, 1902.

SHORTER ARTICLES.

DISCHARGE FROM HOT PLATINUM WIRES.

DURING the past year I have been investigating the discharge from a hot platinum wire, and the results of this work may, perhaps, be of interest to others. An article has been recently published by Rutherford* on the same subject, in which he determined the velocity of the positive ions and showed that at higher temperatures their average velocity was less than at lower. My own work was intended to compare the velocities of the positive and negative ions and to explain as far as possible the decrease in the velocity at higher temperatures.

By a method similar to one which I had previously used in studying the discharge from a flame† it was shown that the average velocity of the positive ions is greater than that of the negative. By a method similar to one used by Zeleny‡ it was shown that the most rapidly moving positive ions have a greater velocity than the most rapidly moving negative ones. By a modification of this method it was shown that the most slowly moving positive ions given off at lower temperature move comparatively rapidly, but that at higher temperatures some are sent off which

* SCIENCE, 14, 590, and *Phys. Rev.*, 13, 321.

† *Phys. Rev.*, 12, 65.

‡ *Phil. Trans. Roy. Soc. Lond.*, 195, 193.