

THE PSYCHOLOGY OF CHARLES DARWIN

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Charles Darwin was a punctilious and fastidious man. He was supersensitive about doing the urbane thing. This afternoon if he were present with us he would probably feel that we had committed him to an unfortunate social blunder by introducing him, not in the biology section, but in that of psychologists. Yet it was impossible for him, as it is for any of us, to tell what three score years and ten will do with our names. And I still insist on bringing Charles Darwin, Naturalist, with me to this section, for I believe that he it was who, to a great extent, caused psychology to be what it is today—a branch of science.

It is true that Aristotle, with whom psychology may be said to have begun, did not distinguish it from biology, both sciences being considered a part of physics or the study of nature. He even antedated Darwin two thousand years in conceiving a "systematic distinction of levels or states of mental processes, so ordered that each stage presupposes the existence of the lower but not conversely"¹—the first suggestion of genetic method in psychology. Yet the *περί ψυχῆς* of Aristotle contributed more than the work of any single man to construct the *philosophy* of the soul. Psychology for him was the science of the *ψυχή*, the principle of life, and it is from this source that the very term *psychology* derives. He would probably be quite confused, though no doubt sincerely interested, were he to hear discussed today under the heading of psychology, such topics as *The Learning Performance of White Rats in Temporal Maze Patterns* and *The 'Recognition Spans' of 'Good' and 'Poor' Readers*.

The Schoolmen of the Middle Ages, first after Aristotle to make any effort to give a systematic treatment of psychology, were philosophers. With the introduction of Christianity certain psychological problems such as the immortality and progress of the human soul, free will, and moral habits raised the *περί ψυχῆς* to one of the most important branches of philosophy.

The outstanding mediaeval problem of universals with its attendant schools, nominalism and realism, also directed much consideration to the origin of ideas. The treatment was yet, however, mostly epistemological, deductive, and metaphysical, and not at all scientific in the sense of empirical or inductive. In the works of Albertus Magnus and Thomas Aquinas, who, more than any other thinkers of the period, popularized Aristotle's psychology, biology, general metaphysics, and theology are constantly interwoven with psychology, as, indeed, they were for many centuries after.

Descartes in the seventeenth century, who with Hobbes and Spinoza, represents the earliest period in modern psychology, was indeed a scientist, but he was also a philosopher.

John Locke's *Essay on Human Understanding* did very much to initiate the method of analytic introspection, one of the outstanding features of modern psychological method. Yet his main interest was not

¹Stout, G. F., 1928. Dictionary of philosophy and psychology. New York.

psychological; his contributions to this science were incidental, almost accidental.

Berkeley, Hartley, and Hume, and later the two Mills, pushed on the latent possibilities in Locke's ideas, but they were all deductive in their methods rather than empirical.

Though an eighteenth century German contributed the term *psychology*, and a compatriot of his, Johann Herbart, made contributions to the psychology of interest and inhibition, not even they can be considered responsible for the scientific tendency in psychology today.

In 1859 Darwin published his epoch-making *Origin of Species*, a ponderous and powerful example of inductive, empiric method. Therein he not only canvassed vast territories of plant and animal life, but also touched frequently upon matters intimately connected with human psychology, as, for example, the matter of instincts. Whether those be right who feel with Huxley that Darwin "gave a smashing blow to orthodoxy" or they be more correct who say he gave it its greatest scientific support, certain it is that this master in one work popularized the empirical method. He pushed into the background of the commonplace, thereby, the familiar and not at all startling approach known as the metaphysical.

Even more in the *Descent of Man* (1871), he contributed to the empirical and inductive emphasis in psychology by "raising the whole question of the development of mental powers in men and in animals, with further extension to the more startling probability that moral qualities might have a natural history."²

But it was in his *Expression of Emotions* published in 1890 that he gave his fullest expression to his psychological ideas in three laws, which were supposed to account for the origin of all human expressions.

Of what importance in the field of psychology, one might ask, have these contributions of Charles Darwin been? It seems certain that, in his own mind, as we said at the beginning, he considered his life work biology, and psychology only a hobby. In his biography we may read: "He wrote to Dr. Asa Gray, April 15, 1867: 'I have been lately getting up and looking over my old notes on Expression, and fear that I shall not make so much of my hobby-horse as I thought I could; nevertheless, it seems to me a curious subject which has been strangely neglected!' . . ."

"Again he says in a letter to Wallace in 1867: 'I have been very glad to see your impression from memory on the expression of Malays. I fully agree with you that the subject is in no way an important one; it is simply a "Hobby-horse" with me, about twenty-seven years old; and after thinking that I would write an essay on man, it flashed on me that I could work in some *supplemental remarks on expression*. After the horrid, tedious, dull work of my present huge, and I fear unreadable, book . . . I thought I would amuse myself with my hobby-horse. The subject is, I think, more curious and more amenable to scientific treatment than you seem willing to allow.'"

Even in Darwin's own life-time, this work was considered unfortunate. His friends felt that he would have done better to have ridden his

²Encyclopedia Britannica (14th. ed.) 18:706-715; 719. 1929.

³Darwin, Francis, 1896. Life and letters of Charles Darwin. 2:313-314.

⁴Ibid., pp. 277-278, Appleton. New York.

hobby only in private and not to have exhibited his feats thereon in public. His own ever-sensitive nature was quick to feel, too, that he was not at his best nor a success in the work, as is shown in an abstract from his *Life and Letters*:

"I have finished my little book on *Expression*, and when it is published in November I will, of course, send you a copy, in case you would like to read it for amusement. I have resumed some old botanical work, and perhaps I shall never again attempt to discuss theoretical views.

"I am growing old and weak, and no man can tell when his intellectual powers begin to fail."⁵

The criticisms of the work were, as a whole, unfavorable, and even today few think of Charles Darwin's actual offerings in the field of psychology as of any great value.

Yet it is true, we believe, that Charles Darwin, to a great extent, has made psychology what many consider it today, a biological science. Most of its present-day trends may be traced to his door.

Primarily of course he is responsible—and not Aristotle who first really used it—for the effective operation of the genetic method so commonly in use today. To him, too, we attribute the fact that for perhaps most psychologists now the biological is the approach oftenest employed, that animal and human psychology are treated together, that child psychology is classified as a genetic science, and that a school has arisen which accounts for the more difficult problems of the nature of intelligence solely in terms of biological response under varying stimuli.

That more exact, prolonged, and careful use of the empirical method in the study of mind which is so prominent a factor of twentieth century psychological study can, without doubt, be attributed to him. It is probably his greatest gift to the science. On the other hand, we must lay upon him, too, the regrets of the minority that to so great an extent the deductive or philosophical method has been utterly abandoned by psychologists, for too little abstract reasoning in any field would seem to be as deleterious as too much.

Perhaps it would be best to conclude without further comment, but to an old hand in the teaching field it is habitual to provoke discussion, and habits are hard to break. Hence we cannot resist asking whether or not psychology is, on the whole, better off or not for Darwin's having influenced it.

Probably the philosopher H. A. Overstreet has well expressed the opinion of the majority in the following words:

"The science of psychology, as we have indicated, has only just been born. There is every reason to believe that it will yet grow up. As it learns caution and precision, it may even, some day, become a highly respected member of the great council of other sciences."⁶

On the other hand Grace Adams has an article in the *Atlantic Monthly* for 1934 which is both very entertaining and quite expressive of the opposite, but probably minority view. After satirizing the over-use of the I. Q., psycho-analysis, and behaviorism, she concludes:

⁵Ibid., p. 349.

⁶Overstreet, H. A., 1927. A quarter-century of psychology. *Century*. 113:526.

"Even Joseph Jastrow, who during his forty years' work with the everchanging subject has tempered his enthusiasm with sagacity, has now admitted that 'psychology may not be a science.'"

Which view is better in the light of eternal truth we do not venture to say. In a spirit that may be considered either cowardly or broad-minded or modern, we had perhaps best conclude in the words of Professor Titchener: "Controversies on such questions are natural in a young science, and more especially in a science whose subject-matter touches general human interests so closely. Their resolution must be left to time."

⁷Adams, Grace, 1934. The rise and fall of psychology. *Atlantic Monthly*. 158:82.

⁸Baldwin, James Mark (Edit.), 1928. *Dictionary of philosophy and psychology*, 2:382-391. Macmillan. New York.