

REVIEWS AND NOTICES.

Darwinism: an Exposition of the Theory of Natural Selection.

By ALFRED RUSSELL WALLACE. (Macmillan. 1889.)

Darwinism is just now in something like the position of the French Republic. It commands a great majority; but many of the most thorough-going adherents of Evolution have their pet schemes for revision of its doctrine, while there is a body of reactionary malcontents ever ready to seize upon and magnify divergences of opinion as evidences of the breakdown of "the mechanical philosophy."

It is thirty years since the theory of natural selection was put forward by Darwin and Wallace to explain the origin of species. A vast mass of literature, illustrative or controversial, has accumulated since, and a compact re-statement of the case was much needed. This has now been furnished in a most admirable form by one of the twin authors. With characteristic modesty and magnanimity, Mr. Wallace accepts the verdict of the world, which has stamped the theory with the name of Darwin, and will not even mention his own contributions to it. But in literary skill and grace of style he is the superior, and it may be doubted whether Darwin himself could have written so good a handbook of Darwinism. We may point especially to the full treatment of colour, and to the remarks on the geographical distribution of organism—a subject which Mr. Wallace has made his own.

One chapter deals with objections to the theory of natural selection made by writers like Mr. Mivart; another deals with the supplements to it, which have been proposed by Mr. Herbert Spencer and others. More Darwinian than Darwin, Mr. Wallace will not concede to these supplemental theories anything beyond a very subordinate action. The modifications of structure, upon which Mr. Spencer lays stress in his "Factors of Organic Evolution," as inherited effects of use or disuse, may equally be explained, he thinks, by natural selection; and he adopts Professor Weismann's view that there is no sufficient evidence of the hereditary transmission of acquired characters. This view, if accepted in its full breadth, is subversive, not merely of Mr. Spencer's factor, but of the most widespread popular beliefs; but Dr. Weismann himself is inclined to make exception as regards climatic influences, and Mr. Wallace adds certain diseases, such as syphilis and tuberculosis. It is hard to say how much may pass through the door thus opened.

On two points Mr. Wallace himself diverges from Darwin: the evolution of man, or rather, of man's mind, and sexual selection. As regards the former, he fully accepts the kinship of man to the anthropoid apes, and the development of his bodily structure through natural selection. But the mental and moral faculties cannot, he is persuaded, be so explained; "some other influence, law, or agency is required to account for them." He finds this explanation in the hypothesis of a spiritual nature superadded to the animal nature of man. Just as there has been a change from inorganic to organic, and from mere vitality to consciousness, in the course of evolution, so there has been a third change, "none the less real because absolutely imperceptible at its point of origin," which points us to an unseen universe—a world of spirit. We cannot help feeling here that we are on the borders of *Aberglaube*. Inadequate as natural selection may be to explain the evolution of mind and of society, Mr. Wallace's hypothesis carries the explanation no further. It may be poetry, but it is not science. The disposition to emphasize the distinction between man and brute seems to influence Mr. Wallace also in dealing with sexual selection. It is true that he discusses this question on strictly scientific ground, and shows reason for thinking that Darwin overrated the operation of one form of it—the female preference for brilliant males. But he seems especially unwilling to credit animals with "those æsthetic emotions which are excited in us by the beauty of form, colour, or pattern." So far as hen-birds exercise choice, he holds that it is not on account of these things in themselves,

but on account of the vigour and mettleomeness of which they are the accompaniment and indication. Supposing this to be true, it is no ground of distinction between ourselves and the animals, for fitness enters largely into our appreciations of beauty.

The fact is, that the lofty title is apt to disguise the lowly origin of our "æsthetic emotions." First, as a groundwork there are the purely sensuous likes or dislikes, attractions or repulsions, which accompany the perceptions of differences in colour, sound, &c. Is there any reason for supposing that animals, which are evidently so keenly sensitive to differences of taste and smell, and—a dog's howls will show—sound also, find neither pleasure nor pain in colours? If butterflies are found to prefer flowers of a particular tint, why should we infer that it must be for their nectar only? If we admit, as Mr. Wallace does, that the song of male birds gives pleasure, why assume that it is to the singer only, not to the serenaded? Out of these primitive likes and dislikes, perceptions and associations of fitness weave a network of increasing intricacy as the evolution of mind goes on; but this, as we have seen, and as the chapters on coloration show, is not altogether beyond the reach of birds. Lastly, there is a third element to be recognised, a twofold one: the counter-impulses of the love of sameness and the love of change. To one man Gothic architecture is confused, to another classic architecture is monotonous, according to the ascendancy of one or other of these impulses. We like variety, but also order; but the root idea of order is fulfilment of our expectations, accommodation to formula. Our minds shrink alike from boredom and bewilderment. Change, but change within narrow limits, is the law of fashion. In the rhythm of poetry, and the recurrence of an air in music, we see that sameness as well as variety has its charm. Like two opposed tendons, they draw us alternately this way and that; one strong in youth and the other in old age. But these are even more primitive than the other constituents of our æsthetic emotions. They go back, at all events, to the very beginnings of life. For what are they, after all, but the two inexplicable tendencies which, under the names of variation and heredity, furnish all the material for natural selection?