

(L. M. M.) *Harvard*

On the Origin of Species by means of Natural Selection or the Preservation of Favourable Races in the Struggle for Life. By Charles Darwin, M.A., F.R.S., Author of "Journal of Researches during a Voyage round the World." John Murray, Albemarle street, 1859.

This is a remarkable book, sure to make a mighty stir among philosophers—perhaps even among the theologians. In the very reputation of such a work from such an authority as Mr Darwin would seem to have done us already, for, if we are rightly informed, the notice which he has taken of us on the first day of publication. Thus he has proved his "Voyage round the World," need not be told that the author is a man of curious and careful research, familiar with every branch of natural knowledge and gifted with the faculty of expressing himself, even in questions often obscure, in language always perspicuous and often eloquent.

Mr Darwin's work, although extending to 490 pages, is but an abstract of a greater which he is preparing, and which we as three years hence will be completed. The doctrine he adopts to account for the present condition of the living world is, in fact, a revival of the old one of the transmutation of species; but he illustrates it with an amount of knowledge and impressive appliances never before brought in its support. We are convinced by no means convinced by his reasoning, nor do we think that it outweighs the existing force of philosophy, founded on the evidence of geological dissections, that the organic world, as we see it, is the result of a succession of creations and destructions. There will, however, we have no doubt, be many converts to Mr Darwin's opinions, which for the perfect integrity with which they are stated are well entitled to the most respectful consideration.

The theory of Mr Darwin may be given in his own words. There is a progress, and has been in all time, "a struggle for existence amongst all organic beings throughout the world, which inevitably follows from their high geometrical powers of increase. This is the doctrine of Malthus applied to the whole animal and vegetable kingdoms. As many more individuals of each species are born than can possibly survive, and as, consequently, there is a frequently recurring struggle for existence, it follows that any being, if it vary, however slightly, in any manner profitable to itself, under the complex and sometimes varying conditions of life, will have a better chance of surviving, and thus be naturally selected. From the strong principle of inheritance, any selected variety will tend to propagate its new and modified form." The theory thus adopted by our author leads him, at length to the startling conclusion, that the numerous multitude of organized beings which now people and adorn our earth may have originally sprung from no more than four or five vegetable, and as many animal species; nay, indeed, that of these may have originated in a single protoplasm. "I cannot doubt," says he, "that the theory of descent with modification concerns all the members of the same class. I believe that animals have descended from at most only four or five progenitors, and plants from an equal or lesser number. A single would lead me a step further, namely, to the belief that all animals and plants have descended from some one prototype."

The volume of a newspaper are not a fit medium for the discussion of a problem so difficult and obscure as the origin of species, even if we were ourselves prepared for it; but a few of the most obvious objections to Mr Darwin's theory may be briefly stated. This relation in plants and animals in the wild state is very rare, and when it does occur it is, most commonly, a defect and not an improvement in the race, as in the striking case of the *Alouatta*, whose weaker than the individuals of the species in which it is found, and not often occasioned by inheritance. The idea, proposed by the agency of man, and, of course, he need only to illustrations of the theory, as in that Mr Darwin has not death for the plain reason, on any theory, that many plants and animals which long before man should

Hybridism, or the crossing of the offspring of parents of distinct species of the same natural family, seems to us to be a clear proclamation of nature against the conclusion which the analogy necessary to Mr Darwin's theory implies. Even when two species are so closely allied that readily in their offspring they are allowed their color, there exists a natural repugnance to intermarriage. Thus, the domestic and feral man who border on each other do not interbreed; the *Yaponee* and *Mauitauian* standing in the same relation have been distinct for some 3,000 years; and it was but a few nights ago that Captain McClintock told us that the Red Indians of America not only did not interbreed with their neighboring neighbors the *Chippewas*, but that no example was known of their being able even to dwell and sleep among them.

A comparison of extinct with existing species of the same natural families seems to us to effect an unanswerable argument against the theory of "natural selection." Thus, the extinct mammoth and elephants were of about equal in size and strength with the living species, and the latter could not by any superiority have displaced and superseded them. Still stronger is the case with the class of *Dinosaurs* or *Ictiosaurs*, since some of the extinct species were such monsters that a *Nitonic* or *Theropneic* dinosaur would have made but a poor breakfast for one of them.

Mr Darwin's theory, even if it were established, would not account for the origin of species, for it would not tell us how his some nine primordial species, or his single progenitor of these also, originated. The theory supplies an unlimited progress towards improvement. By it we may hope that the man to which we ourselves belong may in the course of some millions of years become angels or demigods. This is, no doubt, satisfactory, and yet it is somewhat marred by the startling reflection that proof may have been once an ape, a bat, or a more modest—say, that some *low* *Newton* may have had the very same progenitors as a *low* *Newton* could have had. Millions of years hence (if the improved man then living should think it worth while to preserve a record of our present humdrum doings) the best of us may be looked upon as no better than *stupid* eyes, which in the character in which the poor specimen "superior beings" to have obtained *Newton* when he appeared among them. The theory, indeed, is a singularly unorthodox, not only more impious but far more gossamer than that of *Hobbes* and *Hobbes*, for it is in all hopeful progress without any consciousness of *instability*, *retrogression*, or *fall* worse, of *annihilation*.

Much of Mr Darwin's volume is what ordinary readers would call "ough reading"; that is, writing which to comprehend requires concentrated attention and some preparation for the task. All, however, is by no means of this description, and many parts of the work abound in information, easy to comprehend and both instructive and entertaining. Mr Darwin's account of the *shrew-like* ants, for there are several species of them, is an example.

It will be observed that, as with *bees* *shrew-like*, the shrew is black, and the *bees*, if not white, at least red or silver.

The clearest concluding paragraph of the work is another among the many which are *ought* to be read.

We cannot help saying that that *pleasure* must be *humble*, indeed, that *pleasure* is a theory the tendency of which is to show that all organic beings, man included, are in a perpetual progress of *annihilation*, and that is expounded in the *revelation* language which we have quoted. It runs, indeed, as if it were parallel with the moral advancement of *some* *humans*, which begins with the *correct* *humans*, and is its progress towards maturity has produced a *Harvard* and a *Harvard*.