

Development Hypothesis merely show that the origination of species by the process of modification is conceivable, they would be in a better position than their opponents. But they can do much more than this. They can show that the process of modification has effected, and is effecting, great changes in all organisms, subject to modifying influences.....They can show that any existing species—animal or vegetable—when placed under conditions different from its previous ones, *immediately begins to undergo certain changes of structure fitting it for the new conditions.* They can show that in successive generations these changes continue, until ultimately the new conditions become the natural ones. They can show that in cultivated plants, in domesticated animals, and in the several races of men, these changes have uniformly taken place. They can show that the degrees of difference, so produced, are often, as in dogs, greater than those on which distinctions of species are in other cases founded. They can show that it is a matter of dispute whether some of those modified forms *are* varieties or modified species. They can show too that the changes daily taking place in ourselves—the facility that attends long practice, and the loss of aptitude that begins when practice ceases—the development of every faculty, bodily, moral, or intellectual, according to the use made of it, are all explicable on this same principle. And thus they can show that throughout all organic nature there *is* at work a modifying influence of the kind they assign as the cause of these specific differences—an influence which, though slow in its action, does, in time, if the circumstances demand it, produce marked changes; an influence which, to all appearance, would produce in the millions of years, and under the great varieties of condition which geological records imply, any amount of change.

Now, by most readers of the present day, this passage would undoubtedly be at once set down as "Darwinian." But when was it written? "Would you be surprised to learn" that it was published by Herbert Spencer in the *Leader* newspaper no less than *seven years* before the appearance of *The Origin of Species*? The essay which contains it was first

printed in 1852; *The Origin of Species* was published in 1859. As I have already remarked in my *Charles Darwin*:

This admirable passage.....contains explicitly almost every idea that ordinary people, not specially biological in their interests, now associate with the name of Darwin. That is to say, it contains, in a very philosophical and abstract form, the theory of Descent with Modification, *without* the distinctive Darwinian adjunct of Natural Selection, or Survival of the Fittest.

To put it briefly, most people at the present day, now that evolutionism has practically triumphed, now that the evolutionary method is being applied to almost every form of scientific subject-matter, go doubly wrong as to the origin of that method. In the first place, they attribute mainly or exclusively to Darwin ideas which were current long before Darwin wrote; in the second place, they also attribute to Darwin ideas which were promulgated, in some cases before and in other cases after Darwin, by independent thinkers who accepted his theories as part only of their own systems. Mr. Spencer has been by far the greatest sufferer from this curious human habit of finding an ostensible figure-head for every great movement, and then attaching everything in the movement to that figure-head alone—Luther for the Protestant Reformation, Rousseau or Robespierre for the French Revolution, Pusey for the Anglo-Catholic Revival, and so forth. I am glad that Mr. Clodd has undertaken definitely to combat this doubly erroneous view, and that his book has allowed me the opportunity of adding my mite to this question of ascription.

At the same time, I should like to premise that I write this article in a spirit of the profoundest loyalty to Darwin's memory and opinions. No man could have a deeper respect than I have for the character and the life-work of that great man of science. But