

THE RIDDLE OF THE UNIVERSE

that all the countless members of the plant and animal kingdoms have arisen by slow transformation from simple, common ancestral types, and that it is the gradual modification of forms by *adaptation*, in reciprocal action with *heredity*, which has brought about this secular metamorphosis.

I have fully appreciated the merit of Lamarck in the fifth chapter, and of Darwin in the sixth and seventh chapters, of the *Natural History of Creation*. Darwin, fifty years afterwards, not only gave a solid foundation to all the essential parts of the theory of descent, but he filled up the *lacunae* of Lamarck's work by his theory of selection. Darwin reaped abundantly the success that Lamarck had never seen, with all his merit. His epoch-making work on *The Origin of Species by Natural Selection* has transformed modern biology from its very foundations, in the course of the last forty years, and has raised it to a stage of development that yields to no other science in existence. Darwin is *the Copernicus of the organic world*, as I said in 1868, and E. du Bois-Reymond repeated fifteen years afterwards.*

IV.—MONISTIC ANTHROPOGENY

The fourth and last phase of the world's history must be for us men that latest period of time which has witnessed the development of our own race. Lamarck (1809) had already recognized that this evolution is only rationally conceivable as the outcome of a natural process, by "descent from the apes," our next of kin among the mammals. Huxley then proved, in his famous essay on *The Place of Man in Nature*, that this

* Cf. *Monism*, by Ernst Haeckel.