works on astronomy as an established theory, whereas Laplace himself had put it forward with great reserve, and only as a likely suggestion.[1] There is, however, no doubt that it powerfully influenced the minds of many students of nature in the direction of a genetic view of phenomena.

The attempts referred to so far can be described as belonging to the Romance of Science. I now come to the more solid contributions—to a real genetic theory of the things of nature. These are not much older than our century. They belong to two entirely independent lines of research which were followed up in England and on the Continent respectively—the former in palæontology, the latter in embryology. Although they were carried on quite independently of each other, they had this in common, that they both resorted to a study of life—as preserved in geological strata or as now existing around us—for a guide in comprehending the genesis of Things on a larger scale.

It may be well to remark here that the contemplation of the phenomena, the forms and the processes exhibited in the living portion of creation, has not always, and even not generally, in the course of history led to those theories which our age is elaborating, and which will in future times possibly be looked upon as one of its char-

[1] Laplace himself says: "Je présente cette origine du système planétaire avec la défiance que doit inspirer tout ce qui n'est point un résultat de l'observation et du calcul." The elaborate exposition of the architecture and system of the universe contained in A. von Humboldt's 'Kosmos,' which was professedly inspired by Laplace (see 'Kosmos,' vol. vi. p. 8), gives us little, if anything, about the history of the universe, professing to be only a "Weltgemälde" and not a "Welterklärung." The time for genetic theories had not yet come, and both Kant's and Laplace's cosmogonies are only casually referred to.