

apes, and further, over surrounding organisms in general. In order to maintain the supremacy over them, they formed themselves into companies, and there arose, as in the case of all animals living in company, the desire of communicating to one another their desires and thoughts. Thus arose the necessity of language, which, consisting at first of rough and disjointed sounds, soon became more connected, developed, and articulate. The development of articulate speech now in turn became the strongest lever for a further progressive development of the organism, and, above all, of the brain, and so ape-like men became gradually and slowly transformed into real men. In this way the actual descent of the lowest and rudest primitive men from the most highly developed apes was distinctly maintained by Lamarck, and supported by a series of the most important proofs.

The honour of being the chief French nature-philosopher is not usually assigned to Lamarck, but to Etienne Geoffroy St. Hilaire (the elder), born in 1771, the same in whom Goethe was especially interested, and with whom we have already become acquainted as Cuvier's most prominent opponent. He developed his ideas about the transformation of organic species as far back as the end of the last century, but published them only in the year 1828, and then in the following years, especially in 1830, defended them bravely against Cuvier. Geoffroy St. Hilaire in all essentials adopted Lamarck's Theory of Descent, yet he believed that the transformation of animal and vegetable species was less effected by the action of the organism itself (by habit, practice, use or disuse of organs) than by the "monde ambiant," that is, by the continual change of the outer world, especially of the atmosphere. He conceives the