

Bremen (born 1776, died 1837), was zealously engaged at the same work. As Wilhelm Focke has recently shown, Treviranus, even in the earliest of his greater works, "The Biology or Philosophy of Animate Nature," which appeared at the beginning of the present century, had already developed monistic views of the unity of nature, and of the genealogical connection of the species of organisms, which entirely correspond with our present view of the matter. In the first three volumes of his Biology, which appeared successively in 1802, 1803, and 1805 (therefore several years before Oken's and Lamarck's principal works), we find numerous passages which are of interest in this respect. I shall here quote only a few of the most important.

In speaking of the principal question of our theory, the question of the origin of organic species, Treviranus makes the following remarks: "Every form of life can be produced by physical forces in one of two ways: either by coming into being out of formless matter, or by the modification of an already existing form by a continued process of shaping. In the latter case the cause of this modification may lie either in the influence of a dissimilar male generative matter upon the female germ, or in the influence of other powers which operate only after procreation. In every living being there exists the capability of an endless variety of form-assumption; each possesses the power to adapt its organization to the changes of the outer world, and it is this power put into action by the change of the universe that has raised the simple zoophytes of the primitive world to continually higher stages of organization, and has introduced a countless variety of species into animate nature."