

Georges Cuvier and the establishment of Paleontology as a science

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Until the Modern Age, when the fossils began to be interpreted as the remains of organisms, these natural phenomena receive numerous interpretations that related to the mythology and magic. Even after the recognition of their organic origin, the natural historians practically not used them for the production of scientific knowledge. Only when the question of the occurrence of extinction in the natural world came to be debated vigorously, the role of fossils like data suppliers for the understanding of this and the other natural phenomena, could be perceived. But to prove the total disappearance of a species was necessary to apply methods of Comparative Anatomy. When Georges Cuvier (1769-1832) elaborated these comparative anatomy methods, which enabled the paleontological reconstructions, he promoted the definitive inclusion of the fossils in the biological world and the history of the Globe. This inclusion would provide a large amount of knowledge of the possible ways of organizing body, which was one of the most important cognitive goals of the Cuvier's research program. To make this contribution, he formed a network of international cooperation, which has become a scientific community, formed with the dissemination and acceptance of their work's results. Since then, this community began to use the Cuvier's methods in the production of studies that resulted in confirmations of their work's results. After decades of this practice of kuhnian normal science, some naturalists would discover natural phenomena that the theory guiding of the cuvierian paradigm could not explain. Then followed a questioning of Cuvier's theory and research program, which aimed to achieve a classification system based on natural body organization rather than as genealogy come to rely on systems of taxonomic classification after acceptance of the Darwin's Theory of Unit Type, when a new paradigm was installed in Paleontology.

