THE ORIGIN OF THE PALAEONTOLOGICAL FOSSIL CONCEPT

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In the history of science, the interpretation of fossils as petrified remains of living organisms was a first decisive step towards both the development of a dynamic and evolutional conception of geological and biological forms, and the adoption of a temporal perspective on a scale of billions of years. In line with an underlying radicalism particularly widespread within the scientific community, the current definition of the fossil, and the related attribution of an organic origin to a particular class of stone objects, are usually seen as assumptions that arose almost automatically when, in the modern age, natural scientists set aside their religious dogma and metaphysical speculation and began to carefully observe the world around them with an open and objective mind, in an attempt to work out "how things really stood". Today, the ease and immediacy with which we recognise the vestiges of what was once a living thing in a spiral object set in rock, lead us to conclude that a careful and objective observation, free from prejudice or preconceived ideas based on mere speculation, is enough to determine the organic origin of fossils (or at least most of them) and to clearly distinguish them from other mineral stone objects.

In light of a historical examination of fossil theories developed in Europe between 1500 and 1600, this intuitive and simplified conception of the origin of palaeontology would appear to be incorrect and unfounded. Although the recognition of a research method based on the careful observation of the natural world was fundamental in achieving the system of classification shared today, this nevertheless appears to be insufficient from a historical point of view. That which is considered an almost logical consequence of the adoption of an objective point of view, would appear rather as the result of assuming a vast combination of theories on nature and the workings of the physical world which act as filters and classifiers of the object being examined. When the problem of the classification of fossils is limited to the recognition or denial of their organic origin through observation, distinctions, classifications and the dividing lines between natural worlds and beings (such as that between organic and inorganic) are taken for granted. These factors are the result of a complex theoretical scheme, indeed only a few centuries ago they neither existed nor could they even be outlined. In the absence of these dividing lines, the term *fossil*, coined by Georg Bauer, better known as Georgius Agricola in the 16th century, was simply used to describe any object in rock extracted from the subsoil.

The poster, with the help of some illustrations from that era, aims to represent the decisive epistemological change which, at the beginning of the 17th century, enabled us to conceive the world of mineral "things" as distinct from that of organic "things", thus providing the essential bases for the formulation of a more restrictive palaeontological concept of fossils.

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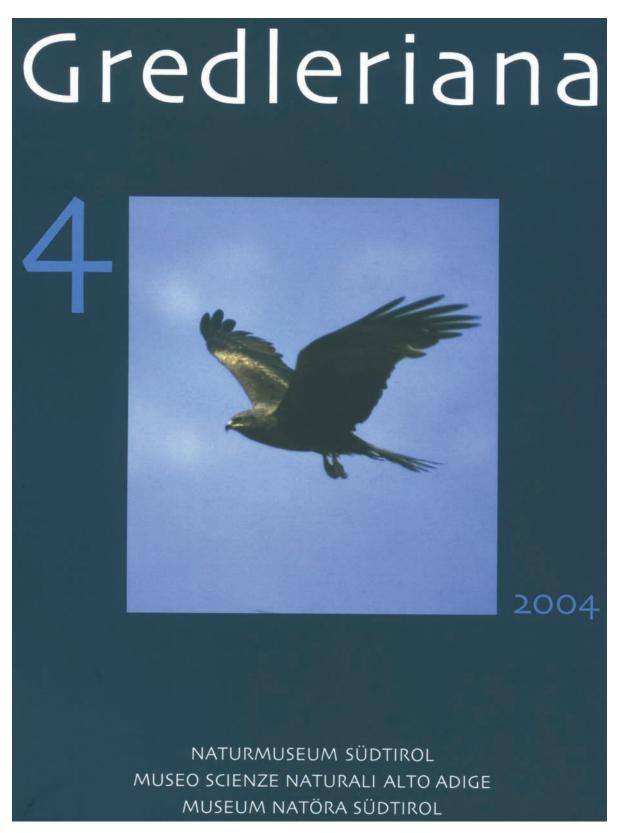
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