

Johann Jakob Scheuchzer (1672-1733), fossils and Deluge

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Although several forerunners like Leonardo da Vinci and Bernard Palissy had already understood the organic origin of fossils, Nicolas Steno is generally acknowledged for having scientifically demonstrated the veracity of this opinion when comparing in 1667 the morphology of the teeth of the recent white shark [*Carcharodon carcharias* (L.)] with the glossopetrae from Malta. However, as shown by Johannes Reiskius in his *Treatise... on the glossopetrae from Lunenburg* (1687), everybody had not immediately been convinced by Steno's demonstration. Similarly, the „taphonomical” study of fossils from the Mio-Pliocene of Sicilia and Calabria, made by Agostino Scilla in his *Vain Speculation refuted by sense* (1670) was not initially seriously taken into consideration, probably because it was written in Italian and also because it was not the work of a scholar but of an artist. The interest for this book increased when it was first translated into Latin in 1747 (*De corporibus marinis lapidescentibus...*).

At the beginning, Johann Jakob Scheuchzer considered figured stones as the product of a petrifying juice. However, he changed rapidly his mind after reading John Woodward's *Essay on the Natural History of the Earth* (1695). In this book was proposed a diluvial interpretation of the Earth history in which fossils were playing a significant role. Scheuchzer became so deeply convinced by Woodward's conception that he rapidly decided to translate his theory of the Earth into Latin, a decision which greatly contributed to the success of Woodward's ideas.

Then, Scheuchzer published several contributions in which he tried to demonstrate that fossils are witnesses of the Deluge : *Piscium Querelae et Vindiciae* [Complaints and Claims of the Fishes] (1708), *Herbarium Diluvianum* [The Herbarium of the Deluge] (1709) and *Museum Diluvianum* [The Museum of the Deluge], which was the catalogue of his own cabinet of fossils (1716). Thanks to these books, Scheuchzer succeeded in popularizing the idea that the Deluge had been responsible for the death of fossils.

Later on, after having purchased the incomplete skeleton of an exceptionally large fossil vertebrate, Scheuchzer wrongly convinced himself that he was in front of the skeleton of a man who had been drowned during the Deluge. For this reason, he published a small booklet: *Homo Diluvii testis* [A man witness of the Deluge] (1726) for demonstrating that this new fossil was bringing him the decisive proof of the validity of his diluvial interpretation.

Finally, Scheuchzer undertook the publication of the *Physica sacra* [or Kupfer-Bibel] (1731-1735) which he intended to be the perfect achievement of his natural theology, as he was using in it living beings and natural objects (animals, plants and fossils) for demonstrating God's magnificence and the exactness of the biblical relation. Although we presently know that his diluvial interpretation of fossils was mistaken, nevertheless Scheuchzer should be acknowledged for having contributed to the refutation of the interpretation of the „figured stones” as „sports” of Nature.

Friedrich Johann Karl Becke als akademischer Lehrer am mineralogisch-petrographischen Institut an der Universität in Wien von 1898-1927

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Ende des 19. Jahrhunderts umfasste die österreichisch-ungarische Monarchie ein sehr großes Territorium innerhalb Europas. Die Universitäten der österreichischen Reichshälfte von Wien, Prag und Czernowitz waren bedeutende Stätten der Forschung und Lehre. Wissenschaftliche Erforschung der Minerale besonders im böhmischen Wald, dem Waldviertel, bildeten die Grundlage für wirtschaftlichen Nutzen und Ausbau der Lagerstätten dieser Regionen. Friedrich Becke war einer jener fortschrittlichen Lehrer und Forscher, die ihre Schüler anregten, zum wissenschaftlichen, aber auch wirtschaftlichen Fortschritt des Landes beizutragen.