

Book review



Fossil fraud: A new interpretation of the Beringer story

Birgit Niebuhr and Gerd Geyer 2005. Beringers Lügensteine: 493 Corpora Delicti zwischen Dichtung und Wahrheit [in German with abridged English version]. *Beringeria Sonderheft* 5, Teil II. 188 pp. ISSN 0923-0242. Price: 25 Euros.

Fraud in palaeontology is the exception rather than the rule, which is one of the reasons why it is given more than its fair share of publicity when it does occur. Palaeontological fraud comes in many guises. Sometimes genuine fossils are "doctored" by joining together pieces belonging to more than individual, or by carving extra parts to complete a partial specimen. An incorrect stratigraphical or geographical provenance can be claimed in order to give significance to an otherwise unimportant specimen. Alternatively, entire "fossils" can be manufactured, either copies of real fossils or imaginary forms that are entirely bogus.

Not only do fraudulent fossils have diverse origins, but there can be various reasons for fakery. The most common is commercial profit—witness the countless fraudulent fossils coming onto the market nowadays from countries like Morocco. Academic gain is another incentive. A third motive is to discredit a fellow scientist. Perhaps the most celebrated instance of this is provided by the "Lügensteine" or "Lying Stones" of physician Johann Bartholomäus Adam Beringer. Or so it has generally been believed prior to the publication of this new volume in the *Beringeria Sonderheft* series.

Beringer's name is known in palaeontology only because of his publication of 1726, the *Lithographiae Wirceburgensis*. This volume, reprinted in 1767 twenty-nine years after Beringer's death, illustrates 204 remarkable specimens said to have been collected in the hills above Eibelstadt near Würzburg, Franconia, in what is now Bavaria. These "iconoliths" were unlike any fossils that had ever been found before, or indeed since. They included spiders sitting on their webs, birds with clutches of eggs, completely preserved plants with roots, stems, leaves and flowers all intact, tiny mermaid-like creatures, and even miniature comets and tablets of Hebrew script, all fashioned from Triassic Muschelkalk limestone.

Beringer had apparently purchased the specimens from some Eibelstadt youths between the end of May 1725 and the autumn of the same year. The 204 figured specimens were only the tip of the iceberg; at least 1100 may have originally existed. A total of 433 specimens are still in existence today, and another 60 have been lost during recent years but are represented by photographic images. Niebuhr and Geyer's new book publishes for the first time photographs of all 493 specimens from 14 different collections in Germany, Holland, and Britain.

To Beringer, the iconoliths were entirely different from normal fossils, such as the ammonoids and bivalves that he and others had collected locally from the Muchelkalk, which at that time in the early 18th century were themselves of uncertain origin. He considered nu-

merous theories for the formation of the Eibelstadt iconoliths, ranging from the Biblical Flood, to Edward Lhwyd's Spermatick Principle and vis-plastica. The possibility that they were of human manufacture, as is so obviously the case to any modern palaeontologist who has seen the crudely carved specimens, did not escape his attention, but even his observations of "...a smoothness suggesting the polished effect of applied pumice..." and "...the [apparent] strokes of a knife gone awry..." were insufficient to shake Beringer from his conviction that the iconoliths were natural objects.

Within a few weeks of the publication of the Lithographiae Wirceburgensis, Beringer had changed his opinion and realized he had been tricked. The first seeds of doubt may have emerged during a dinner party hosted by the Prince Bishop of Franconia, Christoph Franz von Hutten, in late March or early April 1726. This was followed by a famous meeting of Würzburg luminaries at Eibelstadt where J. Ignace Roderique carved some iconoliths in front of Beringer's eyes. Niebuhr and Geyer provide evidence that Chapter 12 of the Lithographiae Wirceburgensis was hastily inserted by Beringer to counteract claims of fraudulence made at this time. However, it was not until after publication of the Lithographiae Wirceburgensis that Beringer came fully to his senses and accepted the bogus nature of the iconoliths. A court was convened to investigate the fraud. Unfortunately, the full findings of the court are unknown but it has generally been assumed that the purportrator was Roderique who wished to discredit the aloof and arrogant Beringer. However, Niebuhr and Geyer make the crucial observation that Roderique only took up his post of Professor of Algebra, Analysis and Geography at the University of Würzburg on 11th December 1725 and may still have been in Münster when the iconoliths began to appear during the summer of 1725.

If Roderique did not mastermind the fraud then who did? The Eibelstadt youths are unlikely to have had sufficient knowledge of natural history to have designed the iconoliths by themselves. An apocryphal story, traceable to August Demmin (1878), that the iconoliths were carved and planted in the hills by students as a prank that was detected only when Beringer found an iconolith bearing his own name, has no factual foundation. Other prominent figures from Würzburg, such as Johann Georg von Eckhart, could have been involved, but Niebuhr and Geyer instead point the finger of suspicion at Beringer himself. Their new interpretation transforms Roderique from villainous fraudster to good samaritan who tried in vain to save Beringer from embarrassing himself, and indeed the whole of Franconia, by publishing the ludicrous *Lithographiae Wirceburgensis*.

Despite the idiosyncracies of the shortened English translation, which obscure the authors' meaning in several places, Niebuhr and Geyer's volume is well worth acquiring, if only to muse at the photographs of the iconoliths that sealed Beringer's place in the annals of palaeontology. More particularly it will appeal to historians of the natural sciences and to curators who have originals or casts of Beringer's lying-stones in their collections.

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