

The Late Eighteenth and Early Nineteenth Centuries

The response of churchmen to geological discoveries was largely negative from the 16th to the first of the 19th century. For that day, this was perhaps understandable, for the early reformers, including Luther, held to the view that the earth is only about 6,000 years old. The gap of misunderstanding between the men who were doing scientific research and the theologians was tremendous. Even after a serious and systematic geologic research was begun (in the late 18th century), geological training was by no means as easy to obtain as it is now. This meant that the clergy had little opportunity to learn the methods by which scientific observations were made, or the specific results of those observations. The scientists could--and often did--sit in the pew and gain a fair degree of understanding and appreciation of the work of the theologian; but the reverse almost never took place. As a result, many leading clergymen of the day--both Protestant and Catholic--took to attacking geological science from the pulpit. This resistance to the discoveries of science was strongest in England, though it also existed on the Continent and in America.¹ On the other hand, strong opposition to religion from research scientists was not evident at that time. However, such opposition did develop later, after the publication of numerous evolutionary biological and paleontological works.

In the late 18th century we find theologians strongly upholding the idea which Luther had championed, that the fossils of the earth were formed during the Biblical Flood.² It is perhaps understandable that Luther and the other early reformers would have adopted this position, since they had no way of learning about the types and methods of formation of the rocks in which the fossils were found, or the depth and extent of the fossil-bearing strata. Even the scientists who were at that time attempting to study the strata of the earth did not have the benefit of deep well drilling records or of cores taken from the sea floor. They could only go to the cliffs, canyons, and coal mines, and study the strata which are near to the surface. It is true that the early geologists learned a great deal about the history and nature of the earth in this way, but what they learned by these surface observations was not easy for the theologians to understand.

Leonardo da Vinci, near the beginning of the 16th century, pointed out that many of the fossils of marine animals have the same skeletal structure in minute detail as their living counterparts.³ This caused some of the more alert theologians to admit that here was a problem for any belief that the earth was only a few thousand years old. But since these men lacked scientific training, having only the tools of philosophy and theology, they too usually attempted to explain the fossils as relics of the Biblical Flood. Their analyses did not take them far enough to see that, since the Bible does not mention fossils as having been produced by the Flood, no amount of deduction from that sacred Book could establish their hypothesis. Such a hypothesis could be tested only by direct field observations, such as scientists have carried out within the past two centuries.

So, from the time of Martin Luther (16th century) until the 19th