

A history of mining, mineralogy and geology in the German literature

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The question of organic or inorganic nature of minerals had been a subject of a debate since the ancient Greece to the Middle Ages. Thales and Pythagoreans believed that stones had souls, whereas Plato and Aristotle believed they possessed an anima. In the view of nature in the Ancient Rome, people believed that leaving mines without mining for a certain period of time would allow them to refill. In the Middle Ages, the relationship between minerals and magic was debated, and people believed stones had anima whereas jewels had magical powers. This thinking was further developed by alchemists, for whom the knowledge and understanding of minerals and jewels was essential.

The idea that minerals have supernatural power is also found in the German literature, especially that of the 18 and 19th century. A lot of novelists at the time studied mining, mineralogy and geology as they had been involved in mining business. In their writings stones have mystic powers.

However, already in the 13th century, Albertus Magnus ridiculed the idea of stones having a soul. Georg Agricola published *De Re Metallica* (1556) a complete and technical treatise on mining and extractive metallurgy in the 16th century, whereas Leibniz created *Protogaea*, an ambitious account of terrestrial history, central to the development of the earth sciences in the 17th century.

I will introduce works of romanticist (Goethe, Novalis, etc.) and philosophers (Leibniz, etc.) involved in mining business, and discuss the gap between their philosophy and reality.