

Kepler's *Somnium* (Dream)

A very brief outline

The story begins when Kepler dreams that a young boy named Duracotus, perhaps himself, symbolizing science, travels by ship from Iceland to Denmark where he learns astronomy from Tycho Brahe. Returning to Iceland some years later his mother, (Fioxilde, a woman with magic powers), welcomes his new knowledge as she too understands much about astronomy. She summons up the Daemon of Levania, (traditionally a wise being or spirit and in this case one with special knowledge of the Moon), who tells her of pathways to the Moon. When a pathway is open the Daemons can take humans there. The story goes on to describe the challenges of the journey and in doing so reveals Kepler's knowledge of astronomy.

Being familiar with Galileo's telescopic observations of the moon he had in mind a speculative and imagined lunar geography. This consisted of mountains, caves, valleys, and even seas, as well as certain types of vegetation, reptiles and animals, whose appearance and rapid cycle of growth and decay would be determined by what he imagined as extremes of climate on either side of the moon as it moved through its various phases. Levania (the Moon) he described as divided into two hemispheres called Privolva and Subvolva. Earth (which he called Volva) was never seen by Privolva. Subvolva saw Volva (Earth), as their moon. The Daemon describes the changing conditions on Subvolva and Privolva as the moon moves through its phases in relation to the Sun and Earth.

Kepler expected this lunar expedition to be a very difficult journey, the voyagers experiencing the intense cold in the thinning air and then the effect of the sun's radiation. This would make it necessary to travel during an eclipse of the moon when the earth's shadow would protect them. His understanding of orbital theory, gravity and the moon's effect on tides made it clear that for the voyagers to leave earth they would require a quick and violent thrust to break free of gravity's grip. He also suggested that they take narcotics to assist them to cope with the rigors of the journey. On arrival it would be necessary to break their speed and wake the voyagers from their drugged sleep to seek shelter in the

caves. By combining knowledge with imagination Kepler saw into a future which we are now inhabiting.

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