



## "Kepler's Somnium: A Renaissance Science-Fiction Story and its Greek Sources"

Johannes Kepler (1571-1630), German mathematician and astronomer, wrote in Latin a science-fiction story published after his death by his widow (1634). He had included in the text a set of footnotes (to help readers understand it) and his own translation of Plutarch's "On the Face of the Moon".

Kepler was one of the first astronomers after Copernicus to believe in the heliocentric theory and wrote the *Somnium* to illustrate that theory by having a character go to the moon, from which he could see the movement of the earth around the sun. 1) shows the opening paragraph, the frame to the story, which involves Duracotus, son of a sorceress, sent to sea by his mother in anger over his spilling some of her magic herbs. Duracotus meets Tycho Brahe in Europe & eventually returns to his mother in Iceland. A daemon summoned down from the moon takes Duracotus and his mother up to the moon. The work ends abruptly when Kepler wakes from his (frame) dream.

Kepler's shift to sci-fi after so much non-fiction is explained by his footnotes. 2) shows that Kepler has modelled his work on ancient sources, including Cicero's *Somnium Scipionis*, especially Plutarch and Lucian. Kepler believed Plutarch knew about the Americas, since the passage in his treatise (3) that speaks of Ogygia and the lands westward seems to indicate knowledge of the new world. Lucian's *True History*, in which the narrator is swept up in a whirlwind to the moon, where he gets involved in the wars between the inhabitants of the moon and of the sun, was taken by Kepler as containing some true astronomical data, despite Lucian's avowal in the prologue that the whole story is a tall tale.

In short, Kepler saw Plutarch and Lucian as factual accounts of some astronomical truths, though their authors pretty clearly meant them to be taken as pure fiction. Until Kepler's time astronomy had been purely hypothetical, without reference to literal truth, devoting itself to "saving the phenomena" - building hypotheses which explained all the phenomena without vouching for the correspondence to reality. The two strands of Renaissance thought in this regard is seen in the publication of Copernicus' work some 50 years earlier: Copernicus presented the heliocentric theory as actual truth; Osiander, a priest, added an anonymous preface saying the whole thing was not a description of reality but purely hypothetical. Kepler, however, saw what Copernicus was actually saying -- and thus mined scientific truth out of what was being labelled fiction. The recent discovery of the Americas suggested to Kepler that the same process applied to Plutarch and Lucian (truth hidden in apparent fiction).

Kepler with his writing and Galileo (his contemporary) with his telescope were trying to make real what previously had been considered only theory. Kepler was successful to such a degree that many of his contemporaries believed Kepler was depicting his own mother in the figure of the sorceress and consequently they tried her and sentenced her to jail.

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