

Astronomy Talk 16th July 2016

Micrographia on the Moon

Allan Chapman came to us for his summer visit to talk about Robert Hooke and his publication "Micrographia".

Hooke was born in 1635. He was a brilliant linguist and a good artist: he'd have made a good portrait painter! He read books in their original languages as far as possible. He made models with functioning guns. He was musical. On top of it all, he was a brilliant scientist.

He was very much an experimentalist, preferring the practical over the intellectual. He learnt many of his laboratory techniques from Robert Boyle. As a great friend of Christopher Wren, he was largely responsible for the design of the rebuilding of London after the Great Fire of 1665.

He transformed our understanding of nature, with both the microscope and the telescope. "Micrographia" was published in 1665 in plain English: most learned books were written in Latin at the time. His experiments with the colour spectrum of light were used by Newton as a basis for his work.

His view of the Moon accepted the possibility of life, and he commented that through a telescope it looked like Salisbury Plain! Were craters impact? Were they volcanoes? His experiments showed both were possibilities. The Moon must have its own gravity to explain this, either way. Again, Newton used this idea in his work on gravity.

He showed by experiment that comets were streamers from the sun, and not on fire as many supposed.

Perhaps he was the greatest experimental scientist ever. He died in 1703.