

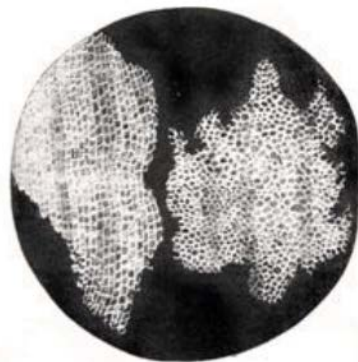
MICROGRAPHIA Robert Hooke, 1665

Micrographia by Robert Hooke, one of the founding members of the [Royal Society](#), was the first illustrated book of observations using microscopes. It contains sixty immensely detailed engraved images including a large fold-out drawing of a flea.

Many of the objects he drew and described are now familiar to us - you may have used a microscope at school - but they were a fascinating revelation at a time when microscopes were rare.

Hooke was the first person to use the word 'cell' in the context of biological organisms after observing these structures in cork.

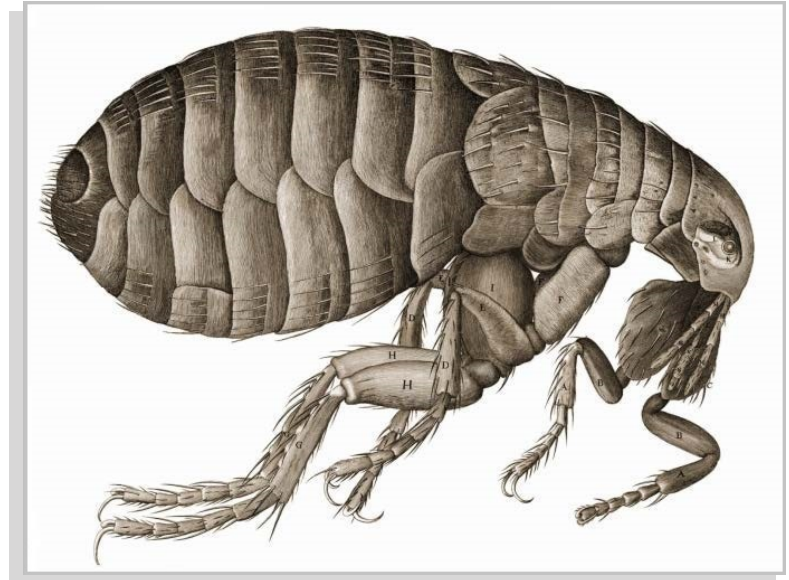
He drew his illustration of cork cells in a round frame, giving the reader an impression of the view he had through his microscope.



Hooke's work was known by another early microscopist, Antony van Leeuwenhoek. Designing and building much more powerful microscopes, he was the first person to observe protozoa, bacteria, red blood cells and sperm cells. He did not publish a book himself, but shared his discoveries by writing to the Royal Society, which translated and published his letters.

You can view an [online copy of *Micrographia*](#) at the Internet Archive.

Dr William Poole discusses the importance of the Bodleian's copy of *Micrographia* [in this video](#).



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Questions

1. Hooke was clearly impressed by the flea. **What significant connection had not yet been made between fleas and disease in 1665?**
2. Hooke used several words to describe the structure of cork including the term 'cell'. **Which other natural structure did cork remind him of? (p113)**
3. Read pages 203 and 204 of *Micrographia*, where Hooke describes the trouble he had drawing ants. **What solution did he find to keep the ant still?**
4. **Why is it significant that Hooke published his book in English, using a conversational style?**
5. **Why was the discovery of microorganisms important for later developments in the understanding of infectious disease?**

FURTHER READING

This article on the discovery of microorganisms provides more detail on the work of [Robert Hooke and Antony van Leeuwenhoek](#).