

7.12: A Martian Controversy

Before spacecraft and more-advanced equipment, we depended on the eye and photography to decipher and understand what we saw in the Universe. Mars was – and it still is – interesting because it is so close to Earth and somewhat “Earth-like.” Some astronomers focused on the planets and specifically Mars. **Percival Lowell** was one such astronomer.

Lowell Observatory in Flagstaff, Arizona

In the late 1800s, Percival Lowell was the first to seek site with good air clarity and superior seeing (steady air or lack of turbulence). After testing many different site tests, Lowell gave the lumber town of Flagstaff, AZ (population of 1,000) high marks. He selected a hill 300 feet above town and built an observatory, which is still in use today.

Lowell initiated Mars Mania; he sensationalized what he perceived as Martian **canals**. The canals were first described by the Italian astronomer Giovanni Schiaparelli during the close Martian approach in 1877. Schiaparelli gave them the Italian name ‘canali.’ The translation was taken as canals; canals refer to something made by someone, something, but not Earth-natural.... Lowell pressed the idea that these canals were made by intelligent beings – Martians. There were books and articles that promoted the Martian canals as well as Martian seasonal vegetation growth. This, and surrounding controversy, stimulated interest in Red Planet. And in 1898, science fiction author H. G. Wells wrote “The War of the Worlds,” furthering the controversy.

Other observers also saw the Martian Canals. Lowell astronomer Earl Slipher’s book, *The Photographic Story of Mars*, shows adjacent direct photographs and drawings. In 1962, Slipher asked readers to judge:

History ... shows that every skilled observer ... has had no great difficulty of seeing and convincing himself of the reality of the canals. Photographs have recorded traces of so many of the canals and oases ... that they should remove all doubt of the reality — E. C. Slipher (1962).

So what happened? Were the canals real? When spacecraft first started exploring Mars in 1965, Mariner 4, no canals were seen. It is now believed that the eye fooled the astronomer, he connected features on Mars that were there – but the canals were not. It was like connecting the dots, an optical illusion.

This page titled [7.12: A Martian Controversy](#) is shared under a [CC BY 4.0](#) license and was authored, remixed, and/or curated by [Lumen Learning](#) via [source content](#) that was edited to the style and standards of the LibreTexts platform.