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Mapping the Mars Canal Mania: Cartographic Projection and the Creation of a Popular Icon by K. Maria D. Lane

Summary

This article takes a historic look at how reputation, the art of cartography and the media worked together to portray an image of Mars as an inhabited planet and popular icon. It further discusses cartography as a scientific force in the late 1800's and early 1900's played a vital role in bringing the theory of Mars as an inhabited planet to the forefront of popular culture. Mars maps produced by Lowell projected an image of a canal ridden planet that was certainly inhabited. This idea of inhabitation was spread throughout the popular and scientific communities and was not held up to scientific scrutiny as a result of the reputation of both Lowell and the cartographic process. Uniquely the Mars map created by Lowell presented an intricate canal system that was not visible at any one given time, but was more of a canonized version of sketches that were compiled from glimpses of the planet that were not visible to the naked eye. Unquestioned, this map spread like wildfire as the scientific authority. With the onset of photography, the door was opened for a technological comparison and weakened the scientific authority of cartography. Lowell's Mars maps were ultimately discredited by evolving photographic and telescope technology. The maps were further weakened when scientists took the opportunity of this window created by technology to hold the Mars maps by Lowell up to the standards of scientific proof. The perceptions of Mars as an inhabited planet eventually dissipated and cartography rebounded, but the historic influence of maps in creating Mars as a popular icon remains.

Class Discussion

The lack of scientific credibility was out shined by the cartographic process

Maps of the time were seen to be the scientific authority and it was pointed out that today maps have a similar power.

This article shows maps in a time of prominence and its ability to disseminate a message, as well as its decline with the advances in technology, mainly photography.

Lowell's amateur astronomer status did not impact his credibility as a Mars expert.

Rather than question Lowell's data and analysis of Mars, the scientific community questioned their own capabilities and their technology.

The burden of proof was not applied to Lowell's claims of a distinct canal system on Mars that meant inhabitation because of the respectability of the cartographic process and the power and privilege of Lowell.

The time that this occurred may have also impacted the ability to dispute Lowell's claims (late 1800's to early 1900's)

Photography was in large part the reason for Lowell's map losing favor, providing a means for comparison and causing cartographic representations to be questioned and held to a burden of proof. The plight of Lowell's Mars map was solidified when one of his faithful supporters named Antoniadi who was an accomplished draftsman had a 9 night visual of Mars and was able to clear detail and proceeded to sketch the detail which differed greatly from Lowell's Mars map.

The media also played a role in the popular culture embracing Lowell's Mars representation and his mapped interpretation of a canal system, embedding it as proof of Mars inhabitation in popular culture.

Lowell's reputation and name was built on his renderings of Mars and his claim of inhabitation.

Lowell's Mars representation was admittedly based on a collection of drawings from many sources that were renderings of quick glimpses of canal segments

The power and respectability of of cartography has returned in the present today