

Modern Astronomy and Culture

Nick Campion

The study of cultural astronomy is normally restricted to ancient and pre-modern culture. My assumption as to the reason for this is that as astronomy is a science, and science is widely seen as being a method of investigation which transcends cultural influence and aims for absolute truth, there can be no benefit from a sociological or anthropological investigation of the culture of astronomy. Where such studies do exist they can arouse great antagonism. I was at a conference in Granada in 2008 in which a paper by the astronomer and sociologist, Martin Lopez-Corredoira, arguing that science funding, and hence the production of scientific truth, is partly a consequence of funding fashions, provoked a furious row. (See below for the abstract)

According to Matthew David,

‘Only a generation ago...the idea that science was itself something that could be studied sociologically took a long time to emerge, largely because sociology’s founders preferred to emphasize the reverse: that society could be studied scientifically and sociology was the way to do just that. The have questioned science itself as a source or method of generating “truth” would have undermined the project of establishing a “social science”’.

In other words, sociologists themselves were complicit in excluding the culture of science from any possible sociological analysis.

As an indication of the available work, conduct a web-search for ‘astronomy-sociology’ and this is about all we find:

Kevin Krisciunas, ‘Strange Cases from the Files of Astronomical Sociology’.

<http://www.nd.edu/~kkrisciu/strange/strange.html>

<http://www.cv.nrao.edu/adass/adassVI/schulmane.html>

(accessed 4 Jan 2009)

Eric Schulman, ‘The Sociology of Astronomical Publication Using ADS and ADAMS’.

<http://www.cv.nrao.edu/adass/adassVI/schulmane.html>

The Sophia Centre’s remit includes the development of a body of knowledge and data on the culture of modern astronomy and scientific cosmology. This opens up a vast amount of untapped territory for research.

Granada Conference Abstract

Sociology of Modern Cosmology

Authors: Martin Lopez-Corredoira

(Submitted on 2 Dec 2008)

Abstract: Certain results of observational cosmology cast critical doubt on the foundations of standard cosmology but leave most cosmologists untroubled. Alternative cosmological models that differ from the Big Bang have been published and defended by heterodox scientists; however, most cosmologists do not heed these. This may be because standard theory is correct and all other ideas and criticisms are incorrect, but it is also to a great extent due to sociological phenomena such as the "snowball effect" or "groupthink". We might wonder whether cosmology, the study of the Universe as a whole, is a science like other branches of physics or just a dominant ideology.

Comments:

invited talk, submitted for the proceedings of the conference "Cosmology across Cultures" (held at Granada, Spain, on 2008, September 8th to 12th), J. A. Belmonte, F. Prada, J. A. Rubino Martin, & A. Alberdi, Eds., ASP, S. Francisco

Subjects:

General Physics (physics.gen-ph); Astrophysics (astro-ph); History of Physics (physics.hist-ph)

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arXiv:0812.0537v1 [physics.gen-ph]

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The paper is a PDF on Moodle but can also be downloaded from

<http://arxiv.org/abs/0812.0537>

The reference to the argument at the conference is in footnote 2.

David, Matthew, *Science in Society*, London: Palgrave 2005. p. 3.