

Lunar Exploration (3)

Lunar Policy (1B)

Author: Dr. Martin Elvis

Harvard-Smithsonian Center for Astrophysics (CfA), United States, elvis@cfa.harvard.edu

Dr. Tony Milligan

King's College London, United Kingdom, tony-milligan@outlook.com

Dr. Alanna Krolikowski

University of Alberta, Canada, alanna.krolikowski@gmail.com

THE PEAKS OF ETERNAL LIGHT: A NEAR-TERM PROPERTY ISSUE ON THE MOON

Abstract

The Outer Space Treaty makes it clear that the Moon is the ‘province of all mankind’, with the latter ordinarily understood to exclude state or private appropriation of any portion of its surface. However, there are indeterminacies in the Treaty and in space law generally over the issue of appropriation. These indeterminacies might permit a close approximation to a property claim or some manner of ‘quasi-property’. The recently revealed highly inhomogeneous distribution of lunar resources changes the context of these issues. We illustrate this altered situation by considering the Peaks of Eternal Light. They occupy about one square kilometer of the lunar surface. We consider a thought experiment in which a Solar telescope is placed on one of the Peaks of Eternal Light at the lunar South pole for scientific research. Its operation would require non-disturbance, and hence that the Peak remain unvisited by others, effectively establishing a claim of protective exclusion and de facto appropriation. Such a telescope would be relatively easy to emplace with today’s technology and so poses a near-term property issue on the Moon. While effective appropriation of a Peak might proceed without raising some of the familiar problems associated with commercial development (especially lunar mining), the possibility of such appropriation nonetheless raises some significant issues concerning justice and the safeguarding of scientific practice on the lunar surface. We consider this issue from scientific, technical, ethical and policy viewpoints.