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Institute of Air and Space Law, McGill University, Canada

## SPACE RESOURCES: BETWEEN ECONOMIC AND LEGAL COMMONS

**Abstract**

A paper presented at the 2015 IAC (by Hertzfeld, Weeden and Johnson (HWJ)) claims outer space is not commons. It puts a spotlight on the critical discussion re-emerging in space policy, economics and law: that of the classification, use (and ownership?) of space resources, and the governance of these activities (rules & institutions). The US legislation from November 2015, recognizing the right of US citizens to all asteroid resources they obtain, clearly signals that “money time” has come, in every meaning. Planetary Resources, Inc. has declared this new legislation “the single greatest recognition of property rights in history”. Yet the discourse is un-structured and surprisingly full of myths. This paper provides a critical analysis of HWJ’s conclusions, based on proper legal interpretation and economic analysis. More importantly, this paper seeks to provide the structure for this important discourse. The first critical step is to distinguish between (i) commons as an economic term; and (ii) commons as a legal regime. The first refers to a type of goods or resource used by multiple users, such as a lake used by numerous fishermen. The second refers to a property-rights regime, the ownership over the resource. An ‘economic commons’ may have different property rights regimes, not just ‘legal commons’. The lake may be state property, where the government grants fishing licenses, or privatized where the owner sells fishing licenses/quotas and can also be community property (‘legal commons’), or owned by no one. A mistake, often made, is to alternate between ‘commons’ in the economic and the legal sense. The paper will follow with: (i) economic analysis based on the theory of Nobel Laureate Ostrom, which HWJ mention but dismiss as irrelevant. Ostrom’s theory categorizes goods into four types, according to their properties: private, public, toll goods and common-pool resources (CPRs). The paper will demonstrate that space resources are CPRs. Ostrom continues to present the efficient governance model for CPRs: polycentric governance. However, this does not necessitate commons as a legal regime, which leads to the next discussion. (ii) legal analysis comprising of critical examination of the common misquotes of the space law treaties; suggestions for the proper use of interpretive tools (e.g. Latin terms are irrelevant, the Vienna Convention of limited applicability, and the other five official languages of the UN providing valuable insights); and evaluation of the prescribed property-rights regime. The paper will conclude with synthesis of the economic and legal conclusions.