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## **RE-DISCOVERING THE BOUNDARY PROBLEM**

## Abstract

What is the height of airspace sovereignty? The 'boundary problem' (e.g. Cheng, 1997, ch 14) is that whereas a State has competence in civil and military activities in sovereign airspace, outer space above that airspace is free to all States for exploration and use. The paradox has come about because airspace is not outer space and space objects are not civil or military aircraft, defined under distinct treaty systems; yet the aerospace sector and air in the atmosphere are in motion. Two current illustrations of regulatory interest are High Altitude Pseudo Satellites (HAPS) for civil and military use, and commercial suborbital flights. Qualitative and quantitative answers in national laws and proposals to the international community are inconsistent, with more space objects in Low Earth Orbit (LEO) than ever. Legal academia, like national perspectives, are spatialist in setting an altitudinal limit to airspace, and functionalist in adapting by regulating identified aerospace activity.

In the context of this debate, the purpose of this research is to triangulate methods of interpreting the boundary question to present de lege ferenda as of 2019. I will interpret the two sets of opposing terms creating the current paradox under international law (airspace/outer space; aircraft/space object) in view of HAPS and commercial suborbital flight. With the reasonable rules of thumb from analysing spatialist and functionalist State practice and legal scholarship, whilst analysing low perigees of space objects registered with the United Nations (UN) over the past 20 years, this research aims to discover the range for international consensus, and discuss its implications. (cf Cheng, 1997, part IV)