ELSEVIER

#### Contents lists available at ScienceDirect

## **Resources Policy**

journal homepage: www.elsevier.com/locate/resourpol



# SPACE: The race for mineral rights 'The sky is no longer the limit' Lessons from earth! \*



Sarah Jane Fox 1

Coventry University, Priory Street, Coventry CV1 5FB, United Kingdom

#### ARTICLE INFO

Article history: Received 2 May 2016 Accepted 2 May 2016

#### 1. Introduction

Law is rarely pro-active, but nevertheless, it is dynamic, needing to reflect the changing requirements of society. Transportation and property law is inherently built upon reaction and observed needs. When transport, and the movement of people and property, involves the crossing of boundaries and borders, the situation becomes even more involved and contentious. History has clearly shown that discord occurs when nations stake claims of ownership on disputed land or property outside 'recognized' state territory. It is often at this point that international law and treaties are turned to. But international law is acknowledged to be multifarious and complex. It is often a case of governance and ultimately power and control. In reality, States decide whether or not to enter into international treaties under the international custom, which is then accepted as 'law', but inevitably this application and adherence remains subject to the political will of States and the protectionism of governments.

Ownership of the skies has remained an antagonistic issue for nations, with the 1900s seeing the establishment of air law, which was based on the concept of Laws of the Sea. Transport continues to develop and evolve due to society's needs and mankind's thirst for travel – transport remains a means to connect and access opportunities, and therefore trade and commercialization is inextricably linked.

The 1960s heralded the *new* stage with the emergence of a *new* era – travel into space. 12 April 1961 will be remembered forever as the day man journeyed into outer space. The space race had

begun. This was to be between the then two superpowers, the U.S. and the Soviet Union. Technically, to be accurate, history records the start of the space-war some ten years earlier, in the 1950s. However this day was to mark the increase of competition involving human space exploration, which led, shortly afterwards, to President John F. Kennedy making the bold, public statement that the U.S. would land a man on the moon before the end of that decade. In essence, the race involved technological dominance and a race for supremacy. Space was viewed as a new frontier to conquer.

At the start of the second decade in the 'new millennium' an announcement was made that space landings and exploration were entering a new phase with 'Mars One' planning to establish a human settlement on Mars in 2027.<sup>2</sup> And, half way through the second decade the space race seemed to be entering a new battle too, with Russia declaring that it was planning to conquer Mars first, with a settlement which is scheduled to be launched in 2017.<sup>3</sup>

Mars One however, typifies the new breed of pioneers in so much as it non-governmental and has international representation – it is very much geared as the 'next giant leap for mankind' both in terms of reaching new outer space limits and levels of cooperation.

However, an apolitical approach to space and space exploration can far from said to be the norm with countries appreciating and no doubt envying the untapped value that lies above us all. And in

<sup>\*</sup>Richard Nixon: 1913–1994, Thirty-seventh President of the USA. "Remarks at a Dinner in Los Angeles Honoring the Apollo 11 Astronauts." Century Plaza Hotel, Los Angeles. 13 August 1969.

 $<sup>\</sup>textit{E-mail addresses:} \ sarah. fox @coventry. ac.uk, \ sj fox 1 @tvalmans a.es$ 

<sup>&</sup>lt;sup>1</sup> This paper is part of the Risky Business series of papers/publications concerning research undertaken as part of my Fulbright-Lloyds of London Scholarship funding, in the US, at De Paul University (International Avia..tion Law Institute) Chicago (2015–2016).

 $<sup>^2</sup>$  In 2011 Bas Lansdrop and Arno Wielders laid the foundations for the Mars One mission.  $\label{eq:landau} \text{http://mars-one.com.}$ 

The first spacecraft to journey to Mars from the Earth was NASA's 'Mariner 4', which was launched on 28 November 1964 – arriving on 14 July, 1965.

<sup>&</sup>lt;sup>3</sup> Initially announced early in the 1980s, the story re-surfaced and gained momentum in October 2015 being reported in newspapers across the world (e.g. see the Metro news – 28 October, 2015). The colonization would be a settlement of monkeys: <a href="http://www.express.co.uk/news/science/615051/Russia-beat-US-Marstrained-monkeys-space-race-mission-red-planet">http://www.express.co.uk/news/science/615051/Russia-beat-US-Marstrained-monkeys-space-race-mission-red-planet</a>. The program launched in the 1980s and is being carried out at the Institute of Biomedical Problems, based at the Russian Academy of Science.

2015 the U.S. proactively staked a claim to this potential by laying a Bill before U.S. Congress on commercial space mining – property ownership was potentially set to reach new heights. Arguably this action was to indicate the next phase of globalization an expansion out of Earth's orbit into 'asterization', albeit potentially of a monopolistic nature, whilst calling into question – mankind's rights vs. profit and commercialization.

This paper explores both the Bill and subsequent Space Resource Exploration and Utilization Act (as within the 2015 - U.S. Commercial Space Launch Competitiveness Act), whilst firstly undertaking a comparison analysis of other UN Treaties and Conventions. The research considers the aspect of sovereignty. boundary limitations and governance, whilst the validity of State commercialization of assets deemed as being 'mankind's heritage' is therefore also subsequently analyzed. Both (i) the comparison analysis of UN Treaties and Conventions and (ii) the relevance of sovereignty/staking claims to assets should be viewed as primary objectives of the research. Ultimately, the methodology is related to legal research, whereby commentary is provided on the similarities of lessons learnt from Earth and other UN International (Space) Treaties and Conventions. Correlation-references are made in respect to this aspect and particularly to the current situation in the South China Sea. In doing so, the paper illustrates the U.S.'s reluctance to ratify any UN treaty, which does not allow the freedom .... of its competitive advantage: as is ultimately the aim of the Space Resource Exploration and Utilization Act.

#### 2. Contextualization - literature overview

#### 2.1. The movement of man – boundaries and borders

As Steinberg made reference to, theorists within the geopolitics environment increasingly recognize that boundaries are more than simply lines that outline territories.<sup>5</sup> Whilst this is arguably true, there is also the additional related factor perhaps to consider, that, therefore, the act of movement has had an influential role to play in causing boundaries themselves to be defined or re-defined. Rubenstein remarked, that 'the function of a boundary is to produce and regulate a distinction between inside and outside; the movement of things across a boundary signals not its failure but its success'. However, it is debatably whether claiming ownership of space, and particularly minerals, is ever going to translate to being successful for mankind. The truer potential is that space mining will, in the short-term at least, lead to conflict and discourse. When viewed from an economic and opportunistic perspective, it may be said to be however of economic benefit to a nation and particularly, that nation's position in an ever global world – where a nation strives to be ultimately 'the global superpower'.

It is true that man has always been migratory with an ancestry steeped in discovery -conquering nations and claiming land and ownership;<sup>7</sup> and of course, transportation has had a key role to play in advancing both movement and development. It is said that the discovery of new lands, which have then been governed and claimed mostly on behalf of sovereign nations, was initially facilitated by utilization of the seas.<sup>8</sup> In this way Steinberg makes the

linkage between 'the ocean itself as a space of connection and an arena of mobility'. Hence there is a direct correlation between a 'boundable space'/territory and the utilization of the area as a means of travel as well as to conquer and to claim. 10 Crossing boundaries has often been seen as an act of aggression and subsequently led to retaliation, and, hence, resulted in conflict and physical wars. Whilst Chilton<sup>11</sup> further identifies that the era of the Cold War was a containment of suspicion (held within the USSR boundary and arguably the U.S. internal borders) - in terms of a perceived threatening environment which had the potential to manifest through outward aggressive actions. Nevertheless, this same distrust ultimately led to competitive behavior and the determination to exert a show of force and supremacy in other ways - such as 'conquering' what lies above us (the moon and the race to into space). Intertwined in this complex equation is invariably 'politics', which manifests itself strongly in the form of sovereignty and ownership, and, hence, prosperity and dominance.

Clifford and Rubenstein actually point to the fact that mankind recognizes a border and boundary only when it is actually crossed<sup>12</sup> - in this sense, the phrases to 'cross the line' or 'overstep bounds or borders' are often used to show our distaste and dislike for an action. As the Cambridge Dictionary defines, crossing the line relates to an action or behavior 'that is not socially acceptable'. 13 And hence, there is further interconnect, in the sense of politics, which leads to policies and legislative control; and, ultimately, enforcement when such physical acts are perpetrated. Consequently, whilst mankind strives to prosper and to lead, it also needs to be reined in and controlled - and held accountable for subsequent actions. From this perspective there is a legal order - rules that can be expressed through different instruments, known as sources of law. These instruments/sources of the law are applicable in the relevant territory, from which they originated which is termed national or federal law. It is only when International Law, in the form of treaties and conventions (or in the case of regional supranational organizations - such as the EU<sup>14</sup>) implement a direction or a restriction, or action for normative behavior, that the rule of law extends beyond an individual sovereign nation. Furthermore, it only becomes applicable to a contracting State and whilst States maybe signatories to an organization, they do not necessarily sign, ratify and implement all subsequent

<sup>&</sup>lt;sup>4</sup> HR 1508 - Space Resource Exploration and Utilization Act of 2015.

<sup>&</sup>lt;sup>5</sup> Philip E. Steinberg (2009) Sovereignty, Territory and the Mapping of Mobility: A view from the Outside, *Annals of the Association of American Geographers*, 99:3 467–495.

<sup>&</sup>lt;sup>6</sup> Steven Rubenstein (2001) Colonialism, the Shaur Federation, and the Ecuadorian state. *Environment and Planning D: Society & Space*. 19:263-93.

<sup>&</sup>lt;sup>7</sup> Paul Carter (1987) The road to Botany Bay. London: Faber & Faber.

<sup>&</sup>lt;sup>8</sup> John Horace Parry (1974) The discovery of the sea. New York: Dial.

E. Biagini and B. Hoyle (1999) Insularity and development on an oceanic planet. In *Insularity and development: International perspectives on islands*, ed. E. Biagini and

<sup>(</sup>footnote continued)

B. Hoyle, 1-14. London: Pinter.

Thomas Bender (2006) A nation among nations: America's place in world history. Boston: Hill& Wang.

<sup>&</sup>lt;sup>9</sup> Steven Rubenstein (2001) Colonialism, the Shuar Federation, and the Ecuadorian state. *Environment and Planning D: Society & Space*. 19:263-93.

<sup>&</sup>lt;sup>10</sup> Jerry Brotton (1998) Trading territories: Mapping the early modern world. Ithaca, NY: Cornell University Press.

Philip Steinberg (1999) The maritime mystique: Sustainable development, capital mobility and nostalgia in the world ocean. *Environment and Planning D: Society & Space*. 17:403-26.

J.R. Gillis (2007) Islands in the making of an Atlantic Oceania, 1500–1800. In Seascapes: Maritime histories, littoral cultures, and transoceanic exchanges, ed J.H. Bentley, R. Bridenthal, and K. Wigen, 21–37. Nonolulo: University of Hawaii Press.

<sup>&</sup>lt;sup>11</sup> P.A. Chilton (1996). Security metaphors: Cold war discourse from containment to common house. New York: Peter Lang.

 $<sup>^{12}</sup>$  J. Clifford (1997) Routes: Travel and translation in the late twentieth century. Cambridge, MA: Harvard University Press.

Steven Rubenstein (2001) Colonialism, the Shaur Federation, and the Ecuadorian state. *Environment and Planning D: Society & Space*. 19:263-93.

state. Environment and Planning D: Society & Space. 19:263-93.

13 Cambridge Dictionary online: accessed 12 January, 2016.

http://dictionary.cambridge.org/us/dictionary/english/cross-the-line.

<sup>&</sup>lt;sup>14</sup> The Member States of the European Union have agreed, as a result of their membership of the EU, to transfer some of their powers to the EU institutions in specified policy areas. Thus, EU institutions make supranational binding decisions in their legislative and executive procedures, budgetary procedures, appointment procedures and quasi-constitutional procedures'.

 $http://www.europarl.europa.eu/atyourservice/en/displayFtu.html?ftuld=FTU\_1.\\4.1.html.$ 

### Download English Version:

# https://daneshyari.com/en/article/7387701

Download Persian Version:

https://daneshyari.com/article/7387701

<u>Daneshyari.com</u>