THE PLIGHT OF VALINOR: A HISTORICALLY INFORMED PERSPECTIVE ON THE FUTURE DEVELOPMENT OF SPACE LAW AND POTENTIAL EXERCISE OF SELF-DETERMINATION BY HUMAN SETTLEMENTS ON MARS

Marshall McKellar[*]

ABSTRACT

Employing the medium of science fiction as a tool for both entertainment and serious inquiry, this paper utilizes a high-altitude

---

[*] Marshall McKellar is a native of south Mississippi, currently serving as Attorney-Advisor for the Office of General Counsel at NASA's Kennedy Space Center. Marshall received a bachelors in both History and Religion at William Carey University before attending the University of Mississippi School of Law, where he received a Juris Doctor (J.D.) with an emphasis in Air and Space law in 2017 and a Master of Laws (LL.M.) in Air and Space Law in 2021. An avid pilot and recording artist, Marshall resides in Cocoa Beach, Florida, where he can be found surfing with friends before and after work. A quick disclaimer: the views expressed in this article are the author's alone and do not represent the views of NASA or the United States Government.

This article is an abbreviated and updated version of my LL.M. thesis. The first rendition of this article was co-authored and presented by me and Yvonne Vastaroucha as part of the 62nd International Institute of Space Law Colloquium on the Law of Outer Space during the 70th International Astronautical Congress in Washington, D.C. (2019). I would like to give special thanks to Ms. Vastaroucha for believing in these ideas and lending her extraordinary skills to their inception and early development—Όπου και να πας, θα εύχομαι πάντοτε το σερφ να είναι εκεί και να σε συντροφεύει. I must also express great appreciation to my principal thesis advisor, Charles Stotler, for supporting this thesis topic and lending his extensive knowledge of both international law and history to its success. Thank you also to Michelle Hanlon and the Center for Air and Space Law for allowing me the opportunity to pursue subjects and ideas that inspire me, and for facilitating this endeavor with such openness. Completing this article would not have been possible without the unconditional support of both my family and my girlfriend, Sara—thank you for suffering my sporadic absence over the years and defending my efforts as I wrestled to complete this work. I would also like to express appreciation for the Brighton metalcore band Architects and their 2016 album, All Our Gods Have

overview of 17th and 18th century English colonial history as a case study to contemplate the potential future development of space law by a small extraplanetary community faced with the possibility of extinction. The analysis will follow a three-chapter structure, aiming to explore potential futures by considering the past, in hopes that future human expansion beyond the Earth succeeds without repeating those transgressions perpetrated by European, English and—eventually—American imperialism. The first chapter will examine the legal history of self-subsistent English colonies in North America and Australia, observing how these fledgling societies created new legal regimes by incorporating both their European legal heritage and novel concepts of law influenced by a new (to them) and uniquely challenging environment. Chapter Two will then present informed observations—based on certain historical precedents set by previous colonial societies—as to how a newly created Martian settlement might adapt its 21st-century legal heritage to accommodate the needs of a community on the edge of oblivion, anticipating that such a community will likely reshape its inherited legal framework in the interest of its long-term survival. Finally, Chapter Three will analyze how a fragile planetary settlement might defend its potentially novel (and likely controversial) actions under general international law, with special consideration for its potential exercise of self-determination.

PREFACE: A BRIEF HISTORY OF VALINOR[1]

In the year 2047, SpaceX accomplishes what has long been considered an impossible dream: Valinor, the first human inhabited scientific community on Mars, is finally established. This tiny, delicate outpost of humanity is constituted by a small group of daring scientists and engineers, carefully maintaining an advanced array

---

Abandoned Us—the music that fueled countless late nights during the drafting of this article. Finally, this article is dedicated to the work and memory of Patricia Sterns and George S. Robinson, whose influence on this article cannot be overstated.

[1] The following is a description of a fictional community on Mars called Valinor. While this brief history of Valinor is not absolutely necessary to approach the subject matter of this article, it provides some useful context for the theoretical application of legal concepts and meaningful discussion. Readers are encouraged to temporarily suspend disbelief in the interest of academic inquiry and, perhaps, a bit of fun. For readers in a hurry, please feel free to skip to the Introduction.

of scientific experiments and incredible life support systems.[2] Each year sees SpaceX conducting more successful Starship missions to Valinor, and the human society grows increasingly more invested in the realization of humankind's long-awaited expansion into the solar system. For the next two decades, SpaceX pushes its already aggressive business model to the brink, funneling every ounce of capital into Elon Musk's most important (and risky) initiative to-date. An entirely new economy of startup companies raises billions of investor dollars in the hopes of acquiring a market share in the eventual profits of the Valinor project. In the meantime, entities like the International Institute of Space Law (IISL) and the United Nations Committee on the Peaceful Uses of Outer Space (UNCOPUOS) host countless debates and seminars to address the future of Valinor, discussing how it should be governed over time. UNCOPUOS even proposes a series of draft Resolutions to help facilitate an "ideal" legal framework for the community, while the United States military rushes to develop interplanetary defense technologies capable of securing potential vested interests in the future use and exploration of Mars. Inevitably, multiple corporations in the United States (US), China, Russia, Japan and India develop the capability to deliver and return payloads (including humans) to and from Mars. However, after twenty years of exciting scientific discoveries and over US$350 billion invested in its continued survival, Valinor remains monetarily profitless for both its government and private investors. Nonetheless, the community's population continues to grow as more explorers and researchers arrive, along with a growing number of children born into the community by Valinor's original inhabitants. For the first time in human history, there are humans who have never seen the Earth or breathed unrecycled air. Within barely a generation, the inhabitants of Valinor not only represent incredibly diverse racial, ethnic and cultural backgrounds, but also develop an adapted dialect of English—emphasizing the efficient use of short-hand and acronyms—optimized for communicating in the complex weave of artificial life-

[2] The Mars Oxygen In-Situ Resource Utilization Experiment (Moxie) onboard the Perseverance rover is a recently demonstrated proof of concept for technology critical to long-term human survival on Mars. *See* Jonathan Amos, *Nasa's Rover Makes Breathable Oxygen on Mars*, BBC NEWS (Apr. 22, 2021), https://www.bbc.com/news/science-environment-56844601.

support structures that sustain the community. In Valinor, every person performs a necessary function and has a place in the community. The challenges of living in the harsh Martian environment bind the community together in a unified desire to survive. After only a few years, the residents of Valinor begin identifying themselves not by their country of origin, but as Valinorians—representing the steadfast resolve of the community's inhabitants to make Mars their permanent home. Valinorians proudly consider themselves the first Martians, consistently rejecting the Earth-based media's designation of "colonists." A quickly evolving Valinorian culture sees their little scientific community as a relatively blank slate, a second chance for humans to interact peacefully and sustainably with their planetary environment, without the historically repetitive violence and tumult of colonialism. For 20 years Valinor continues to grow and evolve, generating a vast spectrum of intellectual property and making revolutionary scientific discoveries for the benefit of all humankind. However, everything is about to change.

In the year 2067, the world economy experiences an unprecedented collapse in the wake of a deadly viral outbreak, causing many of the space industry's leading companies, including SpaceX, to file bankruptcy. As a result, an increasingly weary Elon Musk is ousted from the SpaceX board of directors, and a majority of the company's shares are purchased by OnlyEarth Corp., a multi-national fossil fuel conglomerate (with its corporate headquarters in the state of Delaware) that sees Valinor as an impending threat to its fiscal security. Over the next three years after its purchase of SpaceX's assets, OnlyEarth steadily and quietly reduces the budget for its space research and development division, "forcing" the company to reduce regularly scheduled supply missions to Valinor. Claiming financial impossibility due to the world economic crisis, OnlyEarth demands that Valinor begin producing large quantities of valuable Martian raw materials in exchange for essential supplies from Earth. Realizing its perilous position, Valinor's leadership sends transmissions to the US Government and the United Nations (UN), requesting immediate action on its behalf to ensure the continued delivery of life-saving supplies. The UN General Assembly quickly passes a resolution stating that space-capable nations should provide immediate aid to Valinor under Article V of

the Outer Space Treaty[3] and the Rescue and Return Agreement.[4] The White House even issues a letter requesting that OnlyEarth maintain its resupply mission. However, Congress is unwilling to appropriate funds to subsidize OnlyEarth's costs in the midst of a worldwide financial and health crisis. When no other Earth-based entity is willing to risk a resupply mission to Mars in a time of unprecedented economic and social upheaval, Valinor's leadership realize they are alone. They have no choice but to rapidly repurpose much of the community's scientific equipment and personnel for sustaining life support functions, food production and *in situ* resource extraction.

Thanks to a herculean effort by its determined residents, Valinor manages to extract enough resources from the Martian surface to satisfy OnlyEarth's unreasonable requirements for a single, small resupply mission. Knowing it can sell Martian raw materials for massive profits on Earth, OnlyEarth publicly announces it will send a resupply mission to save Valinor. While the international community praises OnlyEarth for its altruism and continued dedication to space exploration, Valinor's leadership senses that a storm is brewing. In the face of growing uncertainty, many Valinorians wish to return to Earth and resume their previous lives; however, OnlyEarth's promised resupply mission consists of a single, modified cargo-Starship, with limited life-support systems capable of

---

[3] Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, Jan. 27, 1967, 18 U.S.T. 2410, 610 U.N.T.S. 205 (entered into force on Oct. 10, 1967) [hereinafter Outer Space Treaty]. Article V provides that, "States Parties to the Treaty shall regard astronauts as envoys of [hu]mankind in outer space and shall render to them all possible assistance in the event of accident, distress, or emergency landing . . ." and also, "In carrying on activities in outer space and on celestial bodies, the astronauts of one State Party shall render all possible assistance to the astronauts of other States Parties."

[4] The Agreement on the Rescue of Astronauts and the Return of Objects Launched in Outer Space, Apr. 22, 1968, 19 U.S.T. 7570, 672 U.N.T.S. 119 [hereinafter Rescue Agreement]. Article 3 provides that:

> If information is received or it is discovered that the personnel of a spacecraft have alighted on the high seas or in any other place not under the jurisdiction of any State, those Contracting Parties which are in a position to do so shall, if necessary, extend assistance in search and rescue operations for such personnel to assure their speedy rescue.

Id. at art. 3.

carrying no more than ten people back to Earth. With the vast majority of Valinor's 1,200-person community doomed to remain on Mars indefinitely, work quickly begins anew to amass more raw materials for OnlyEarth's eventual return. Over time—and despite its best efforts—Valinor never amasses enough *in situ* materials to satisfy OnlyEarth. Each resupply mission comes with heftier demands, less space for returning humans to Earth and increasingly aggressive bargaining tactics employed by OnlyEarth to force compliance. All the while, Valinor's pleas to the US and UN are met with largely ceremonial condemnations of OnlyEarth's unsavory business tactics and no tangible action. Seeing no end and little hope in sight, Valinor's leadership eventually fails to comply with OnlyEarth's demands, refusing to continue working as the de-facto slave miners of a corrupt corporate entity. In response, OnlyEarth effectively ends corporate funded re-supply missions altogether, claiming to the US and UN that continued support of the community without guarantee of adequate monetary returns has become financially impossible. However, OnlyEarth then makes an ominous encrypted transmission to Valinor's leadership, implying its intent to "reclaim and liquidate" its valuable corporate assets on Mars. To make matters worse, Valinor's leadership receives communications from its sympathizers in the intelligence community that multiple foreign States are considering decisive military action to take advantage of Valinor's vulnerability and seize both its assets and strategic planetary position. As a result, Valinor's leadership unilaterally establishes an exclusionary zone around the community's primary life-support structures, landing zones and resource extraction zones, broadcasting on all available frequencies that any entity attempting to access the community without permission will be denied access, not barring the use of force.

Although many in positions of power sympathize with Valinor, the severity of the global recession makes it economically and politically taboo (at least, publicly) to focus attention or resources on a small group of off-world scientists growing potatoes in their biological waste. With the flow of corporate resources now stemmed, Valinor's leadership is forced to quickly redesign the sociopolitical and legal structure of its 1,200+ inhabitants to ensure the community's survival. Valinor's people need to generate sustainable nutrients, establish a microeconomy, amass raw materials and intellectual

property to incentivize trade with Earth and somehow implement a stable legal framework that serves the needs of a community edging toward oblivion. Not to mention, Valinor's leadership also has to decide how best to defend themselves and their resources from potentially adverse actions by OnlyEarth or foreign States. From a legal standpoint, Valinor's leadership faces many difficult decisions: can the community continue depending solely on its legal heritage of US domestic law and international space law, or will certain aspects of its heritage soon require adaptations that prioritize Valinor's survival? On the one hand, traditional international law provides Valinor with a much-needed connection to Earth, not to mention the benefits of established precedent. However, recent attempts to plead the authority of established law to Earth's governing bodies fell short in the face of socioeconomic turmoil. On the other hand, modifying its established legal framework could potentially provide Valinor the platform it needs to establish itself as an independent entity, one capable of conducting trade and executing treaties with Earth, even if doing so could potentially create greater uncertainty in an already tumultuous situation. Regardless, Valinor finds itself in both an extremely vulnerable and uniquely opportune situation, balancing on the precipice between extinction and the potential for a bold new future.

I. INTRODUCTION

> . . . space migration, and the concomitant sophistication of intelligence necessary to bring it about, may be unique in its effect on human behavior, perception, and consciousness. The environment and outlook offered by space are unique. The artificial life-support requirement imposes a high degree of biotechnological integration . . . How is this radical change in survival requirements, cultural norms, social expectations, knowledge, and point of view going to affect the space settler? How can the social system here on Earth adapt so as to permit and symbiotically interact with these new requirements, expectations, and perspectives? How can the new migration be facilitated—made beneficial for both earthkind and spacekind? These are the questions of the adolescent space age. These concerns underlie the success or failure of the newly developing space law.

—George S. Robinson & Harold M. White[5]

The last sixty years have generated countless books, articles, Declarations, Treaties and special conferences to debate and construct the potential legal structure of future human space communities.[6] An entire body of international law took shape in the 1960s and 70s to address urgent questions regarding the use and exploration of space, culminating with the Outer Space Treaty of 1967,[7] the Rescue Agreement of 1968,[8] the Liability Convention of 1972,[9] the Registration Convention of 1976,[10] and the Moon Agreement of 1979.[11] The Outer Space Treaty is the first and "doubtless also the most important"[12] of the five treaties, serving as the foundation of the following space treaties and "widely considered to represent

---

[5] GEORGE S. ROBINSON & HAROLD M. WHITE, JR., ENVOYS OF MANKIND: A DECLARATION OF FIRST PRINCIPLES FOR THE GOVERNANCE OF SPACE SOCIETIES 66 (1986). [hereinafter Robinson and White].

[6] *See* George S. Robinson, *No Space Colonies: Creating a Space Civilization and the Need for a Defining Constitution*, 30 J. SPACE L. 169, 174-75 (2004) [hereinafter Robinson, No Space Colonies]. There once was a collaborative project that created a draft constitution for space societies, based on values similar to those enumerated in the American Constitution:

> The Declaration that ultimately emerged from the deliberations is a three-part document. The first part is a ringing preamble embracing the reasons for the Declaration; the second is a reaffirmation of faith in fundamental human freedoms and the inalienable rights of individuals who live in space; and the third is an assertion that the governance of and by space societies should reflect the "will" of the participants. The document was designed to evolve and adjust to equally as evolved realities not the least of which is the changing nature and definitions of what constitutes 'normal' human functions, what in fact is "human," and what are "inherent human rights." The focus of the conference was on the most fundamental values and principles underlining any space civilization.

Id.

[7] Outer Space Treaty, *supra* note 3.

[8] Rescue Agreement, *supra* note 4.

[9] Convention on International Liability for Damage Caused by Space Objects, Mar. 29, 1972, 24 U.S.T. 2389, 961 U.N.T.S. 187 [hereinafter Liability Convention].

[10] Convention on Registration of Objects Launched into Outer Space, Jan. 14, 1975, 28 U.S.T. 695, 1023 U.N.T.S. 15 [hereinafter Registration Convention].

[11] Agreement Governing the Activities of States on the Moon and Other Celestial Bodies, Dec. 18, 1979, 1362 U.N.T.S. 3 at art. 7 [hereinafter Moon Agreement].

[12] BIN CHENG, STUDIES IN INTERNATIONAL SPACE LAW 156 (1997).

Customary international law."[13] In the nearly six decades since the advent of these treaties, much debate within the international law community has centered around questions of State sovereignty and space resource utilization,[14] attempting to logically extrapolate from the UN Space Treaties enough positively and negatively inferred meaning to satisfy future questions with long-dated answers. Still, many others have valiantly contributed ethically sound—if somewhat idealistic—recommendations for future space communities,[15] answering George S. Robinson's call to press "with great urgency to catch up with our unfolding space technology in terms of philosophical, theological, and biocultural constructs necessary for establishing a [space] civilization that reflects not only a framework of values we wish to inculcate at the outset, but the unique demands

---

[13] FRANCIS LYALL & PAUL B. LARSEN, SPACE LAW: A TREATISE 54 (2009) (citing A.E. Gotleib, *The Impact of Technology on the Development of Contemporary International Law*, 170 HAGUE RECUEIL 1981-I, at 115-329; *see generally* HANDBOOK OF SPACE LAW 39-40 (Frans von der Dunk & Fabio Tronchetti eds. 2015).

[14] *See* PROCEEDINGS OF THE POLICY AND LAW RELATED TO OUTER SPACE RESOURCES: EXAMPLES OF THE MOON, MARS AND OTHER CELESTIAL BODIES WORKSHOP (2006), MCGILL INST. AIR & SPACE L., https://www.mcgill.ca/iasl/centre/publications/proceedings; FABIO TRONCHETTI, THE EXPLOITATION OF NATURAL RESOURCES OF THE MOON AND OTHER CELESTIAL BODIES: A PROPOSAL OR A LEGAL REGIME (2009); Marshall D. McKellar, *It's Dangerous Business: The Possible Effects of the Space Resource Exploration and Utilization Act of 2015 on Planetary Defense*, 41 J. SPACE L. (2017) [hereinafter Dangerous Business]; Han Taek Kim, *Fundamental Principles of Space Resources Exploitation: A Recent Development of International and Municipal Law*, 11 J. E. ASIA & INT'L L. 35 (2018); Fabio Tronchetti, *The Moon Agreement in the 21st Century: Addressing its Potential Role in the Era of Commercial Exploitation of the Natural Resources of the Moon and Other Celestial Bodies*, 36 J. SPACE L. 489, 493-95 (2010); Fabio Tronchetti, *Non-Appropriation Principle as a Structural Norm of International Law: A New Way of Interpreting Article II of the Outer Space Treaty*, 33 AIR & SPACE L. 277, 279 (2008); Position Paper on Space Resource Mining, INT'L INST. SPACE L. (Dec. 20, 2015), https://iislweb.space/wp-content/uploads/2020/01/SpaceResource-Mining.pdf [hereinafter IISL Position Paper]; HANDBOOK OF SPACE LAW 789 (Frans von der Dunk & Fabio Tronchetti eds. 2015); Guoyu Wang & Yangzi Tao, *Who Owns the Natural Resources on Asteroids?*, 58 PROC. INT'L INST. SPACE L. 549, 554 (2015); PHILIP DE MAN, EXCLUSIVE USE IN AN INCLUSIVE ENVIRONMENT: THE MEANING OF THE NON-APPROPRIATION PRINCIPLE FOR SPACE RESOURCE EXPLOITATION (2017).

[15] *See* Robinson, No Space Colonies, *supra* note 6, at 173-74; Patricia M. Sterns & Leslie I. Tennen, *The Art of Living in Space: International Law and Settlement Autonomy*, 35 PROC. ON L. OUTER SPACE 416 (1992) [hereinafter Sterns & Tennen, Art of Living in Space]. *See also* Patricia M. Sterns & Leslie I. Tennen, *Jurisprudential Philosophies of the Art of Living in Space: The Transnational Imperative*, 25 PROC. ON L. OUTER SPACE 187 (1982) [hereinafter Sterns & Tennen, Jurisprudential Philosophies]; Patricia M. Sterns & Leslie I. Tennen, *International Law and 'The Art of Living in Space': The Recognition of Settlement Autonomy*, 9 SPACE POLICY 213 (1993) [hereinafter Sterns & Tennen, Settlement Autonomy].

and physical exigencies, as well . . ."[16] Although significant literature exists on the importance of working ahead to facilitate the adoption of "ideals designed to foster the ultimate community"[17] in space, few scholars have discussed what a less idealistic "plan B" may look like during the early history of a successful off-world community. One may argue the de facto impossibility of knowing what will occur in the future, seeing as it is yet to take place, but what if something meaningfully analogous to it already has?

During the 17th and 18th centuries, envoys[18] of English- and European-kind boarded what were, at the time, technologically incredible vessels, and embarked on one-way journeys across nearly impossible distances. Many thousands crossed the immense Atlantic ocean with the intent of establishing extensions of their various imperial benefactors along the coastline of what they considered—whether in temporary ignorance or aspirations of conquest—a "new world," ripe for utilization and exploitation.[19] These people brought with them the cultures, perspectives, ethics and legal frameworks of their *fundator terrani*—their respective homelands. Over time, some of these settlements overcame challenges unique to their circumstances, faced existential adversity from the elements, terrain, disease, hunger, and at times the native peoples they displaced, and eventually evolved into legally and culturally distinct societies that

---

[16] Robinson, No Space Colonies, *supra* note 6, at 175-76.

[17] Sterns & Tennen, Art of Living in Space, *supra* note 15, at 417.

[18] Outer Space Treaty, *supra* note 3. Art. V formally established the concept of astronauts as "envoys of [hu]mankind in outer space," endowing them with a special protected status under international law. While it is possible, for certain limited purposes, to analogize early English and European colonizers as astronauts for their respective cultures and States, it is unsound to make a one-to-one comparison between those and modern professional astronauts.

[19] LAWRENCE M. FRIEDMAN, A HISTORY OF AMERICAN LAW 5 (2019). Friedman writes of the endless stream of incoming Europeans,

> [t]hey spread west and south; they expanded in all directions. They were in conflict with mature itself. But also with other human beings. The land was, after all, not empty; it was peopled with native tribes . . . and there were bitter and bloody wars and battles . . . as settlers poured in, their numbers overwhelmed the natives. The natives also lost the war with disease: sicknesses which arrived with the colonists ended up killing huge numbers of natives, who lacked any sort of immunity.

Id.

lived significantly different lives and possessed different values than their immediate ancestors. Despite the best efforts and best-laid-plans of several *fundator terrani*, "new world" colonies often did not turn out originally as planned; in fact, two in particular eventually evolved into historically and legally unique societies founded on ideas (albeit, selectively applied for hundreds of years to the near exclusive benefit of white men) of democracy and representative government. While acknowledging the colossal failures and unspeakable evils committed against indigenous peoples by English and European colonists in the name of God, King and Country,[20] it is posited that studying the development of law in certain 17th and 18th century colonial settings could provide meaningful insight into how future communities of human beings inhabiting new and challenging environments have the potential to evolve beyond the intention and scope of their original benefactors/*fundator terrani*, whether those benefactors are governments, private entities or a combination of the two. After all, our present societal ambition to become a multiplanetary species is merely the current expression of an ancient behavioral pattern of expansion. While our social and cultural values may change with the passing of single generation, humans have lived in essentially the same evolutionary state and exhibited similar behavioral patterns for thousands of years.[21]

Employing, at need, the medium of science fiction as a tool for both entertainment and serious inquiry, this article utilizes aspects of 17th and 18th century colonial history as a case study to contemplate the potential future development of space law by a small extraplanetary community—Valinor—that is faced with the impending possibility of extinction. The present analysis will follow a three-chapter structure, aiming to explore potential futures by considering lessons of the past. The first chapter examines the legal history of self-subsistent colonies in the misnomer "new worlds" of North America and Australia, observing how these societies created

---

[20] *Id*. at 26-27. Friedman writes of the American colonists specifically, "[t]he history of American settlement . . . was a history of dispossessing the native peoples; sometimes violently, often with cruel and callous disregard of their rights and their very humanity. This history is, in many ways, one long trail of tear."

[21] *See* George S. Robinson, *Must There Be Space "Colonies"? A Jurisprudential Drift to Historicism*, *in* PEOPLE IN SPACE: POLICY PERSPECTIVES FOR A "STAR WARS" CENTURY 207, 209 (James E. Katz ed. 1985) [hereinafter Robinson, Must There Be Space Colonies?].

innovative legal regimes by incorporating both their European legal heritage and some novel concepts of law inspired by a uniquely challenging environment and the necessities of their own survival. The second chapter presents informed observations—based on the historical precedents set by previous colonial societies—as to how a future community like Valinor might adapt its 21st-century legal heritage to satisfy the needs of a fledgling off-world community, anticipating that such a community will likely reshape and adapt its inherited body of space law in the interest of its immediate survival and long-term socioeconomic success. Finally, the third chapter analyzes how an adolescent interplanetary society like Valinor might attempt to defend its potentially unprecedented and controversial actions under existing international law concepts, with special consideration for the principle of self-determination.

Before continuing, it may be helpful to further explain the intent and purpose of Chapter One in analyzing colonial history for a space law context. Firstly, this paper is not intended to present either a comprehensive or novel representation of English colonial history, law, culture or psychology. Neither does this paper espouse any one-to-one comparisons between 17th/18th century colonial peoples and future humans on Mars. It is important to recognize the expansion of English and European colonies across the North American and Australian continents resulted in the cataclysmic decimation of native populations and the enslavement of countless black African and Aboriginal peoples.[22] Even long after the end of the colonial era, black Americans not enslaved were suppressed and segregated, Native Americans were conquered from the Atlantic to the Pacific and forced to "assimilate" to white, Christian Americanism, while both Chinese and Mexican Americans were systematically excluded and, at times, violently driven out of their

---

[22] Friedman, *supra* note 19, at 26-27.

> Tribal groups occupied much of the land, but to many of the colonists, these people did not actually have the same kind of rights a settler had. . . In the long run, of course, the natives were overwhelmed. Exotic disease roared through their populations and decimated their numbers. And they fell victim, in the end, to the insatiable land hunger of the settlers.

Id.

communities.[23] As such, it is not helpful from a historical or legal perspective to make one-to-one comparisons. Rather, the intent of this article is to glean what useful information may be available from the history and evolution of law in a colonial context and apply that knowledge for the benefit of meaningful discussion on the future development of space law by an extraplanetary community. With any luck, applying lessons learned from history could help future human expansion into the solar system avoid the mistakes, conflicts, and bloodshed of previous centuries. This author is by no means a professional historian, nor is this a history paper; however, colonial history—specifically in the North American and Australian continents—provides interesting case studies for the evolution of law in a colonial setting and arguably reveals meaningful trends and potentially comparable (within limits) circumstances to that of future human communities on the Moon and Mars. The language "potentially comparable" is emphasized here from the perspective that "history doesn't repeat itself but it often rhymes."[24] Keeping this concept in mind, Chapter One will present observations on the development of law in North American and Australian colonial societies, observing how these societies created divergent legal regimes by incorporating both their European legal heritage and novel concepts of law influenced by unfamiliar and uniquely challenging environments. Chapter Two will then leverage these observations in a space law context, speculating as to how a future Mars community, such as Valinor, might adapt, in response to such challenging environments and circumstances, its inherited legal framework to better facilitate its short-term survival and long-term socioeconomic success. Finally, Chapter Three will propose ways in which Valinor could defend its potentially unprecedented and likely controversial actions under concepts of international law, with special consideration to the principle of self-determination.

II. CHAPTER ONE – LEGAL HISTORY OF COLONIES

With respect to the legal evolution of self-subsistent colonies in North America and Australia: observing how these societies created

---

[23] *Id.* at 494.

[24] While this quote is traditionally attributed to Mark Twain, there is not a definitive citation to its author or origin.

divergent legal regimes by incorporating both their European legal heritage and novel concepts of law influenced by new and uniquely challenging environments.

> "Law—our highest ideal and our basest nature. Don't look too closely at the law. Do, and you'll find the rationalized interpretations, the legal casuistry, the precedents of convenience. You'll find the serenity, which is just another word for death."
>
> —Paul Muad'Dib[25]

When imagining human communities on other planets, the first images that may come to mind are classic utopian space-societies depicted in television dramas and cheap comics from the 1960s, or perhaps recent Hollywood films dramatizing the soaring ambitions of the modern space industry. These depictions encapsulate the hopeful dream of our species for a better and more promising future in our greater solar system. However, the utopian frontier societies depicted in space-age propaganda and popular films look radically different from actual frontier societies in Earth's history.

Many of the space societies depicted by popular entertainment since the Apollo era seem to have serendipitously overcome the socioeconomic obstacles and resource deficiencies that Earthian societies have always faced. Is it logical to expect a hatchling community in an alien environment to construct and maintain such a utopia? In practice, would these hopeful ideals even begin to provide some measure of efficiency and utility in a planetary environment likely more hostile than any found on Earth?

When considering these questions, it is useful to remember other times when enclaves of humans voyaged near-impossible distances to establish settlements (or, in many cases, "colonies") on the coasts of what they perceived as alien worlds. The practices of both imperial colonization and exploratory settlement making is interwoven throughout human history. From ancient times, colonialism played a catalytic role in the economic and political organization of societies. For example, the first and second Ancient Greek colonizations gave rise to 500 new colonies around the Mediterranean that facilitated the creation of new political systems, essentially invented the City-State, and achieved greater levels of wealth and

---

[25] FRANK HERBERT, DUNE MESSIAH 253 (1969).

prosperity than their metropoles.[26] In more recent times, English and European Imperialism—while not forgetting its accompanying horrors of genocide, slavery and ethnic oppression—unquestionably played a decisive role in the economic, social and political shaping of our planet, affecting the way today's modern world functions. Studying both the abhorrent and novel products of colonialism in North America and Australia may serve as a valuable tool for anticipating ways in which future human communities on other celestial bodies may evolve. George S. Robinson aptly describes the evolution of colonial law as "a reflection of the fears, insecurities, scheming, plottings, and strivings of 'strangers in a strange land,' hostile and precarious but with unlimited development potential," further recognizing that "we can look at the establishment of space communities through the eyes of a legal historian and perhaps determine measurably how these communities will be established in fact, as opposed to how we think they ought to be."[27] With this objective in mind, the following analysis will proceed to examine the legal evolution of self-subsistent colonies in North America and Australia, observing how these societies created divergent legal regimes by incorporating both their English/European legal heritage and novel concepts of law influenced by unfamiliar and uniquely challenging environments.[28]

A. Extractive vs. Settler Colonies

Many economic historians distinguish the practice of colonization into two main categories: extractive and settler colonies,[29] or alternatively, transplant and origin colonies.[30] Extractive colonialism refers mainly to the colonies established by the European

---

[26] *See* Peter Funke, Western Greece (Magna Graecia), *in* A COMPANION TO THE CLASSICAL GREEK WORLD 153 (Konrad H. Kinzl ed. 2006).

[27] Robinson, Must There Be Space Colonies?, *supra* note 21, at 214.

[28] For those on an accelerated schedule, or simply more interested in concepts of international law and space law (i.e. less interested in the minutia of colonial history), feel free to skip to Section E of this chapter, The Five Factors, where the findings of Chapter One are summarized with respect to their usefulness in discussing the future development of space law by an extraplanetary community.

[29] Daron Acemoglu & James A. Robinson, *The Economic Impact of Colonialism*, *in* 1 THE LONG ECONOMIC AND POLITICAL SHADOW OF HISTORY 81, 82-85 (Stelios Michalopoulos & Elias Papaioannou eds. 2017).

[30] Philip Lipton, *A History of Company Law in Colonial Australia: Economic Development and Legal Evolution*, 31 MELB. U. L. REV. 805, 831 (2007) [hereinafter Lipton].

powers in Central and South America, Africa, and South Asia.[31] This type of colonization is characterized by a high percentage of native populations, small numbers of European settlers, a relatively mild climate, and an abundance of natural resources.[32] The settler category primarily refers to the colonial tactics of the European powers in North America and Australasia.[33] It is characterized by comparatively smaller populations of established natives, rapidly increasing numbers of European settlers, an abundance of what the colonists considered—at the expense of indigenous peoples—"unsettled" lands, and relatively harsher, dynamic climates.[34]

Comparative studies on colonies developed during similar time periods—such as Argentina and Australia, or Mexico, Peru, the United States and Canada—help express the striking differences in the institutions established in each area. In practicing extractive colonialism, the actions of Spain in Central and South America, or France and England in the Caribbean, saw the enslavement of native populations, extensive exploitation of the regions' natural resources, and the disproportionate amassing of wealth by a small number of elite traders and imperial governors.[35] These societies often began with extreme inequality, and even after achieving relative forms of independence, the well-established elite classes introduced legal regimes that reinforced their disproportionate share of political and economic power at the expense of the general populace, producing self-perpetuating systems of inequality with little access to wealth or opportunity for any not born into it.[36]

Settler colonies, on the other hand, were often established partly as a natural result of the exploration of new continents by English and European powers, and partly as satellite expansions of their way of life. For example, England's immigration—and penal policies—facilitated a consistent migratory flow to what is now the

---

[31] *See* Stanley L. Engerman & Kenneth Lee Sokoloff, *Factor Endowments, Inequality, and Paths of Development Among New World Economies* 11-12 (Nat'l Bureau of Econ. Rsch, Working Paper No. 9259, 2002) [hereinafter Engerman & Sokoloff].

[32] *Id.*

[33] *See id.* at 14-15.

[34] *Id.*

[35] *See generally id.* at 17-28.

[36] *Id.*; *see also* DARON ACEMOGLU & JAMES A. ROBINSON, WHY NATIONS FAIL 335-367 (2012) [hereinafter Acemoglu & J. Robinson].

United States[37] and Australia.[38] These settler colonies were established with governing institutions that evolved at an unprecedented pace towards partial representation (representation to the extent that white men were represented at a historically significant level), and eventually wielded the power to enact what the represented settlers wanted: "freedom and the ability to get rich by engaging in trade."[39] As a result, the societies formed by settler colonists began their social and legal evolution with institutions already in place that were similar in some ways to their metropole, yet allowed for a relatively wider distribution of land for eligible white men and established fundamental checks/balances against certain governmental abuses of power. Generally, the settler colony method facilitated more economic opportunities for a greater percentage of the settler population (relatively speaking), a far healthier per-capita income for its beneficiaries and set the stage for the evolution and adaptation of inherited institutions that would maximize the long-term growth of the colonial community, even when said growth came at the cost of entire indigenous societies.[40]

B. A Brief Overview of the Ways in Which the Law Evolved in Colonial America and Australia

As previously stated, studying past examples of humanity's expansion into "new worlds" can provide valuable insight when making informed speculations as to the development of future societies on other celestial bodies. Because the purpose of this paper is to present a historically informed approach to the future development of space law in a Moon/Mars community, the settler colonies of North America and Australia, in particular, present interesting case studies for such analysis, seeing as the circumstances of these entities are potentially most analogous in history to those of the engineers and scientists forging a new life in Valinor.[41] In both North America and Australia, legal and societal adaptations

---

[37] Friedman, *supra* note 19, at xix-xx.

[38] Lipton, *supra* note 30, at 808.

[39] Daron Acemoglu et al., *The Colonial Origins of Comparative Development: An Empirical Investigation*, 91 AM. ECON. REV. 1369, 1374 (2001) [hereinafter Acemoglu et al.].

[40] Acemoglu & J. Robinson, *supra* note 36, at 302-334; *see generally* Engerman & Sokoloff, *supra* note 31, at 17-28; *see also* Friedman, *supra* note 19, at 5, 130.

[41] *See generally* R.C. VAN CAENEGEM, AN HISTORICAL INTRODUCTION TO WESTERN CONSTITUTIONAL LAW 151 (1995) [hereinafter Caenegem].

occurred in a relatively short time span, transforming what were once dependent imperial colonies into sovereign nations with unique identities and laws. Considering colonial history in a space law context could serve to inform the best laid plans of those few entities, whether public or private, currently in a position to impact the future of extraplanetary community. Again, the historical circumstances presented here are by no means a one-to-one comparison to those of future off-world settlers, neither are they perfectly consistent enough to serve as concrete indicators of universal trends; nonetheless, from a legal perspective, it is posited that there are enough connections between the collective experience of "new world" settlers and the current generation of hopeful interplanetary travelers to warrant serious thought and consideration as to how the law developed in English colonial environments.

C. The Development of Law in the American Colonies

1. Background

In his book, *A History of American Law*, legal historian Lawrence M. Friedman refers to the American colonial period as one of "restless and insatiable change."[42] A typical American high-school history class teaches a radically condensed narrative that the American colonies refused to accept taxation of their tea and subsequently fought a long and bitter war for independence.[43] As a young homeschooler in south Mississippi, this author was taught that, during and immediately following the war, the newly independent colonies cast aside the burdensome yoke of English monarchy, along with its associated legal structures, in favor of a brand-new system of governance "which broke with so many traditional principles that it can certainly be called revolutionary."[44] The end result of this overly simplified version of American history is a general understanding that one "bad" unit of law (English law) was replaced overnight by a fundamentally "good" and altogether different unit of law (American law) represented in grandiose totality by the Declaration of Independence, the United States Constitution,

---

[42] Friedman, *supra* note 19, at xxviii.

[43] *Id.* at 77-86.

[44] Caenegem, *supra* note 41, at 151.

and the Bill of Rights.[45] Although this narrative is conveniently digestible, the true story of the emergence of American law is complicated and nuanced, reflecting the constantly evolving nature, needs and struggles of people fighting for survival (and dominance) in an unfamiliar world.

Unlike the infamous Russian or French revolutions, where a nation's entire socioeconomic and legal foundations were overturned in the name of achieving utopian States,[46] the American revolution was fought to maintain a long-established status quo.[47] During the approximately 150 years leading up to the American Revolution, the various American colonies diverged ever so steadily away from the identity, will and rule of England, cutting new paths through relative unknowns that eventually became well-trodden walkways by the second half of the 18th century.[48] Some may argue as to whether this divergence was the result of willful rebellion or unintentional ignorance; however, the real question is not whether change was intentional but whether it was necessary.

Friedman makes a compelling case for the law existing as a mirror of society's values, reflecting whichever hands are at the helm of power.[49] Legal historians and space law pioneers George S. Robinson and Harold White similarly observe this principle, anticipating that the methods by which humans have typically defined the law will likely continue into space:

> Our basic tenet, as we understand the origin and function of culturally institutionalized laws, whether on Earth or in space, is that laws and legal systems are strictly intellectual articulations of the ecological needs and interactions of human beings. In turn, these legal articulations will either promote or deter human survival and growth. Laws are institutionalized ideas and values. They comprise the structure and reflect the underlying assumptions of civilized socio-organisms. In Coon's sense, laws can even be seen as the industrialization of ideas—whether the intended function of the product or tool be the

---

[45] WILLIAM FRANCIS DEVERELL, UNITED STATES HISTORY (2012).

[46] Caenegem, *supra* note 41, at 170.

[47] *See* Friedman, *supra* note 19, at 3-4.

[48] *See id*. at 4-5.

[49] *Id.* at xviii; *see also* Myres S. McDougal, *Law and Public Order in Space*, *in* PROCEEDINGS OF THE CONFERENCE ON SPACE SCIENCE AND SPACE LAW 152 (Mortimer D. Schwartz ed. 1964) [hereinafter McDougal].

> physical survival, knowledge, information, aesthetics, or altruism.[50]

Viewed through this perspective, the story of all law, whether Chinese, Russian, English or Martian, is one of consistent evolution and adaptation.[51] This truth is especially evident in the evolution of law in the American colonies, where legal concepts were often retained or discarded on the basis of their inherent convenience, efficiency and usefulness to the colonists. Friedman writes of the incremental evolution of law in the colonies, "old rules of law and old legal institutions stay alive only when they still make sense; when they serve a purpose today, rather than yesterday. They have to have, in short, survival value."[52] The American colonial legal system was not invented out of thin air; rather, it is a patchwork of Dutch, French, Spanish and English law, blended together and progressively mutated through the process of natural selection. In fact, it is a fallacy to speak of American colonial law as a single entity, when there were as many different and unique colonial legal systems as there were colonies, each diverging in ways most beneficial to that colony's immediate success—"the colonies borrowed as much English law as they wanted to take or were forced to take. Their appetite was determined by the requirements of the moment, by ignorance or knowledge of what was happening abroad, and by general obstinacy."[53] In essence, early American colonial law's form was determined by its function, not the other way around.

The early settlers of New England brought with them a mixture of English Common Law (used predominantly by the English aristocracy) and the various local systems of customary law (used predominantly by the common folk).[54] Although the royal common law theoretically reigned supreme in the colonies, the colonists themselves clung to the rudimentary customs with which they were familiar, instigating an ideological tug-of-war between the educated ruling class of England and the everyday people struggling to build a new life from nothing, clinging to the coasts of North America.[55]

---

[50] Robinson & White, *supra* note 5, at 117.
[51] Friedman, *supra* note 19, at xviii.
[52] *Id.*
[53] *Id.* at xx.
[54] *Id.* at xxiv-xxv.
[55] *Id.*

Similarly, future settlers of the Moon or Mars will arrive with a varied toolkit of general international law, domestic space law, national space policy and diverse moral, ethical and religious values. The American colonists were partly aided in their initial legal tug-of-war by the vast ocean that separated them from their imperial rulers, a physical and metaphorical distance that only grew in significance as the various colonies expanded deeper into the North American continent and continuously evolved their own social, economic and ideological norms in response to growing autonomy, harsh elements, conflict with indigenous tribes, and the passing of time. Despite the colonists' initial reliance on England for convenient systems of governance and the lifeline of transatlantic trade, it was difficult from the outset for England to manage its odd and increasingly "unruly children."[56] In general, English control over the colonies in the early-to-mid 17th century was weak and distanced, growing increasingly more demanding and authoritative towards the middle of the 18th century.[57] Not only did the early colonists quickly find themselves differing from their counterparts in England—due in large part to the unique hardships and challenges posed by their North American environment—but the early colonists were equally dissimilar to the men and women who fought the war for independence a century and a half later. This quiet dissonance began as early as the mid-17th century, fueled by the reality that "the legal needs of a small settlement, dominated perhaps by clergymen, clinging precariously to the coast of an unknown continent, were fundamentally different from the needs of a bustling commercial state."[58]

The colonial period saw 150 years of constant change by each colony in ways that made sense for their continued survival and long-term success. This trend would soon be largely replicated in colonial Australia (minus the revolution). The study of American colonial history reveals that the law, in connection with society, adapted to its newfound circumstances in ways neither Britain nor the American colonists anticipated. Western Constitutional history scholar R.C. van Caenegem writes of the American colonists that, "although the political institutions framed by the American

---

[56] *Id*. at xx.

[57] *Id*. at 6.

[58] *Id*. at 1; *see also* Caenegem, *supra* note 41, at 173.

Revolution have proved perfectly adequate for the huge expansion of capitalist industry in the 19th and 20th centuries and the rise of the country to a leading position in the world, this had never been the aim of their creators."[59] Keeping this "huge expansion" in mind, the following chapter will investigate both the ways in which American colonial law developed and the key factors that facilitated it, in hopes that it will provide helpful insight into how future off-world communities like Valinor may evolve their legal framework to account for unique circumstances on a "new world."

Contrary to common understanding, concepts of self-government did not erupt into the early American general conscience out of thin air. Historians like Warren Billings and van Caenegem agree that self-government by the colonies was something neither the Crown nor the colonies anticipated.[60] The idea of self-rule grew subtly over time against the "particular social background" of the many colonies established from New England to the far South.[61] This peculiar environment facilitated a growing separation between those who lived in the old world of England or continental Europe, and those who were discovering a new way of life in what they perceived as the new world of the North American continent. Friedman writes, "what developed on this side of the Atlantic was a culture and a politics of self-government (at least by white males) and the men who ran the colonies got used to running the colonies, and they resented the attempt, by the English, to treat them as colonies."[62] Friedman describes many areas in which the law of the colonies built upon its English legal heritage to create something both familiar and innovative. Those areas most relevant to the subject matter of this paper involve: 1) the simplification of the colonial court system for efficiency; 2) developments in land law; 3) the fluidity of commerce; and 4) the introduction of slavery. Studying how adaptations in these areas of law tracked alongside the needs and ambitions of the colonists provides a valuable perspective as to how one could better anticipate and provide for the needs and ambitions

---

[59] Caenegem, *supra* note 41, at 173.

[60] Warren M. Billings, *'That All Men Are Born Equally Free and Independent:' Virginians and the Origins of the Bill of Rights*, *in* THE BILL OF RIGHTS AND THE STATES: THE COLONIAL AND REVOLUTIONARY ORIGINS OF AMERICAN LIBERTIES 335, 346 (Patrick T. Conley & John P. Kaminski eds. 1992).

[61] Friedman, *supra* note 19, at 5.

[62] *Id*.

of future communities like Valinor, where a fringe community must fend for itself in the face of socioeconomic turmoil, extremely difficult survival conditions and the competing (if not hostile) interests of Earth entities. Again, this is not a history paper, and its purpose is neither to reveal a hidden pattern or code interwoven throughout history, nor to argue the existence of any consistent, prevailing aspect of humanity's evolutionary psychology or biology. Nonetheless, readers may find that the circumstances faced by early colonial societies—and the law that developed in response to them—have sufficient similarities and key dissimilarities[63] with future off-world communities like Valinor to warrant serious inquiry and meaningful discussion as to how future space law could develop on the frontiers of space exploration.

2. Evolution of the Early Colonial Court System

As boats full of soon-to-be colonists left the shores of England for North America, they left behind the complex, stratified trappings of English aristocratic and bureaucratic society. Amongst the most arduous of these stratifications was the fantastically inflated court system, a spider-web of over 100 different juridic institutions jostling for jurisdiction over every aspect of society from royal affairs to the individual tin mine workers.[64] Alongside this bloated court system came hordes of the worst sort of people: lawyers—wielding England's convoluted systems of codes, statutes, common law and customary law to the bewilderment (and often detriment) of the common person.[65] It only makes logical sense that small communities setting out to live in the face of oblivion could not afford to worry themselves with the proprieties and formalities of the homeland. With a touch of hubris, Friedman writes, "that one hundred settlers huddled on an island near what is now the city of Newport, or freezing in the Plymouth winter, should have reproduced this [English] system exactly, would have been both miraculous and insane . . . Necessity was the supreme lawmaker; the niceties came

---

[63] For example, there is currently no evidence suggesting either the Moon or Mars sustains biological life, much less intelligent life. This may prove a mercy as humanity expands into the solar system, especially if we fail to overcome our worst manifestations and succumb to the same evils that have haunted our species for millennia.

[64] Friedman, *supra* note 19, at 6.

[65] *See id*. at 6, 63-70.

later."[66] A lack of "niceties" generally meant that a variation of martial law was adhered to at the outset of newly established colonies, where a single group of people held the power to make and enforce rules, handle disputes and provide for the direction of the community without unnecessary constraints.[67] Let it be understood, the fact that fledgling colonies utilized pseudo martial law as a means of governing did not necessarily mean that the English legal system was cast aside the moment colonists stepped foot off English ships. Rather, the fully developed "niceties" of English law were temporarily placed on hold in favor of what was most efficient at the time. The purpose of this chapter is not to assert that frontier environments necessitated an inherently reductionist approach to lawmaking, but rather that certain English colonial environments catalyzed an essentialist approach to deciding which laws were amenable to the immediate circumstances and which were not (at least, temporarily).

As the colonies grew in size and stability, regular court systems grew as well, dividing into sub-systems and gaining complexity only as their evolving needs demanded.[68] The colonies' ability to do what was necessary and efficient was actually facilitated by the Crown. For example, the Charter of Massachusetts Bay (1629), issued by the Crown for the governance of that particular tract of land, was fashioned according to the charters of contemporary trading companies rather than proper municipalities. Leaders of the corporate-colony were given broad authority to establish whatever laws they deemed necessary for the "good and welfare of the said Companye," so long as those laws were not "contrarie or repugnant to the Lawes and Statutes of this our Realme of England."[69] In the absence of any clarity as to what sort of laws might be considered "repugnant" to the Crown, colonial leadership (with fingers crossed) made rules and established legal systems as needed, without fear (at least, initially) of retribution from the motherland. Colonial charters were drafted in such a way as to facilitate the growth and profitability of the various "Companye(s)," without any apparent

---

[66] *Id.* at 6.

[67] *Id.* at 6, 7.

[68] *Id.* at 7.

[69] *Id.* (quoting DAVID T. KONIG, LAW AND SOCIETY IN PURITAN MASSACHUSETTS: ESSEX COUNTY, MASSACHUSETTS, 1629-1692 23 (1979)).

consideration for their capacity to become self-sufficient.[70] This was due, at least in part, by England's initial lack of an official imperial policy for its satellites. No fully developed policy existed because the Crown—perhaps analogous to today's space powers[71]—lacked an experiential framework for what to expect of societies in the "new world," how they would evolve, or whether they would even survive at all.[72]

Consequently, the early colonial court systems evolved quickly. Early systems of martial law—executed by a handful of powerful individuals—evolved into small "general courts" tasked with handling nearly every aspect of the youngling colonies. These general courts next grew into small pseudo-legislative bodies, with representation by elected "freemen" who simultaneously wielded legislative, executive, and judiciary powers (the concept of the separation of powers did not yet exist in the colonies during the mid-17th century).[73] By 1639, the Massachusetts Bay colony in particular had a recognizable system of high courts and local courts—still wielding practically absolute power—that managed varying aspects of life from the building of highways and bridges to the punishment of heretics and the whipping of "wandering Quakers."[74]

The Virginian colonies, in particular, exhibited an accelerated evolution, beginning with a ruthless system of martial law called "Dale's Code" in 1611.[75] Dale's Code was substituted for a proto-legislature in the early 1620s, followed quickly by a system of local representation in the late 1630s.[76] To help put this rough timeline in perspective, Englishmen in Virginia and Massachusetts graduated from what was essentially martial rule by the sword to a modicum of representative self-government within 30 years. The

---

[70] *Id*.

[71] *See generally* Outer Space Treaty, *supra* note 3, arts. I-XIII. Finalized two years prior to humans first setting foot on the Moon, the Outer Space Treaty established an international legal framework for a myriad of space activities that had not yet been conducted; some may never see practice at all.

[72] *See* Friedman, *supra* note 19, at 7,8.

[73] *Id*. at 8-9.

[74] *See* JOSEPH H. SMITH, COLONIAL JUSTICE IN WESTERN MASSACHUSETTS, 1639-1702: THE PYNCHON COURT RECORD—AN ORIGINAL JUDGES' DIARY OF THE ADMINISTRATION OF JUSTICE IN THE SPRINGFIELD COURTS IN THE MASSACHUSETTS BAY COLONY 65-66 (1961); Friedman, *supra* note 19, at 9.

[75] Friedman, *supra* note 19, at 11.

[76] *Id.*

various colonies were given the right to fend for themselves and they did so with abandon, enticing more and more people to leave the long-petrified English society for a strange new experience in an increasingly promising land.[77]

It is hardly surprising that American colonial leadership would grow to enjoy their relative autonomy, and even actively seek to prevent unnecessary meddling by the English imperial system. In one such scenario, a disgruntled citizen named Dr. Child drafted a letter to England (1646) alleging the leadership of Massachusetts Bay had departed from the "Fundamentall and wholesome Lawes" of the motherland, and pleaded for the Crown to intervene and rectify its wayward colonies.[78] Amusingly, Massachusetts Bay leadership are said to have warned local shipmasters against carrying "complaints against the people of God" to England, lest God cause the seas to rise up and storms assail their ship as He did Jonah in the Bible.[79] Despite such theatric measures levied against potential whistle-blowers, colonial courts began to look more English during the first half of the 18th century, partly due to the colonies' need to handle increasingly complex social and commercial matters, and also due to pressure by England's budding imperial power structures.[80]

Toward the end of the 17th century, England moved to install royal governments in the colonies in an attempt to consolidate power at the expense of colonial representative assemblies.[81] Although these attempts ultimately failed, colonies like Massachusetts were left with a sort of compromise, guaranteeing that all the King's subjects retained the right to appeal cases (valued at over 300 pounds of sterling) to the courts of London, and requiring that all "Orders Laws Statutes and Ordinances" executed by the Colony be sent to England for review and potential veto by the Crown.[82] Despite these administrative inconveniences, the American colonies nevertheless utilized their pseudo-autonomous nature to develop

---

[77] *Id*.

[78] *Id*. at 15.

[79] *Id.* (referencing GEORGE LEE HASKINS, LAW AND AUTHORITY IN EARLY MASSACHUSETTS: A STUDY IN TRADITION AND DESIGN 135 (1960)).

[80] *See id.* at 17.

[81] *Id.* (citing RICHARD B. MORRIS, STUDIES IN THE HISTORY OF AMERICAN LAW 62 (1959)).

[82] *Id*.

noteworthy innovations within the law. Perhaps the most important of which was a simplified and accessible approach to the ownership of land. It was largely the widespread acquisition and utilization of land (both inhabited and uninhabited) that enabled the American colonies to gradually evolve into something entirely unrecognizable to their English counterparts. As will be elaborated in later chapters, land acquisition and utilization was not only a fundamental catalyst in the evolution of the American and Australian colonies but is also at the center of modern discussions regarding the future development of human communities on the Moon and Mars. As subsequent sections will address, the ways in which legal regimes treat resource utilization, trade and property rights could have potentially significant impacts on the success or failure of a future off-world frontier society.

3. Early Colonial Developments in Land Law

It would be difficult in the 21st century United States to remove the concept of land ownership from the American cultural psyche.[83] Perhaps most central to the western concept of land ownership is one's ability to exploit and utilize land. For the early American colonists, the idea of land ownership in general, much less land ownership by the individual common man, was practically outside the realm of possibility.[84] Land in England (and much of Western Europe) was not something one could easily purchase or acquire by other means. Land was the ultimate symbol of power and status, originally distributed by the King in the Middle Ages and held closely by the landed gentry as part of ancient estates passed from generation to generation through the patriarchal line.[85] Accessing land from outside the feudal system was nearly impossible without extraordinary amounts of money or the chance marriage to a wealthy widow. Not to mention, the ancient and laborious English Common Law employed by the ruling class concerned itself primarily with land law, further widening the gap between the high class

---

[83] Friedman, *supra* note 19, at 213-218. ". . .ownership of land did not have the same relationship to power that it had in England. In the United States, ownership of land was crucial—but in a different way. It was, or was thought to be, the very foundation stone of a republic."

[84] *Id*. at 26-32.

[85] *Id*. at 26.

and the common man.[86] Consequently, as the early American colonists established simpler and more efficient court systems to govern themselves in the absence of direct imperial control, they also left much of England's complex land law behind in favor of a quick, simple, and open method of acquiring and divesting real property.[87] Initially, land was bestowed by the King to the colonies through their respective charters (remember, these were fashioned like company charters[88]), with the King withholding certain legal interests in the land. Land outside of New England proper was also bestowed by the King—or his proprietors—and required the periodic payment of "quitrents," a relatively modern and comparatively unrestrictive (by English standards) form of taxation.[89] However, the early colonists resisted paying the quitrents from the outset, making it exceedingly difficult for representatives of the Crown to hunt down and collect quitrent sums.[90] The Crown's difficulty collecting quitrents from American colonists is a handy example of how distance and evolving colonial culture cross-tied the laces of English imperial control over the region, serving as a harbinger of what was to come.

What England had difficulty conceiving was a world in which land was practically infinite by English measurements. The colonies may have struggled to find viable people, livestock and hard money, but there was no shortage of dispensable land, at least, land that could be wrested, often by force or trickery, from the native population.[91] Friedman observes that, generally, "[t]he history of American settlement . . . was a history of dispossessing the native peoples; sometimes violently, often with cruel and callous disregard of their rights and their very humanity."[92] As far as the colonists were concerned, they had nearly unlimited and exclusive rights to an newly discovered planet, and the law recognized virtually no inherent right of land ownership by native tribes. The attitude of the early American legal system towards indigenous peoples' land

---

[86] *Id*.

[87] *Id*. at 27.

[88] *See supra* notes 69-71.

[89] Friedman, *supra* note 19, at 27; *see also* BEVERLEY W. BOND JR., THE QUIT-RENT SYSTEM IN THE AMERICAN COLONIES (1919).

[90] Friedman, *supra* note 19, at 27.

[91] *Id*. at 26.

[92] *Id.*

rights is well summarized by the argument of the Defense (with which the Court agreed) in Johnson v. McIntosh (1832),[93] where the US Supreme Court held that Indian tribes had no right to convey title of their land to individuals, as they held no rights to the land except that of "occupancy," and only to the extent authorized by the United States Government.[94] Although this case was decided long after the early colonial period, it served to legally justify centuries of conquering and expelling Native Americans from their land to make room for the endless stream of English and European immigrants.[95]

Neither the Crown nor early 17th century colonial leadership was prepared to govern a society where land was made available in plenty. The promise of land enticed wave after wave of hopeful settlers to the North American coastline, where even a male servant could acquire title to real property at the end of his tenure.[96] The colonists bought and sold land using an arsenal of convenient and novel means, including crudely fashioned deeds (in formal situations) or simply assigning land in writing on the back of its original paper patent (similar to signing the back of a modern cashiers

---

[93] Johnson v. McIntosh, 21 U.S. 543 (1823), 1823 U.S. Lexis 293, 26. Addressing Native Americans' rights, the Defense writes,

> [t]hey are of that class who are said by jurists not to be citizens, but perpetual inhabitants with diminutive rights . . . an inferior race of people, without the privileges of citizens, and under the perpetual protection and pupilage of the government . . . by the law of nature, they had not acquired a fixed property capable of being transferred.

1823 U.S. Lexis at 34.

The Defense also argued (and the Court ultimately agreed) that the supreme right to land belongs to its "discoverer;" specifically,

> . . .all existing titles defend on the fundamental title of the crown by discovery. The title of the crown (as representing the nation) passed to the colonists by charters, which were absolute grants of the soil; and it was a first principle in colonial law, that all titles must be derived from the crown. It is true that, in some cases, purchases were made by the colonies from the Indians; but this was merely a measure of policy to prevent hostilities . . .

Id. at 36.

[94] *Id.* at 596.

[95] Friedman, *supra* note 19, at 489-91.

[96] *Id.* at 29.

check).[97] The ease with which land could be bought, sold or traded made it the most important commodity of the colonial economy. Friedman writes on the transformational idea of property ownership in early colonial America,

> [t]he very nature of colonial society, of course, implied a new attitude toward land, land ownership, land tenure, land inheritance. Land was a commodity. There were no hoary, ancient "estates." Everything was new—and open. The legal history of the United States was shaped by one fact more than any other: the widespread ownership of land. This colored every aspect of law—and every aspect of society.[98]

When compared to the laws of England, American land actions were already significantly more simple, free and open by the mid-18th century.[99] It must be noted that this expansion in the practice of land ownership and use took place largely without "permission" from the royal government and soon became a status quo that was impossible (at least in hindsight) to reverse. Some key takeaways from this discussion are that, in the absence of direct oversight by the English imperial machine, the American colonists 1) had an immediate need—paired with the de-facto opportunity—to utilize the continent's resources (often to the detriment of its native populations), which contributed to 2) widespread land utilization that fundamentally impacted the identity and attitudes of the colonists themselves. As this author argues, it may behoove current space actors and scholars to also consider possible scenarios in which future collections of humans on distant worlds may discover a similar need and opportunity to occupy and exploit their physical environments—to whatever extent necessary and useful in the interest of both immediate survival and long-term socioeconomic success—and how this could affect their attitudes, identity and resulting legal frameworks over time. Once again, the purpose of this paper is not to assert that future off-world communities will exactly replicate the patterns of previous colonial societies, but rather that previous colonial/frontier societies provide potentially useful case studies for today's legal scholars (particularly space law scholars) to consider

---

[97] *Id.* at 30.
[98] *Id.* at 29.
[99] *Id*. at 31.

when making educated predictions as to how organized off-world communities may adapt to the uniquely difficult circumstances inherent in long-term space exploration and habitation.

4. Colonial Innovations in Commerce

Another invaluable legal innovation utilized by the early settlers was "negotiable instruments," that is, various types of paper currency or "commercial paper."[100] In other words, efficient and trustworthy instruments of trade. At the time of early colonization, the English Common Law had not yet fully integrated commercial law, which included legal concepts for international trade. Instead, colonial and English merchants interacted using other established commercial habits and customs, essentially the de-facto 17th century body of customary international law.[101] Seeing as the colonists had little-to-no hard monies to utilize as currency for international trade, and also considering the colonies' primary mission as royally chartered companies was to develop profitable satellites for the Crown, they began conducting trade with Europe using a variety of soft currencies, such as chattel notes,[102] tobacco notes and even official paper money issued by the colonies.[103]

Along with the colonies' use of soft currency came some necessary legal innovations that facilitated its efficiency and effectiveness. Traditional English soft money was essentially snail money under traditional English Common Law, which provided legal rights and protections exclusively to the original parties under a chattel or tobacco note, leaving any future transferee without legal protection.[104] The colonies, however, could not afford to douse the sparks of a fledgling transatlantic trade economy with such old-fashioned ideas about liquid currency. In the absence of a hard and fast unified imperial commercial law, the colonists took advantage of their pseudo-autonomous circumstances to make commercial paper more fluid. Many colonies, including Massachusetts,

---

[100] *Id*. at 48.

[101] *Id*. at 48-49.

[102] *See* Caenegem, *supra* note 41, at 151 (writing that "[t]he colonials were treated as second-class Englishmen, fit to produce raw materials and buy the finished products from the mother country, without control over their own foreign trade.").

[103] Friedman, *supra* note 19, at 48; *see also* Frederick Beutel, *Colonial Sources of the Negotiable Instruments Law of the United States*, 34 ILL. L. REV. 137, 140 (1939).

[104] Friedman, *supra* note 19, at 141.

Connecticut, Pennsylvania, New York, Delaware, New Jersey and the southern colonies, passed laws guaranteeing that anyone who received commercial paper or monetary notes in the ordinary course of business retained all rights to use, sue and collect on that paper, allowing legal rights in currency to flow with it from hand to hand.[105] In doing so, the colonies were able to generate a trade economy *ex nihilo* and compete on an international scale. As this economy grew more stable in the 18th century, it was able to grow in formality and complexity as needed, demanding an increasingly complex system of commercial laws and processes.[106] This trend was also manifested in one of the most significant and tragic examples (next to the evisceration of Native American people and culture) of the colonies' continued pursuit of "legal innovation" in the name of efficiency and socioeconomic necessity: the introduction of slavery.

Before transitioning into a discussion on slavery in the American colonies, consider for a moment the profundity of liquid currency for the colonies while looking forward to how future off-world communities could utilize non-traditional liquid assets to incentivize trade with other off-world or Earth entities. The recent widespread implementation of cryptocurrencies founded on blockchain technology allows for millions (if not billions) of people in developing countries unprecedented access to value trading and storing capabilities. Countless people who have never had access to physical banks and credit lines can now conduct financial transactions with practically anyone on Earth easily, securely and cheaply on a decentralized network that is throwing world governments into a frenzied rush for monetary control.[107] Blockchain currencies transfer control over currency away from hierarchical institutions and arbitrary gatekeepers to individual people with little more than a smartphone and a connection. Without the need for institutional

---

[105] *Id*.

[106] *Id.* at 48-49; *see generally* BRUCE H. MANN, NEIGHBORS AND STRANGERS: LAW AND COMMUNITY IN EARLY CONNECTICUT (1987).

[107] *See* Philipp Sandner, *The Impact of Crypto Currencies on Developing Countries*, MEDIUM (Jan. 21, 2020), https://philippsandner.medium.com/the-impact-of-crypto-currencies-on-developing-countries-dce44c529d6b.

bank accounts, SWIFT[tm] identification numbers,[108] and a plethora of associated financial intermediaries, individuals can engage in international trade effectively and anonymously without the interference of corrupt government institutions and geographically confined financial systems.[109] Without delving too deeply into potential comparisons between 18th century tobacco notes and currencies using blockchain technology, consider the transitional effects of liquid currency on the American colonies and how a similar shift in value-trading technology could facilitate the success of an off-world community under extreme pressure from both government and corporate financial interests back on Earth. Whether it is by utilizing blockchain networks or some equally innovative system, greater monetary sovereignty and fluidity could help evolve the values—and as a consequence, the legal structures—of an off-world community like Valinor, similar to how liquid currencies facilitated the financial and cultural independence of the American colonies.

5. The Colonial Development of Slavery

The slave trade and its footprint in the colonial legal framework is a harrowing example of the reality that, in the absence (impossibility even) of constant and direct oversight by the Crown due to physical distance, the colonists pursued the legal and economic equivalent of Fermat's Principle: where the easiest path to a desired result was allowed to prevail in the interest of progress.[110] By the mid-17th century, the slave trade was already booming in the American colonies, riding on the back of a profitable plantation economy.[111] During the first few decades of colonization in America, it appears that there existed neither a practice of slavery, nor any legal mention of it; however, both the practice itself and legal documentation of its existence in the colonies soon arose seemingly *ex nihilo*.[112] Long before the law officially recognized slavery, it grew

---

[108] Seth Shobhit, *What is the SWIFT Banking System?*, INVESTOPEDIA (Sept. 14, 2023), https://www.investopedia.com/articles/personal-finance/050515/how-swift-system-works.asp.

[109] *See supra* note 107.

[110] *See generally* T. Smith, *Interpretation of Fermat's Principle*, 135 NATURE 587 (1935), https://doi.org/10.1038/135587a0.

[111] *See* Jonathan A. Bush, *Free to Enslave: The Foundations of Colonial American Slave Law*, 5 YALE J.L. & HUMAN. 417, 419 (1993) [hereinafter Bush].

[112] *Id*. at 421.

within customary practice like a rancid sore, bubbling and spewing refuse until the letter of the law was forced to restate the definition of societal health to accommodate for this terminal disease. Strangely, despite that slavery has been practiced by humans since before recorded history, no contemporary express legal authority for the practice existed in English Common Law at the time of slavery's implementation in the American colonies. In fact, anti-slavery rhetoric was growing increasingly popular in England as early as the late 17th century.[113] Nonetheless, an express common law authority for slavery did not have to first cross the Atlantic from England for early American colonies to readily receive black captives from Africa and elsewhere as permanent laborers in the budding agricultural economy of the southern colonies, and even throughout the homes and estates of wealthy northerners.[114] By the end of the 17th century, slavery was codified across both the northern and southern colonies, steadily and comprehensively entrenching the vile practice deeper into the psyche of colonial culture, all without meaningful interference from the English imperial government that permitted the slave codes in hopes they generate profits.[115]

The primary driver for slavery's sudden arrival was undeniably its economic convenience.[116] Nonetheless, due to the American colonists' increasing reliance on slave labor for the growth and success of their fledgling agricultural economy, combined with the absence of direct prohibitions against slavery under the common law, any aspect of the English legal heritage interpreted as unfriendly to the slave trade "was received selectively, which prerogative theory allowed . . . In the case of the colonists, their prerogative framework permitted them to create a property interest in persons, as well as a private realm for slave governance."[117] The various slave codes designated slaves as chattels, or as freehold property, a form

---

[113] *Id*. at 419-420.

[114] *See* Friedman, *supra* note 19, at 54-57; *see also* Thomas D. Morris, Southern Slavery and the Law, 1619-1860 (1996); Carl N. Degler, Out of Our Past: The Forces that Shaped Modern America 30 (1959); William M. Wiecek, *The Statutory Law of Slavery and Race in the Thirteen Mainland Colonies of British America*, 34 Wm. & Mary Q. 258 (1977).

[115] Friedman, *supra* note 19, at 54-57.

[116] *See* Bush, *supra* note 111, at 438.

[117] *Id*. at 469.

of real estate forever bound to the land.[118] Although there was a general understanding that masters ought to treat slaves with some modicum of fairness, the slave codes (especially in the south) gave slave owners "absolute power and authority over negro slaves;"[119] some even expressly protected masters who beat their slaves to death, so long as the slave's death was "by reason of any stroke or blow given, during his or her correction."[120]

Naturally, the oppression levied upon black slaves by the colonists inspired primal hatred on the part of slaves and primal fear on the part of their masters. The plantation owners of the southern colonies in particular lived in a perpetual "ghastly fog of fear" that the slaves would revolt.[121] In response to this ever-present fear, the colonies created responsive legal regimes to protect themselves from the potential consequences of their evil institution, banning slaves from engaging in trade of any kind, marriage, property ownership, home building, hunting, boat ownership, cattle breeding, gathering in groups, traveling in groups, concocting medicines and especially reading or writing.[122] One may question whether such extreme measures were necessary to maintain control over the slave population, that is, until the statistics become apparent. As of 1770, 12% of the population of New York, roughly 25% of Bostonians, 42% of Virginia, and a whopping 61% of South Carolina's populace were black slaves, pushing the colonists to claw ever deeper for control over this increasingly demeaned and brutalized demographic.[123] There is a tragic irony to the realization that, for all the revolutionary ideals cultivated and expressed by the American colonists regarding freedom, equality, and representation, there existed entire nations living either amongst or in close proximity to the colonists with no voice, no rights, no freedom, no equality and no representation. Van Caenegem writes of this bitter irony:

---

[118] Friedman, *supra* note 19, at 54-55; *see also* M. Eugene Sirmans, *The Legal Status of the Slave in South Carolina, 1670-1740, in* COLONIAL AMERICA: ESSAYS IN POLITICS AND SOCIAL DEVELOPMENT 404, 408 (Stanley N. Katz ed. 1971).

[119] Friedman, *supra* note 19, at 56; *see generally* JOHN SPENCER BASSET, SLAVERY AND SERVITUDE IN THE COLONY OF NORTH CAROLINA (1896).

[120] Friedman, *supra* note 19, at 57; *see also* WENDY WARREN, NEW ENGLAND BOUND: SLAVERY AND COLONIZATION IN EARLY AMERICA 244 (2016).

[121] Friedman, *supra* note 19, at 56.

[122] *Id.* at 56-57.

[123] *Id.* at 58; *see also* BETTY WOOD, SLAVERY IN COLONIAL AMERICA, 1619-1776 90 (2005).

> [t]o what extent self-interest could be at cross-purpose with political credo appeared from the phrases about equality and the inalienable right to freedom used by authors who were themselves slave owners and, with few exceptions, never thought of freeing their human capital. They had no qualms about invoking the equality of men on their own behalf against a tyrannical king, and at the same time denying that equality to the slaves on their plantations.[124]

At this point, it may be helpful to note that the intent of including this information is not to suggest space slavery will soon flourish on Mars. Rather, the introduction of slavery into the American agricultural economy represents an example of how the American colonists pursued their own ends and benefits at times, irrespective of express legal authority from their English legal heritage. With respect to slavery in particular, the American colonies were not concerned with asking for permission and were hundreds of years from seeking forgiveness. Furthermore, the long-term implementation of slavery is an example of how Britain's over-extended hand was not willing (and likely incapable) to intervene when an imperial colony "adapted" its legal framework to accommodate for something as severe as slavery, especially when agricultural profits were at risk. Despite that Britain retained an 18th-century equivalent to Article VI[125] of the Outer Space Treaty's requirement that States maintain "authorization and continuing supervision" over their "non-governmental entities," its official authority and general oversight in American colonial affairs was not enough to prevent their adoption of abhorrent practices in the name of economic growth and convenience. As previously mentioned, the English Common Law did not expressly provide for the practice of slavery; however, its early and extensive adoption by the colonies—further enabled by England's subsequent acceptance of colonial slave codes and practices—allowed for the development of a unique body of slave law in North America. Slavery in the American colonies represents how a series of events, actions, and inactions—despite the presence of government oversight and the absence of express legal authority—can lead to wild legal, cultural and moral mutations when paired with economic necessity and sufficient distance from traditional sources of power. Could

---

[124] Caenegem, *supra* note 41, at 172.

[125] Outer Space Treaty, *supra* note 3, art. VI.

something as terrible as slavery find a place in an off-world community wracked with struggle and conflict? One surely hopes not. Nonetheless, history reminds us that great leaps in distance, technology, and culture can lead to unforeseen innovations for both good and evil. Hence, it is critical that humanity fundamentally improve upon those brutish, short-sighted methods employed by previous expansions, and instead seek to anticipate and ethically accommodate the needs of future off-world communities. With proper knowledge, planning and cooperation, future communities on Mars could have an opportunity to sustainably expand and evolve without the cursed specter of genocide, slavery, imperialism, colonialism and war.

6. Summary Observations

The institution of slavery—along with the implementation of liquid currency, the acquisition (by any means) and commodification of land and the compiling of representative legislative bodies—represent interesting data points for an emerging societal trend that follows the American colonies through the first 150 years of their evolution. The key takeaway is that a group of human beings—living precariously in a foreign environment, facing challenges unfamiliar to anyone living in England, and experiencing a once-in-a-millennia opportunity to start over with a perceived blank slate—appear to evolve, alongside their legal frameworks, with some consistency in ways divergent from the desires, assumptions and expectations of their *fundator terrani* and convergent with the self-interest of the settlers. We see that, in the case of the American colonies, some divergences were genuinely innovative for their time and were eventually adopted by the homeland (paper currency), whereas others were divergent (at least on paper) to the sentiments of the homeland (slavery), or eventually diverged significantly enough to inspire a bloody war for independence (widespread land ownership/representative legislative bodies). The effects of distance, the colonists' perception of starting anew, and the unique circumstances of colonial life in alien lands greatly changed the identity, intent and values of the early colonists. This in turn solidified the evolutionary trajectory of colonial law, resulting in both contextually significant sociopolitical breakthroughs and nearly

insurmountable evils.[126] From the perspective of people in England, what once had been acceptable English colonists devolved into something entirely unrecognizable: Americans. These Americans seemed like vigilante traitors, despite the fact that their colonial transition "was brought about by European immigrants or their direct descendants" and cultivated within the English Common Law system and post-enlightenment philosophy (a European invention).[127]

Eventually, this newly formed society, these Americans, declared themselves independent from England. As Friedman writes, "this was hardly a sudden event; it was a long, slow, development, in which dissatisfaction gradually curdled into a grim resolve, passionate enough to erupt into war."[128] The years leading up to revolution were littered with England's attempts to reclaim control over their wayward children; however, these attempts were too late. The Americans had already tasted the possibilities of self-rule for too long and bitterly resented intrusions into their affairs by the Crown.[129] Although the English revered their own civil liberties rooted in the heritage of the Magna Carta, the American colonies were, in comparison, much further along the path towards democracy by the late 18th century, riding on steeds of land ownership, economic freedom, and representation (at least of white males).[130] However, the revolution did not end with the war for independence. Even before the rejection of English rule, the various colonies began a painful process of reorganization, drafting their own constitutions and selecting which aspects of the English legal system would be kept and which would be cast out forever.[131] On October 14, 1774, the First Continental Congress, attended by representatives from a majority of the colonies, drafted the Declaration and Resolves of the First Continental Congress.[132] With regard to those aspects of

---

[126] *See* Billings, *supra* note 60, at 955.

[127] Caenegem, *supra* note 41, at 151.

[128] Friedman, *supra* note 19, at 77.

[129] *Id.*; *see also* G. EDWARD WHITE, LAW IN AMERICAN HISTORY: VOLUME 1: FROM THE COLONIAL YEARS THROUGH THE CIVIL WAR 113 (2012).

[130] *See* Friedman, *supra* note 19, at 77; *see also* Caenegem, *supra* note 41, at 170.

[131] *See* Friedman, *supra* note 19, at 79.

[132] ELIZABETH G. BROWN, BRITISH STATUTES IN AMERICAN LAW, 1776-1836 21 (1964) (quoting *Declaration and Resolves of the First Continental Congress* at N.C.D. 6, Oct. 14, 1774).

English law chosen for retention by the colonies, the Congress writes, "[the colonies] are entitled to the benefit of such of the English statutes, as existed at the time of their colonization; and which they have, by experience respectively found to be applicable to their several local and other circumstances."[133] Essentially, even before the chaos of war erupted across the Atlantic coast, the colonists were in agreement that the only path forward was to keep what was useful to the circumstances at hand and leave the rest behind.

Even after the war was won and the newly formed United States of America entered a new era under the governance of the Articles of Confederation, radical innovation continued at a rapid pace. The Founders drafted the Articles of Confederation as a direct reaction against the English monarchy, creating a system of government with a strong legislative branch and a much weaker executive.[134] However, this system was fraught with its own short-comings, and the governmental structure that once gave colonists peace of mind instead became the cause of inefficiency and socio-political frustration. Soon, the newly independent colonists matured their political ideology so significantly that the confederation of states participated in the creation of an entirely new form of government. Historian James E. Viator writes:

> [t]here was much room for improvement to the system that existed under the Articles [of Confederation], especially in commerce and foreign policy … Public opinion gradually shifted towards nationalism because the public itself perceived problems that were not being addressed by the Confederation Congress and perhaps were not solvable under the Articles.[135]

After only a few short years under the Articles of Confederation, the colonists' quickly-evolving identity as a free society made possible the drafting and ratification of the American Constitution and the Bill of Rights.[136] A brief overview of the American colonial period reveals how the settlers of this "new world" appear to lean toward doing what was necessary, as it was necessary, for the

---

[133] *Id.*

[134] Louis J. Sirico Jr., *How the Separation of Powers Doctrine Shaped the Executive*, 40 U. TOL. L. REV. 617, 622-23 (2009) [hereinafter Sirico].

[135] James E. Viator, *Give Me That Old-Time Historiography: Charles Beard and the Study of the Constitution, Part II*, 43 LOY. L. REV. 311, 324-25 (1997) [hereinafter Viator].

[136] *Id.* at 323.

amount of time it remained necessary, all in the name of ensuring their continued growth, success and survival as an adolescent society in an alien environment. The next section of this paper observes how this concept resurfaces under similar circumstances in the Australian colonies, providing additional data points for potential patterns that could also resurface when future communities are tasked with defying all odds to succeed under extreme circumstances on the Moon or Mars. For those wishing to evade further review of colonial history, please feel free to skip on to Section E, where key takeaways from this section on colonial history are discussed in the context of contemplating how legal frameworks will adapt and evolve in future off-world communities. For any reader brave enough to have ventured this far, the investigation into the evolution of law in the Australian colonies will begin.

D. On the Australian Colonies

1. Overview

Australia's genesis as a British imperial colony has very interesting implications for the purposes of this paper. If Britain's colonial expansions make a book, North America's chapter is followed immediately by Australia's chronologically, ideologically and socioeconomically. Just as England's colonial story came to a close after the American war for independence, a new story began in Botany Bay, on the Pacific edge of the newly "discovered" territory of New South Wales (southeast Australia). In many ways, Britain's colonies in Australia are the immediate successors to those in North America, serving as a second attempt or America 2.0. The British imperial machine saw the opportunity to start fresh in Australia, with the benefit of economic and ideological lessons learned from its failures in North America, as well as new methodologies for effective colonial expansion. Although history reveals that Australia would also diverge from England as its own unique society and eventually acquire its independence, this transition took place with comparatively less bloodshed (at least, between the colonies and the Crown).

The colonists in Australia and North America shared much in common: other than a shared disregard for the rights and humanity of indigenous peoples, both were starting new ventures far from

their homeland, facing difficult challenges in a harsh environment and changing/evolving both culturally and ideologically according to the demands of their circumstances. Both colonies provided opportunities for lower rungs of old English society to forge new lives, innovate societal structures and evolve novel cultural identities. Not to mention, both colonial systems accomplished this while under the thumb of British imperialism. In light of our previous discussion of how the Americans grew into their independence from England, a curious mind may wonder whether Australia could have also fought (and potentially won) a clean break from England? Regardless, one important factor arguably helped prevent the breakdown of Australian/English relations and continuously facilitated the generation of massive wealth (for both England and the Australian colonies): simply put, the British Empire roughly anticipated the Australian colonists' needs and, at least temporarily, tried to account for them.

Although its foresight was often clunky and mismanaged at best, the British Empire played a smarter game in Australia than in North America, emphasizing long-term mutual benefit over its immediate desire for absolute control. Consequently, the story of colonial Australia serves a dual purpose for this paper. First, Australia's early colonial story is an interesting example of how human beings change, evolve and adapt their legal frameworks under a roughly analogous set of circumstances to those of an off-world frontier community like Valinor. Second, it provides a compelling argument for the potential benefits of anticipating the needs of humans experiencing such unique circumstances and responding in a way that is mutually beneficial for both the settlers and their State/corporate benefactors, rather than needlessly repeating the sins of historical imperialism through violence and forceful domination. One of the most compelling scholars to consider colonial history in the context of future off-world communities, George S. Robinson, writes on preventing the practice of colonialism in space:

> [W]e must not ignore the historical lessons of imperialism, militarism, and economic colonialism, and the strong possibility that they will also characterize human behavior and culture evolving in outer space. We must not ignore the glaringly antithetical lessons of history that emphasize the ultimate violence of colonialism and militarism as the primary tools of cultural

> and economic imperialism. Put differently, can we afford to ignore these lessons? It may well be that the films Star Wars and The Empire Strikes Back are not only entertaining but may also represent the simple declaration that the nature of humankind will not undergo some elevated evolutionary change while transitioning from Earth to near and deep space.[137]

In essence, Robinson suggests colonial history provides an important warning to future groups of humans leaving Earth to cultivate new worlds. Studying how groups of people have behaved in the past under certain adverse or novel circumstances offers historical data points for the relative success or failure of societal decision making in extreme frontier environments. Bear in mind that the purpose of investigating Australia's colonial beginnings is to add an additional layer of historical context to later discussions about the development of space law in a future Moon or Mars community. The evolution of law and society in colonial Australia reveals similar trends and circumstances to that of colonial America, with several key differences that allowed for Australia to achieve its functional independence with greater haste and without open war with England. In the interest of exploring more potential data points for use by future off-world communities, this section will briefly describe the origins of colonial Australia, its unique cultural evolution, divergence from English norms—specifically with regard to land ownership, treatment of the First Nations population and company law—and rapid journey to self-rule.

2. Origins

Similar to how colonialism viewed the majority of North America, English and European colonists perceived the continent of Australia as a brand-new world, a *Terra nullius* (unclaimed land) free for the taking. This story begins when English naval lieutenant James Cook sailed the eastern coast of the Australian continent in 1770, naming it New South Wales as he claimed the continent in the name of the British Empire.[138] Of course, Cook's arrival came thousands of years after that of Polynesian mariners and some

---

[137] Robinson, Must There Be Space Colonies?, *supra* note 21, at 209.

[138] STUART MACINTYRE, A CONCISE HISTORY OF AUSTRALIA 1 (3d ed. 2009) [hereinafter Macintyre].

40,000 years after its original human settlers first appeared.[139] The first fleet of English settlers to arrive on the continent were commanded by an English colonial officer named Arthur Phillip, landing in Sydney Harbor (Botany Bay) in January of 1788.[140] One thousand officers, troops, civilian officials and convicted felons (spared the hangman's noose in England) were among the first European residents of a harsh, foreign landscape they did not understand. These "goalers" and "goalees" "[prepared] the way for later immigrants, bond and free, who spread out over the continent, explored and settled, possessed and subdued it."[141] Not entirely unlike a well-planned long duration spaceflight, the first fleet of Botany Bay settlers traveled across the ocean with everything they believed would help ensure their viability, such eleven ships, ample seed supply, ploughs, harnesses, horses, herd livestock and enough food for two years.[142] These tools and supplies were necessary for any chance of survival in the scorching hot, sandy, swampy, practically uninhabitable—from the perspective of Europeans—Botany Bay of that era. The land was at first agriculturally poor, rejecting the first crops of vegetables, blunting hoes and axes, breaking shovels and swallowing unattended livestock with abandon. The temperature often reached 44-degrees Celsius, wreaking havoc on the

---

[139] *Id*. at 29.

[140] *Id.* at 1.

[141] *Id*. For additional context on the evolving literary representation of Australian colonial history, *see* Alan Lawson, *Acknowledging Colonialism: Revisions of the Australian Tradition*, *in* AUSTRALIA AND BRITAIN – STUDIES IN A CHANGING RELATIONSHIP (A.F. Madden & W.H. Morris-Jones eds. 2005). Lawson writes,

> Some readers may already be aware of the recent shift in how contemporary scholars of Australian history review and interpret the continent's recent English/European colonization to account for the obfuscating effects of colonialism on the shaping of historical literature in general…. In the developing (or rather, changing) awareness of the forms of the Australian self-image and particularly its literary manifestations we have reached a very important stage. The problems which are now clearly apparent are characteristically colonial ones. These problems have caused discrepancies between image and experience and discontinuities between culture and context, the range and dimensions of which are now being recognized.

Id. at 135.

[142] *See* Macintyre, *supra* note 138, at 2.

sensibilities of the Englishmen and women.[143] Historian Stuart Macintyre writes of this period:

> These were the hungry years when men and women fought over food and listless torpor overtook even the most vigorous. The fact that the rations were distributed equally, with no privileges for rank, alleviated resentment. Even so, the colonial surgeon wrote of "a country and place so forbidding and so hateful as only to merit execration and curses."[144]

The settlers soon found fertile soil on the upper reach of Sydney Harbor, a major milestone for facilitating their continued survival. Somewhat miraculously, within a mere four years of their arrival, the convicts were farming 600 hectares of land, fishing successfully from the harbor and growing healthy flocks in the grassy Cumberland Plain.[145]

The imperial officers that led the early penal settlements were deeply paternalistic, thinking of Australia's destiny "not as mere imitation [of England] but as striking out anew."[146] They believed that the vast island-continent offered the chance to leave behind the Old-World troubles of poverty, privilege and rancor. Under the banner of a similar practice to "discovery" doctrine employed by the American colonies,[147] the English imperial machine doggedly designated the entire continent as a *Terra Nullius*—now an abandoned legal relic of a bygone era, meaning a place without a possessor—and no amount of time spent with the Aboriginal, or more appropriately, the First Nations, people would change the white man's perspective of his divine entitlement to the entirety of the Australian continent. Whether by violence or manipulative dispossession, the

---

[143] *Id.* at 32-33.

[144] *Id.*

[145] *Id.*

[146] *See id.* at 3.

[147] *See* Johnson v. McIntosh, *supra* note 93. Chief Justice Marshall writes,

> [i]f discovery be made, and possession of the country be taken, under the authority of an existing government, which is acknowledged by the emigrants, it is supposed to be equally well settled, that the discovery is made for the whole nation, that the country becomes a part of the nation, and that the vacant soil is to be disposed of by that organ of the government which has the constitutional power to dispose of the national domains . . .

Id. at 595.

prevailing belief of the British Empire was that the world belonged to the "civilized" white man.[148] As slavery and the decimation of Native tribes was to the American colonies, Australia's original sin was the dispossession, oppression and near elimination of the First Nations from the continent.[149] Tragically, England chose to view the natives as cave people, hardly more than animals.[150] However, the First Nations had complex religions, encoded ecological wisdom, remarkable genetic variety and maintained a long-term social cohesion over an extraordinary period of time.[151] Nonetheless, English settlers quickly dispossessed the natives of their ancestral land. In New South Wales "there was little effort . . . to maintain the existing order, to enter into commercial relations with their inhabitants or recruit them as labour; instead, these lands were cleared and settled as fresh fields of European endeavour."[152]

Traditionally, there have been two competing perspectives as to the nature of the Sydney settlement. The first is that it was simply an improvised dumping ground for convicts, seeing as England could no longer transport its undesirables to America.[153] The second was that the settlement of New South Wales (NSW) was a strategic imperial objective, designed to enhance England's naval and trade capabilities.[154] The truth is that both are equally true, each serving the interests of the other.[155] By establishing a penal colony in NSW, the British Empire not only acquired an effective laundry chute for its social deviants, but also gained the advantage of a naval base for British expansion into Asia and the south Pacific, established with the benefit of essentially free labor.[156] Some interesting parallels may be drawn here between the strategic objectives of the British imperial navy and the modern-day incentives of the

---

148 *Macintyre*, *supra* note 138, at 3-4.

149 *Id.* at 19-20. Macintyre responds to common misconceptions regarding how the indigenous peoples in Australia were dispossessed, "[i]t required a substantial European effort to subdue the indigenous peoples of the regions of settlement, and no less an effort to justify their expropriation. Notions of providence and destiny dignified images of the native based on cultural difference and racial inferiority."

150 *See id.* at 19-20.

151 *See id.* at 4.

152 *See id.* at 19.

153 *Id.* at 17-18.

154 *Id.*

155 *Id.*

156 *Id.* at 18-19.

United States and China to establish a permanent base on the Moon as a stepping stone to Mars.

The 18th century saw England and France emerge as the world's leading European powers, waging war against each other intermittently. By the time England lost most of North America to the American colonists, the French were on the verge of their own revolution and Britain was straining under the weight of its vast empire.[157] Following England's defeat in the Americas, it turned east for imperial conquest, looking to Australia as a potential new "new England." Furthermore, after England survived the Napoleonic Wars in 1815, the British imperial machine recognized that maintaining an empire through brute military strength was too expensive and burdensome, and chose instead to shift its strategy in Australia towards encouraging its colonies to become self-sustaining through economic development and international trade.[158] After all, the American and French revolutions served as a solemn reminder of the dangers of ruling with too heavy a hand.[159] In hindsight, Britain's relaxed approach to colonial governance served to better facilitate the growth of the Australian colonies and generally succeeded in helping the Crown avoid another costly war for independence on a continent thousands of miles from the Imperial seat.

There may be important lessons to garner from Britain's initial oversight of the Australian colonies, specifically in the context of developing space law for future off-world communities. What level of efficiency and aptitude can one reasonably expect of government oversight, whether military or civilian in nature, when the arm of authority is stretched across millions of miles of open space? To what extent can the budgets of defense agencies (much less those of civilian agencies) afford to invest in maintaining tight control over people and events literal worlds away? Under such circumstances, what will the words "authorization and continuing supervision" mean when applying Article VI of the Outer Space Treaty[160] to a human settlement so physically distant from Earth that even the most advanced communication systems require upwards of 40

---

[157] *Id.* at 20.

[158] *Id.* at 18-19.

[159] *See id.* at 20.

[160] Outer Space Treaty, *supra* note 3, art. VI.

minutes to send and receive signals?[161] Any potential answers to these questions are difficult and uncertain at best, a conundrum likely shared by the British imperial government while attempting to govern distant colonies experiencing vastly different circumstances. For the Australian colonies, the outcome of this conundrum was a growing sense of cultural and economic independence, an evolving identity that fed on the unprecedented opportunities available to England's forgotten castaways in a "new" continent.

3. Unprecedented Opportunity for England's Forgotten People

By the early 1790s, it became apparent that the penal colony of New South Wales did not have the necessary natural resources to trade in timber and flax for the Imperial navy; consequently, it was of urgent importance that these fledgling communities become self-sufficient by other means. As thousands of more convicts arrived, and additional settlements were established both along the coast and across the straits to Van Diemen's Land (now Tasmania), the officers and convicts alike took up sealing, whaling, hunting and fishing until the land was finally wrangled into submission for agriculture.[162] In order to facilitate their survival, the NSW colonies began trading as early as 1792, when ships carrying goods from Cape Town and the United States first arrived to do business for whale oil and seal pelts. Incredibly, merchants were soon shipping pork from Tahiti, potatoes from New Zealand, rum from Bengal, sandalwood from Fiji and pearl-shell from the Melanesian island, eager to trade with the fledging society on the edge of the known world.[163] By learning new trades and utilizing the natural resources of Botany Bay, the NSW colonies were able to quickly incentivize international trade, outlast their initial agricultural woes and establish a steady growth rate for the colonies.

Interestingly (and essential to one's understanding of the culture in early Botany Bay), both penal officers and ex-convicts alike entered into this budding trade economy (often as partners), experiencing economic opportunities that would otherwise have been

---

[161] *See Mars 2020 Mission Perseverance Rover: Communications*, NASA SCI., https://mars.nasa.gov/mars2020/spacecraft/rover/communications/ (last visited Apr. 15, 2022).

[162] Macintyre, *supra* note 138, at 37.

[163] *Id*. at 38.

inaccessible in Europe.[164] This peculiarity of the early Australian economy allowed for the creation of a sturdy financial framework for the State in parallel with an active private sector.[165] Thanks to several budding markets and the great distance from direct English oversight, the roles within the penal settlement became increasingly blurred, as officers, convicts and emancipists (convicts whose sentences were completed) engaged indiscriminately in commercial pursuits.[166] Within an essentially classless community, market forces were allowed to emerge from scratch, avoiding the hurdles faced by the slow-moving economies of Europe deeply rooted in the remnants of feudalism and a fear of capitalistic ideas.[167] Australian society was small, closed, surprisingly educated—seeing as the majority of convicts had committed petty or political crimes[168]— and unified by a common goal: to make the best of the situation at hand.[169] The various commercial and public (and often controversial) roles emancipists often took within the colonies led not only to the mingling of the classes, but served to accelerate the eventual recognition and protection of their individual and economic rights.[170]

The early years of Botany Bay saw an extraordinary level of collaboration and mutual benefit shared by the colonist prisoners and their wardens. Despite every indication by imperial policy that this was not to be the case, the convicts continuously took advantage of their unique position—worlds away from the seat of power—to reforge their identities. Within the first several decades of colonization, the NSW judicial system had already strayed from classic notions of traditional English Common Law as amateur judges and lawyers adapted inherited concepts of law to fit local needs.[171] Even when hard and fast rules were made to limit the

---

[164] *Id*.

[165] IAN W. MCLEAN, WHY AUSTRALIA PROSPERED: THE SHIFTING SOURCES OF AN ECONOMIC GROWTH 49 (Joel Mokyr ed. 2013) [hereinafter McLean].

[166] *See generally id*. at 44-50.

[167] *Id.* at 46.

[168] BRUCE KERCHER, AN UNRULY CHILD: A HISTORY OF LAW IN AUSTRALIA xiii (1995) [hereinafter Kercher].

[169] *See* McLean, *supra* note 165, at 47.

[170] *See id*. at 47-49.

[171] *See* Kercher, *supra* note 168, at 22-23, 42-46, (1995). The very first case to be adjudicated in the colony sowed the seeds of this eventuality. In the Kable vs. Sinclair case, the Kable couple, both condemned to death and shipped as penal workers to NSW, sued

convicts' economic opportunities, they seemed to dissolve in application. For example, the first Governor of the Botany Bay colony, Arthur Phillip, strictly prohibited the building of all but the smallest boats by convicts; yet within twelve years of its establishment, there was a thriving shipyard and ship-building economy in Sydney Cove, promulgated predominantly by convicts and ex-convicts.[172] The ship manufacturing center had been created as a method of punishing convicts; however, it appeared to have the opposite effect, helping establish soon-to-be ex-convicts as expert ship-builders and sailors, ready to partake in international trade and wealth building.[173] These emancipists were a unique collection of tough, resourceful people. Governor Hunter, a successor of Arthur Phillip, once complained of the convict community that "a more wicked, abandoned and irreligious set of people have never been brought together in any part of the world."[174] However, this was the nature of humans struggling to live in a harsh environment. The convicts had no backup plan, no insurance and nowhere else to go except the grave. Their options were either to succeed in earning freedom or die working under their colonial officers. The simple fact that there existed an opportunity to succeed at all made the penal colonies an odd sort of paradise compared to the petrified, old-world society in England.

As early as 1800, two-thirds of the NSW colonists were free folk, most having previously been convicts. Some ex-convicts "accumulated substantial wealth, most ate better, their children were more successful and they had a keener sense of their entitlements than the agricultural labourers or urban poor of the United Kingdom."[175] This unintentional phenomenon inspired jests in England about the potential benefits of getting caught stealing: "it may eventually lead to the possession of a farm of a thousand acres on the

---

Duncan Sinclair, the master of a First Fleet vessel, for the loss of their belongings during their journey of exile to Australia. Although Blackstone's Commentaries stripped condemned criminals of any legal right, the appointed judge awarded £15 damages for the lost baggage. This ground-breaking decision not only recognized the right of personal property ownership to criminals, but also the ability to enforce those rights in the NSW court system, clarifying that the convicts' legal position would be close to that of an English citizen.

[172] Macintyre, *supra* note 138, at 42.

[173] *Id.*

[174] *Id.* at 43.

[175] *Id.* at 45.

river Hawkesbury."[176] Such jokes were not without a grain of truth, and this truth was only possible due to the "episodic and inconsistent" nature of British imperial governance.[177] At the turn of the century, the colonies of NSW (now over 5,000 strong) had already spread from Sydney to the Hinterlands, Norfolk Island and Van Diemen's Land, growing both mercantile and agricultural economies. These small settlements achieved a high standard of living in record time, and less than thirty years from their founding were already "straining the penal principles that had governed its foundation."[178] A period of rapid change soon commenced, and a culturally distinct colonial society began to take shape; constituted by people that resented attempts by their imperial parents to maintain control over their unruly children.

4. Growing Animosity Towards Imperial Rule and a Vision for the Future

By all accounts, the convicts, emancipists and even colonial officers enjoyed their relative independence from the greater British Empire. Despite the naturally tenuous jailer/jailee relationship between the colonial officers and the convicts/ex-convicts, they had worked together to survive the hungry years and become self-sufficient in a ruthless land. Consequently, when England installed a famously cruel naval officer named William Bligh as a "law and order" governor in 1806, the New South Wales Corps (his own men!) forcibly overthrew Bligh barely two years later.[179] Bligh had attempted, amongst other things, to prohibit the barter of alcohol for food or wages, a practice begun two decades earlier and embraced by soldier and convict alike.[180] Unable to ignore such a blatant rejection of imperial authority, England dispatched a new Governor to NSW named Lachlan Macquarie, along with a new regiment to replace the mutinous New South Wales Corps.[181] England hoped Macquarie would reinstate order and straighten out the wayward colonists, and in some ways he did. However, Macquarie's primary

---

[176] *Id.* at 42.
[177] *Id.* at 39.
[178] *Id.* at 42.
[179] *Id.* at 46-47.
[180] *See id.*
[181] *Id.*

legacy would not be of squashing rebellious military officers or crushing the spirits of newly independent colonists. Instead, Macquarie's legacy is one of construction, expansion and a vision for the future of NSW and its unique people.[182]

In order to ensure that law and order was reinstated in NSW (and in what could serve as a historical example of how the exercise of "authorization and continuing supervision"[183] can be at odds with the healthy administration of a colony by a *terra fundator*), Macquarie was given both authority and funding to do whatever he deemed necessary to wrangle the colonies into submission. However, instead of bringing down hellfire on the rebellious colonists, Macquarie took advantage of his privileged position—empowered by the absence of higher imperial oversight—to help turn the survivalist colonies into a legitimate society.[184] Only several years after arriving in Sydney, Macquarie headed the construction of colonial bank, introduced a local currency, redesigned the layout of Sydney, built roads, bridges and lighthouses, new barracks for the soldiers and a hospital for the convicts (part of which is still used today).[185] Between Macquarie's arrival in 1810 and 1820, the colonies at Sydney and Van Diemen's Land grew to populations of 26,000 and 6,000 respectively, receiving thousands of new convicts and free entrepreneurs alike.[186] Although Macquarie was essentially an all-powerful despot delegated authority by the English Crown, he was fairly benevolent and maintained an idyllic vision for the future of his colony. Based on his writing and commentary, he viewed NSW as a unique place capable of both effective punishment and positive reformation. He believed the convicts deserved a chance to fashion themselves for the better, for "when a man is free, his former state should no longer be remembered, or allowed to act against him."[187] Macquarie insisted that "this country should be made the home and a happy home to every emancipated convict who deserves it."[188] What were once mere castaways of the old society were now the forgers of a new society, one built up from the ground by a

---

[182] *Id*. at 47-48.
[183] Outer Space Treaty, *supra* note 3, art. VI.
[184] Macintyre, *supra* note 138, at 47-48.
[185] *Id.*
[186] *Id*. at 48.
[187] *Id*.
[188] *Id*.

combination of the fear of a flogging, desperate necessity in the face of possible extinction and hope for a better future. In the words of Macintyre,

> [e]verything was topsy-turvy, and even the attempts to faithfully reproduce familiar [English] institutions brought hybrid results. A vigorous and often rancorous society had emerged in which captivity meant freedom, and the gentleman chafed while the outcast enjoyed the governor's favour. . . the life that was emerging blended what was brought with what was found."[189]

Similar to how the American colonists created a unique and vigorous society by fusing inherited ideas from Europe with their own quickly evolving identity, the Australian colonists (imperial leadership included) quickly followed suit in response to their own newfound freedom and independence from the old-world mentality. The combination of struggle and adversity, paired with real potential for unprecedented opportunity, planted the seeds of what would eventually become a new and distinguishable people—people not afraid to adapt inherited legal structures to better serve their immediate needs.

5. No Mercy at the Hands of Progress

Similarly to how English Common Law initially contained no express authority for the institution of slavery or the decimation and displacement of Native peoples in the American colonies, the earliest position of the English government towards the Australian First Nations population was that Governor Phillip and the settler convicts were to "open an intercourse with the natives, and to conciliate their affections, enjoining all our subjects to live in amity and kindness with them."[190] Initially, Governor Phillip endeavored to comply, however, the white man almost always struck with disproportionate force against the Native people. One officer of the marines admitted in his journal that attacks by the Aboriginal people

---

[189] *Id.* at 52.

[190] *Id.* at 33. Although it is largely considered that this was merely a ceremonial pleasantry, it does evidence that the Crown's position on the native population was at least not one of open aggression at the outset.

were due to the "unprovoked outrages committed upon them by unprincipled individuals among us . . ."[191] Unlike in North America, the British government forwent entering into sham treaties and exploitative land purchase agreements with the natives. Instead, it simply proclaimed absolute sovereignty over the whole of eastern Australia under the now defunct legal doctrine of *terra nullius*.[192]

With the growing profitability of the merino wool industry (constituting half of the British wool market by 1850), pastoral life was seen as the path to wealth. The wool industry ruthlessly pushed the First Nations deeper into the continent, absorbing their lands at a rapid pace and often with horrible violence.[193] As a result, native populations shrank from 600K to 300K between 1821 and 1850, those who did not succumb to disease, hunger or violence were integrated into the pastoral workforce as one of their only means of survival.[194] Tragically, the treatment of First Nations people by Australian colonists replicated a trend that had already been adopted in North America, where the settlers valued efficiency, "progress" and profit above all else. As a result, the new frontier society quickly spread across the landscape, becoming increasingly more secure and rooted in the strange continent. Meanwhile, the First Nations dwindled just as quickly and nearly disappeared from the Earth. Although it will be discussed at greater length later in this chapter, there is something to be said for the influence of convenience in the evolution of legal and cultural norms. The abhorrent treatment of Native Americans, African slaves and First Nations people by English colonists was hardly accidental. Enslaving hundreds of thousands and displacing/exterminating countless others was consistently the most convenient means to an end, whether that end was acquiring free labor for agricultural economies or endless land for pastoral ones. Consequently, legal frameworks evolved

---

191 *Id*. at 33-34.

192 *Id*. For helpful context to understand the long, deep roots of colonial ideas about indigenous peoples, consider that it wasn't until the famed Mabo decision of 1992 that Australia indirectly recognized that the First Nations owned and possessed their traditional lands; *see Mabo v. Queensland* [No. 2](1992) 175 CLR 1,5 (Austl.).

193 *Id*. at 60-61. Examples of these atrocities include the aptly named Slaughterhouse Creek, Mount Dispersion, Convincing Ground, Fighting Hills, Murdering Island, Skull Camp and Myall Creek massacres.

194 *Id*. at 62.

to expressly authorize these practices or conveniently look the other way.

6. Independence for the Colonies

Despite the influx of free people from around the world in response to booming wool and gold economies, there remained a large demographic of the population that were either convicts, ex-convicts or the children of convicts. These people were hardened, often decorating themselves with tattoos and shaved heads to represent what some historians describe as "a separate, transgressive and defiant identity."[195] These were the defiant castaways upon whose shoulders the entirety of NSW's civilization was built. Inevitably, many who were once convicts became ex-convicts, and these ex-convicts gave birth to children who identified with their ex-convict parents. This growing proletarian population pushed back against the will of the wealthy English settlers who sought to maintain traditionally English social hierarchies.[196] The free children of ex-convicts were called the "currency lads and lasses," and they lived in stark antithesis to the "sterling" or "pure merino" folk who inherited their pastoral wealth from the old English class that first claimed the majority share of grazing lands.[197] The tension between the currency kids and the sterling establishment was representative of a larger trend that emerged at the end of the Napoleonic wars, where novel capitalistic ideology demanded that the old social order "based on rank and station, in which relationships were personal and particular, [yield] to the idea of society as an aggregation of autonomous, self-directed individuals, everyone seeking to maximize their own satisfaction or utility."[198] Ideas about equality and representative government were already spreading like wildfire throughout colonial society, catalyzed by a populist movement that erupted in the 1830s and inflamed by equalist literature from newspapers like *The Australian* (a newspaper owned by the well-established son of convict parents).[199] Populace literature pushed for the establishment of representative legislature in the colonies, equal

---

[195] *Id.* at 73.
[196] *See id.* at 74.
[197] *Id.*
[198] *Id.* at 55.
[199] *Id.* at 75.

rights for all colonists regardless of origin and wealth and the ushering in of a more open and inclusive society compared to the status quo in England.[200] Not to mention, despite Governor Bigge's attempts to reverse what Macquarie had begun, the widespread distribution of land had already weakened the arbitrary character of colonial rule. Thousands of ex-convicts and wealthy immigrants alike continued to acquire land grants to expand across the continent.[201] Even where land grants were expressly denied, it was commonplace for settlers to unilaterally claim their own holdings, asking for forgiveness when necessary rather than permission.[202]

While the rivalry between "currency lads and lasses" and "sterling" folk is hardly unique in human history, it is a helpful reminder of how cultural values evolve across generations to effectuate societal shifts (and consequently, the law). Later sections of this paper will address the concept of a "People" as it relates to the international law principle of self-determination. Part of what demonstrates the existence of a unique and distinguishable "People" is a shared cultural identity/heritage. As this chapter of the paper draws to a close, keep in mind the lessons of colonial history and how the transition from one generation to another could impact the cultural values and identity of human beings subsisting on Mars. How might second generation "Martians" perceive their inherited—Earth based—legal frameworks once the first generation of Mars settlers diminish? Some readers may roll their eyes at the thought of considering the perspectives of a nonexistent generation; however, had the British Empire better anticipated and accounted for the needs of second-generation American and Australian colonists, the world might look strikingly different today.

With the explosion of Australia's gold rush in the 1840s,[203] it was obvious on an international scale that the colonies were ready

---

[200] *Id*.

[201] *Id*. at 74-75.

[202] *Id*. at 77.

[203] *See id*. at 86-87. The 1840s saw the discovery of large gold deposits in Australia, inviting hopeful treasure hunters and professional mining corporations from across the world to swarm the continent. By the 1850s Victoria was producing a third of the world's gold output, helping the United Kingdom adopt a gold standard for its currency. Settlers flocked to supplement the gold economy by the hundreds of thousands, facilitating the construction of railroads, telegraph lines and large steamships. Millions of pounds of gold were shipped to London, and massive amounts of imports were shipped back.

to do business at an unprecedented level. Having learned lessons from its failings in North America, the English imperial government knew to loosen its grip on the colonies if it was to benefit from the spoils of their economic progress. Between 1842 and 1851, England granted the colonies of NSW, South Australia, Tasmania and Victoria the ability to elect their own legislative councils.[204] The imperial minister at the time noted that it had "become more urgently necessary than heretofore to place full powers of self-government in the hands of a people thus advanced in wealth and prosperity."[205] The motherland, in all her wealth and military might, recognized that its vested interests in the continued growth of wealth through trade would be served by giving the Australian colonies free institutions of governance.[206] The colonial minister next invited the elected colonial legislatures to draft their own constitutions for representative government. The colonies responded accordingly, and from 1855-59 the British parliament approved the constitutions of NSW, Tasmania, Victoria, South Australia and the newly separated colony of Queensland.[207] By 1856, the first Australian colony—New South Wales—had its own constitution, an elected bicameral parliament that exercised legislative authority, self-government for the executive and universal male suffrage (a significant expansion of voting rights for that period of history).[208] By comparison, there was no universal male suffrage in Britain until 1917.[209] Kercher writes, "[o]nce again, the legal ideas for reform in the Australian colonies may have been recognizably British, but the reforms themselves were put into effect in the colonies decades earlier."[210]

Although the English imperial government retained some significant powers in the Australian colonies—primarily by maintaining control over international relations/trade/shipping and continuing to appoint the colonial governors—the colonists were not too concerned with the imperial appointment of governors, seeing as gubernatorial power could be checked with their newly created

---

[204] *Id*. at 92.
[205] *Id*.
[206] *Id*. at 91-92.
[207] *Id*. at 92.
[208] *See* McLean, *supra* note 165, at 63-67, 79.
[209] Kercher, *supra* note 168, at 78.
[210] *Id*. at 78.

parliaments. For example, the 1865 Colonial Laws Validity Act[211] continued a long-standing trend of Australian laws that contradicted or altered imperial ones. The act allowed colonial legislatures to pass local laws either adopting, rejecting, or ignoring general English laws and statutes, unless they contradicted paramount imperial force Acts.[212] This was an answer to Australian deviations from imperial law which were observed in the areas of property, trade, company and labor. Characteristic examples included the local Supreme Courts' power to adjudicate cases of bankruptcy, provide full bankruptcy relief to all debtors and allow married women to divorce, hold property and run businesses under their own names. These changes would not be implemented in England for more than fifty years.[213] Thus, by loosening the reins of imperial dominance (at least marginally), the English imperial machine both directly and indirectly benefited from the social and economic progress of the Australian colonies. Similarly, space law scholars George S. Robinson and Harold White propose—and indeed it is a central premise of this paper—that humanity's expansion into space would benefit from an understanding that it is not the role of Earth-based power structures to subjugate and exploit future space-based frontier societies, but rather to anticipate and facilitate their needs so as to mutually benefit from their social and technological advances:

> Just as in earlier migrations, terrestrial humanity will be as much affected by the new environment of space albeit somewhat differently, as will the new space inhabitants themselves. Earthkind will be dependent on the new production and energy of the space economy and on the global and ecological awareness of the space perspective. There will be a parent-child relation between earthkind and spacekind that should be recognized now in order to plan properly for the symbiotic, but independent, cultural evolution of spacekind.[214]

---

[211] *Colonial Laws Validity Act 1865* (Vic) c. 63 (Austl.); *See* Kercher, *supra* note 168, at 124-126; *see generally* Alex C. Castles, *The Reception and Status of English Law in Australia*, 2 ADELAIDE L. REV. 1, 22-31 (1963).

[212] Kercher, *supra* note 168, at 124-126.

[213] *Id.* at 49-52, 72, 138.

[214] Robinson & White, *supra* note 5, at 70.

Although there are no known indigenous populations on the Moon or Mars (or anywhere else in our solar system) at risk of subjugation by off-world human expansion, what potential wonders could the human species accomplish if it pursued long-term symbiosis rather than short term subjugation and exploitation in the next century of space exploration? How much violence, chaos, and loss of life might we avoid by accounting for the lessons of history to improve future outcomes?

7. Concluding Remarks

With the transition in the middle 19th century from penal settlements to free and self-governing communities, the overall culture and mentality of Australia's newest inhabitants "shifted from colonial imitation to national experimentation."[215] With the gold rush, land settlement and urban growth, "minds turned from dependency to self-sufficiency, and from a history that worked out the imperial legacy to one of self-discovery."[216] After observing the early societal development of both the United States and Australia, some interesting similarities become evident: both colonial societies diverged and evolved in ways unplanned and unforeseeable—both by their shared *fundator terrani* and the colonists themselves—despite attempts by the homeland to prevent or delay these changes. In both America and Australia, incredible adaptations occurred in a relatively short timespans, transforming what were once dependent imperial colonies on the edge of their known world into sovereign nations with unique identities and laws. While the ways in which legal frameworks evolved in North America vs. Australia are not exactly consistent on a macro or micro scale, enough shared themes are apparent to make useful comparisons for the purpose of studying how the law develops in frontier societies and whether these overarching themes could re-surface in future frontier settlements on Mars. In theory, studying past colonial ventures in previous "new worlds" could allow today's space actors to better predict the legal needs of future space communities, and subsequently position themselves to facilitate those needs without unnecessary conflict. Perhaps anticipating the needs of future space societies could help avoid returning

---

[215] Macintyre, *supra* note 138, at 3.

[216] *Id.*

to what George S. Robinson calls "the ultimate violence of colonialism and militarism as the primary tools of cultural and economic imperialism."[217] With enough long-term vision, understanding and careful planning, humanity could accomplish its next expansion far more ethically, legally, peacefully and efficiently.

The following section takes into account all that has been discussed thus far of English colonial history and posits five shared trends, themes or factors that influenced the development of law in colonial North America and Australia. While it is not the purpose of this paper to draw one-to-one comparisons between past colonial ventures and future off-world societies, the following five factors played an undeniable role in the development of colonial law and could also affect the development of law in a human Martian community like Valinor. Furthermore, as is addressed in a later chapter, these five factors could also help determine whether an off-world community meets the requirements to exercise self-determination under international law.

E. The Five Factors

In a chapter written by George S. Robinson titled, "Must There Be Space 'Colonies'? A Jurisprudential Drift to Historicism," included in James E. Katz's book *People in Space: Policy Perspectives for a "Star Wars" Century*, Robinson pleads the importance of studying past colonial ventures so as to potentially avoid repeating their many tragedies, sins and failures. He writes,

> [W]e should look more realistically to the military-political historian for our guidelines in planning economic, political, and legal regimes for space habitats and the sophisticated exploitation of space resources. In fact, we might best look at those perspectives and lessons of colonialism reflected in known legal regimes . . . What better history to use as an indicator of the unfolding human occupation of outer space than the history of New World colonialism and its legal institutions?[218]

Based on the prior historical analysis of colonial evolution in North America and Australia, five primary factors/themes/trends,

---

[217] Robinson, Must There Be Space Colonies?, *supra* note 21, at 209.

[218] *See id*. at 210.

resurfacing across time and space, appear to have contributed to the radical transformation of both law and society in the English colonies. These factors are summarized as: 1) distance from the homeland (or *fundator terrani)*, 2) unique circumstances and necessity, 3) the *tabula rasa* or "blank slate" effect, 4) the widespread distribution and use of property and 5) the evolving values/identity of the settlers. It is posited that exploring these factors—and how past colonial societies responded to them—could benefit the understanding of how the law might evolve in a Mars settlement experiencing analogous circumstances to previous colonial/frontier societies.

1. Factor 1: Distance from the Homeland

The first and most obvious factor facilitating socioeconomic and legal mutations in new world colonies is distance. In a time before steam engines, airplanes or even the telegram, sailing on a wooden boat from Europe to North America or Australia was the equivalent of catching a three to six-month Starship ride to Mars. This served as the ultimate, permanent field trip for England's outcasts looking for a fresh lease on life. In order to exert influence over such great distances, European powers (Britain in particular) relied on its regional governors, old-world legal regimes and the threat of force to maintain lordship over their satellite realms.[219] This approach worked—for the most part—until the colonies felt the impending dissonance of "the enourmous distance from Britain (three months for the return journey)."[220] Colonists in both North America and Australia felt this keenly through the influence of their colonial governors (placed in power by Britain).[221] 18th-century British politics is famous for deep corruption, exercised via the power of the colonial governors to act as the outstretched hand of God, even thousands of miles removed from their source of power.[222] In addition to their proclivity for corruption on a worldwide scale, English governors/magistrates (with some extraordinary exceptions like

---

[219] *See* Sirico, *supra* note 134, at 617-618; *see* DONALD S. LUTZ, THE ORIGINS OF AMERICAN CONSTITUTIONALISM 147-148 (1988); *see also* M. J. C. VILE, CONSTITUTIONALISM AND THE SEPARATION OF POWERS 144-45 (1998).

[220] Caenegem, *supra* note 41, at 153.

[221] *See* Sirico, *supra* note 134, at 622-23.

[222] *Id*. at 623.

Lachlan Macquarie in NSW) generally tended to lack a basic understanding of their constituency and the cultural/ideological context in which they governed. Colonial historian Sally Engle Merry writes, "[m]agistrates often operated with fragmentary and inaccurate understandings of local cultural practices and rules, seeking to rectify this disadvantage by relying on local experts yet unable to adjust their decisions according to the class and kin interests of these experts."[223] This misunderstanding of their local colonial and indigenous context often led to "incomplete application, resistance, and the reinterpretation of European categories in indigenous terms."[224] Robinson writes of the differences in need and perspective between early English/European colonists and their imperial authority;

> [M]uch in the same manner as we are currently discovering in our progressively sophisticated [crewed] space programs, the daily requirements of a few soldiers of fortune, merchants, and persecuted religious zealots barely surviving . . . were substantially different from those of highly commercialized and industrialized countries several thousand miles away. The legal needs were worlds apart also.[225]

The negative influence of imperial governors acting as the hand of a distant *fundator terrani* served as a powerful incentive for colonists to increasingly resent the yoke of their old-world masters.

---

[223] Sally Engle Merry, *Colonial Law and Its Uncertainties*, 28 LAW & HIST. REV. 1067 (2010) [hereinafter Merry].

[224] *Id*.

[225] Robinson, Must There Be Space Colonies?, *supra* note 21, at 211-12. Robinson further notes that distance also played a role in disparities between how the law was practiced in the more developed towns and cities of New England vs. its application further west on the American frontier:

> Although "economy" and "commerce" beget a bottomless pit of rules and regulations, those rules become stretched, distorted and broken by the special demands of great distances and demanding physical environments. This was true in the colonial and postcolonial frontiers. What was good in the large cities on the Eastern seaboard was simply unresponsive, hence unfit, for the needs of isolated settlements, remote trading posts, thinly scattered populations and a variety of unique social conditions.

Id at 217.

The colonies' distance from their imperial patriarchs, while undeniably facilitating the brutal treatment of indigenous populations and the development of slavery, also provided various opportunities for the steady rise of lower classes of English and European people (from maligned Quakers in New England to convicts in New South Wales) into both economic and social positions of power; positions that would not have been possible to achieve in the deeply ingrained class systems of Europe and Britain.[226] Whether by engaging in Virginia's tobacco industry or whaling off the coast of Van Diemen's Land, the vast distance between Lord and subject functioned like a long leash loosely held. This was due in part to colonists' use of their newly budding legal institutions to pursue new opportunities for people of traditionally low social status.[227] The combination of inept and distant imperial governance, combined with a rising lower and middle class, is the oil in which both American and Australian independence eventually cooked.[228] Whether by violent revolution or socioeconomic pressure, distance from the *fundator terrani* allowed the proverbial colonial child to become a self-sufficient adult and helped awaken the desire for legal and political independence.

2. Factor 2: Unique Circumstances / Necessity

The second factor is the unique circumstance faced by new world colonists in both America and Australia. This factor may seem as blatantly obvious as the factor of distance; however, it somehow managed to blindside imperial powers. For example, Australia's early, rapid economic development was directly tied to the colonists' immediate need to survive in a harsh environment, necessitating that social norms and identities be temporarily cast aside for the benefit of the greater enterprise.[229] The lines between convict and imperial officer hardly mattered when there was insufficient food, no potable water, ineffective shelter or a common enemy in government or indigenous peoples.[230] The influence of necessity and unique circumstances catalyzed the development of dynamic

---

[226] Merry, *supra* note 223, at 1068.
[227] *Id.*
[228] *Id.* at 1071.
[229] *Supra* Section D.2 "Origins."
[230] *Id.*

legal structures, reflecting the real-world needs of the colonists. These dynamic legal structures could then allow for novel commercial practices (whether in the gold mining industry or international trade) to progress and innovate—often irrespective of English precedent—in the name of economic necessity.[231] When unique circumstances arose, the law evolved to meet and match those needs.[232] Colonial historian Phillip Lipton writes of the effects of economic necessity in New South Wales:

> [T]here were innovative features in the development of company law which were specific to the Australian experience and which cast light on the interrelationship between economic development and legal evolution . . . [the] early use of joint stock companies set in train an evolutionary trajectory well before the introduction of "companies" legislation and the establishment of formal stock exchanges. This suggests that companies would have continued to evolve as a matter of commercial practice, irrespective of legislative developments. This legal form was short-lived, but it indicates the willingness of colonial governments to seek innovative responses to the needs of their business communities despite the absence of equivalent English legislation.[233]

Australia's colonies responded to their unique set of circumstances by evolving their legal system to better facilitate the success of young corporations driving the economy.[234] Although Australian law was transplanted from England, "its evolution was innovative and responsive to the economic needs of Australian society at the time."[235] Similar phenomena occurred in the American colonies through the establishment of the slave trade and its footprint in the colonial legal framework.[236] By the mid-17th century, the slave trade was already thriving in the American colonies, thanks to American planters and English investors building profitable plantation economies on slave labor.[237] During the first few decades of

---

[231] *See generally* Sirico, *supra* note 134.
[232] *Id*.
[233] Lipton, *supra* note 30, at 806.
[234] *Id*.
[235] *Id*. at 805.
[236] *Supra* Section C.5 "The Colonial Development of Slavery."
[237] *See* Bush, *supra* note 111, at 419.

colonization in America, it appears that there existed neither a practice of slavery, nor any legal mention of it; however, both the abhorrent practice and legal justification for its existence soon arose seemingly *ex nihilo*.[238] The American colonists similarly conquered and displaced Native Americans without express legal authority or Imperial edict, establishing legal justification retroactively many decades later.[239] The primary driver for these practices was undeniably their economic convenience: free labor and free land. Historian John Bush writes of slavery specifically that, "it is also no surprise that the mainland plantation colonies would [so] turn to slavery when, toward the end of the 17th century, the supply of 'free' (i.e. indentured) servants fell and their price rose when the supply of slaves increased."[240] He argues, "there are few settings in which notions of race, market, and empire are more germane, and the switch to slave labor has been amply explained by social and economic historians."[241] Similarly to the development of Australian company law, the American colonists formed practices that they perceived as "necessary" under the circumstances and subsequently wrapped those practices with legal justification, regardless of whether said justifications were expressly authorized under English Common Law. Based on historical trends, the factor of social and economic need/necessity could also play a significant role in the evolution of law in a human Martian community like Valinor, with or without the blessing or knowledge of its *fundator terrani*. As previously cited, Robinson writes, "whether on Earth or in space . . . laws and legal systems are strictly intellectual articulations of the ecological needs and interactions of human beings. In turn, these legal articulations will either promote or deter human survival and growth. Laws are institutionalized ideas and values."[242] Let us hope the ideas and values of future off-world communities can transcend that of previous "new world" societies.

---

[238] *Id*. at 421.

[239] *See generally* Johnson v. McIntosh, *supra* note 93.

[240] Bush, *supra* note 111, at 438.

[241] *Id*.

[242] Robinson & White, *supra* note 5, at 117.

3. Factor 3: The "Tabula Rasa" Effect

The third factor leading to legal evolution in the American and Australian colonies is the *tabula rasa* or perceived "blank slate" effect. As previously described, new world colonists tended to take with them "only such portions of the statute law and the common law of the mother country as were in force at the date of the settlement and were applicable to its condition."[243] This was due in part to the great distance between colonies and their imperial patriarchs, as well as the unique circumstances encountered by colonists seeking to build economies from scratch. Additionally, colonists themselves experienced a newfound confidence and sense of independence; that is, the colonies' collective sense that they had a second chance, a clean slate from which to build new ways of living.[244] Macintyre writes of the colonial attitude in Australia:

> [V]isionaries thought of Australia not as a mere imitation but as striking out anew. They believed that the vast island continent offered the chance to leave behind the Old-World evils of poverty, privilege and rancor. With the transition in the middle of the nineteenth century from penal settlements to free and self-governing communities, the emphasis shifted from colonial imitation to national experimentation. With the gold rush, land settlement and urban growth, minds turned from dependency to self-sufficiency, and from a history that worked out the imperial legacy to one of self-discovery.[245]

This sense of a new beginning was not limited to the Australian colonies. The American colonies wasted little time putting English legal norms into the furnace, testing which were actually useful in their "new world" and which were imperial excess. For example, in Wessex County, Virginia alone, between the years 1672 and 1684, county residents filed over 3,000 actions in court; "a remarkable number indeed, when the reader recalls the expense of filings and the dangers of travelling about in a colony wracked by Indian

---

[243] Kwamena Bentsi-Enchill, *The Colonial Heritage of Legal Pluralism (The British Scheme)*, 1 ZAM. L.J. 1, 11 (1969) (*quoting Caterall v. Caterall*, 1 ROB. EEC. 581 (1847)). On the contrasting development in America from an identical doctrinal base, *see* Ford Hall, *The Common Law: An Account of its Reception in the United States*, 4 VANDERBILT L. REV. 791 (1951).

[244] Macintyre, *supra* note 138, at 3.

[245] *Id*.

wars."[246] However, historian Warren M. Billings claims that this high amount of litigation was not evidence of a pathological society. Instead, he argues that this was an indication of positive movement towards social stability and a "device for testing what was useful about the English legal heritage in an American setting."[247] Despite the fact that Europeans discovered nothing at all truly new—both North America and Australia had been populated by indigenous peoples for thousands of years prior to their "discovery"—the term "new" was inextricably built into the "new world" moniker for all of North America and Australia, as well as countless place names such as New England, New York, New Hampshire, New South Wales, etc. The early settlers populating these lands were also becoming a culturally and ideologically distinct set of people, far from their home world, struggling against an unfamiliar environment (as well as its Native people), and empowered by the opportunities presented by their perceived blank slates, even if to the detriment of virtually all non-white people in their path. "Put another way, eras of exploding industrial activity in the past have demanded simplification of laws and reforms of confounding legal pleadings so that business can be 'gotten on with.'"[248] For better or worse, some of the world's most powerful space actors already see the settlement of other worlds as humanity's "second chance"—an answer to many of Earth's current problems.[249] However, past societies employed

---

[246] Warren M. Billings, *Law in Colonial America: The Reassessment of Early American Legal History*, 81 MICH. L. REV. 953 (1983) (referencing Konig, *supra* note 69). Billings writes of the colonists' changing attitudes over time:

> There is more to the American legal system than its rules and institutional buttresses. Apart from the technicalities, law has a social function. It defines and governs the social order, but not in splendid isolation; instead, it is susceptible to economic, political, or social imperatives because these are the obligations that give it definition. Thus to study even the most ordinary components of the legal order through time is to illuminate society's values, as well as how they change with the passage of years.

Id. at 955-56.

[247] *Id.* at 956. As for the "American setting," this was, of course, the American setting as perceived and understood by white colonists,

[248] Robinson, Must There Be Space Colonies?, *supra* note 21, at 215.

[249] *See generally* WALTER ISAACSON, ELON MUSK (2023); *See also* CHRISTIAN DAVENPORT, THE SPACE BARONS: ELON MUSK, JEFF BEZOS, AND THE QUEST TO COLONIZE THE COSMOS (2019).

similar manifestations of this same *tabula rasa* effect as a means of creating new opportunities for some and leveraging power to oppress others. Neither the American nor Australian colonists used their clean slate to achieve world peace or universal harmony with the environment. Instead, they gave the world a mixed cacophony of blessings and curses, creating new opportunities for some and enslaving others, inventing efficient, innovative methods for buying and selling land—after massacring Native peoples to get it—and generating unprecedented works of law and literature to protect individual liberties, whilst simultaneously preventing over half the population from enjoying those protections. The gift of starting over is both a powerful tool and a potentially merciless weapon. If history is an indicator of humanity's future on other worlds, it is entirely possible that future "blank slates" will be used accordingly. Recall Robinson's warning that "we must not ignore the historical lessons of imperialism, militarism, and economic colonialism, and the strong possibility that they will also characterize human behavior and culture evolving in outer space . . . can we afford to ignore these lessons?"[250] Hopefully these lessons are not ignored by future generations preparing to make humans multi-planetary.[251]

4. Factor 4: The Distribution and Use of Property

One of the most important advantages of the settler colony framework, both in America and Australia, was undoubtedly the recognition and protection of certain individual property rights for a wider spectrum of colonists compared to what was available in England/Europe. Economic historians have found direct correlations between secure property rights and an emerging colonial society's economic and social success.[252] Some experts argue that the long-term success or failure of historical colonial structures depended largely on what method of colonization was originally employed by the European powers, and whether that method provided

---

[250] *Id*. at 209.

[251] *See generally Artemis*, NAT'L AERONAUTICS & SPACE ADMIN., https://www.nasa.gov/specials/artemis/ (last visited Feb. 10, 2024); *see also Human Spaceflight: Making Life Multiplanetary*, SPACE EXPLORATION TECH. CORP., https://www.spacex.com/humanspaceflight/ (last visited Feb. 10, 2024).

[252] *See* Acemoglu et al., *supra* note 39, at 1369.

for the widespread distribution of land.[253] If rights to the use and ownership of land are also critical to the success of future human settlements off-world, how will this interplay with the express prohibition of territorial sovereignty under Article II of the Outer Space Treaty?[254] This and other questions will be addressed at length in subsequent chapters.

One of the reasons colonial societies in North America and Australia experienced more sustainable economic and social systems compared to other colonies was Britain's allowance and/or ignorance of its colonial settlers' widespread acquisition and use of land (regardless of whether empty or occupied by indigenous peoples); a precedent that later helped facilitate ideas about open access to land ownership for a greater percentage of colonists, protection of intellectual property and unprecedented access to economic opportunities for both men and women.[255] This stood in stark contrast to contemporary Spanish colonies in Mexico and South America, where extractive colonialism[256] created deep inequalities among the population, negatively influencing "the way in which institutions evolved and helped foster persistence in the degree of inequality over time."[257] This contrast is also reflected in the early US banking system, where efficiency, mobility, flexibility and active competition fostered widespread growth in the economy.[258] Meanwhile, contemporaneous colonies in Mexico and South America, where "the chartering of banks was tightly controlled by the national governments, leading to highly concentrated financial sectors dominated by a few banks," facilitated the hoarding of wealth amongst the few and stunted the long-term growth of those economies.[259]

Although the threat of extreme inequality and indefinite tyranny was always a possible outcome for English settler colonies, the ever-growing tension between the colonies and the Crown

---

[253] *See generally* Lipton, *supra* note 30, at 829.

[254] Outer Space Treaty, *supra* note 3, art. II. Article II establishes, "[o]uter space, including the Moon and other celestial bodies, is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means."

[255] *See* Engerman & Sokoloff, *supra* note 31, at 19-23.

[256] *See supra* Chapter One, Section A.

[257] Engerman & Sokoloff, *supra* note 31, at 22-23.

[258] *Id*. at 28.

[259] *Id*. at 30.

regarding economics and the law eventually favored the side of individual rights and self-rule (at least, by white males). In Australia, for example, the abundance of accessible/conquerable land facilitated the early expansion of its economy by merino sheep farming.[260] Flock owners often "squatted" on large areas of grasslands, creating huge estates and forming a rich oligarchy of "sterling" folk.[261] However, the squatters most often did not own the land they claimed. At best, hopeful entrepreneurs received a small holding lease from the Government, which gave many early Australians enough implied authority to clear and settle areas ten times what was actually granted.[262] The Argentinian economy, which evolved contemporaneously with Australia's, perpetually allowed its respective wealthy elite to appropriate vast acres of land unchecked, leading to the complete control of the government by the rich oligarchy and the deepening of inequality. In contrast, after learning of corruption in the Australian colonies, the English Crown divided and re-allocated leased lands to a larger number of farmer families, diminishing the power of the wealthy squatters and supporting the maximum productivity of the colonies as a whole.[263] While this likely further accelerated the dispossession and displacement of Aboriginal tribes, it benefited colonists by helping develop a pseudo middle-class of Australian landowners.[264]

Despite being separated by great distances, colonies in what are now the US and Australia followed similar paths of conquest and subsequent economic success, emphasizing efficiency in economic development and enhanced protections for property rights.[265] To their credit, these societies retained those beneficial aspects of their inherited legal systems that facilitated their upward trajectory. Additionally, these new societies advocated for those principles they deemed missing from their inherited legal and social arsenal, utilizing the courtroom, parliament and the field of battle (in

---

[260] McLean, *supra* note 165, at 58-61.

[261] Macintyre, *supra* note 138, at 74.

[262] *Id*. at 74-77.

[263] *See* McLean, *supra* note 165, at 96-100; Carlos F. Diaz Alejandro, *Argentina, Australia and Brazil Before 1929*, in ARGENTINA, AUSTRALIA AND CANADA: STUDIES IN COMPARATIVE DEVELOPMENT 1870 – 1965 101-102 (D. C. M. Platt & Guido di Tella eds. 1985).

[264] *See* McLean, *supra* note 165, at 96-100.

[265] Lipton, *supra* note 30, at 828.

the case of the US).[266] By the time British Imperial armies finally arrived in the American colonies to quell a growing insurrection, they faced a society that had grown accustomed to the widespread ownership of land by individuals, and as a result, had already evolved its own unique identity, values and customized legal foundation to support it.[267]

5. Factor 5: Evolving Values / Identity of the Settlers

The fifth, and likely the most influential of the factors leading to the evolution of law in new world settler colonies, was the changing identity, intent and values of the colonists themselves.[268] This factor is the natural culmination of the preceding four, the inevitable end result of a process involving each previous factor working together to create something unique in history. In both North America and Australia, the impacts of distance, necessity, *tabula rasa* and widespread access to land wrested from First Nations fundamentally changed the values and identity of the settlers in ways neither they nor their imperial benefactors anticipated.[269] Van Caenegem observes that the American colonists developed a certain toughness, "hardened by the struggle against nature and the natives, and the belief in the American way of life, rural and unspoiled by the luxury and corruption of old world entrepreneurs and politicians."[270] As previously described, the passage of time saw humble subjects of the English Crown become proud American colonists, while convicts sentenced to a lifetime of servitude became independent Australians. The evolved identity of the American colonists allowed for the creation of the Articles of Confederation, which famously created a strong legislative branch and a much weaker executive to prevent any vestiges of monarchal rule.[271] Historian and professor of law James Etienne Viator writes of the Colonists' evolving attitudes:

---

[266] *See generally* Acemoglu et al., *supra* note 39.

[267] *See generally* MORTON J. HORWITZ, THE TRANSFORMATION OF AMERICAN LAW 1780 – 1860 5 (1977).

[268] Billings, *supra* note 246, at 955.

[269] *See supra* notes 36-38.

[270] Caenegem, *supra* note 39, at 153.

[271] Sirico, *supra* note 134, at 622-23.

> There was much room for improvement to the system that existed under the Articles [of Confederation], especially in commerce and foreign policy … Public opinion gradually shifted towards nationalism because the public itself perceived problems that were not being addressed by the Confederation Congress and perhaps were not solvable under the Articles. [272]

However, within a few short years, the newly independent colonists matured their political ideology so significantly that the confederation of states was receptive to and participated in the creation of an entirely new form of government to overhaul itself.

After only a few short years under the Articles of Confederation, the colonists' quickly evolving identity and values inspired the notable efforts of men like James Madison and Alexander Hamilton, facilitating the drafting and ratification of the American Constitution.[273] This ever-evolving social and idealistic identity was also a factor in the development of Australia's colonies, where, in a few shorts decades, "minds turned from dependency to self-sufficiency, and from a history that worked out the imperial legacy to one of self-discovery."[274] Based on these historical precedents in colonial North America and Australia, could it be that future settlements on the Moon and Mars will also experience significant evolution and adaptation, at least in part, as a result of these five factors? In the case of our hypothetical community of Valinor, within only a few short years of arrival on the red planet, its inhabitants must already make critical decisions as to which legal constructs are useful under duress and which are a hindrance in the face of immediate adversity. Each decision will impact how Valinorians live in every way, from intra-community commerce and accepted social norms to interplanetary trade with Earth. As supplies run low and panic builds, the best intentions and illustrious legal fabrications of the previous century's space lawyers and United Nations representatives may seem comical when tasked with addressing the needs of human beings living on the surface of a mere twinkling light in the Earth's night sky. Much like its predecessors in previous frontier societies, Valinor could find itself at the cusp of radical evolution

---

[272] Viator, *supra* note 135, at 323-25.

[273] *Id.*

[274] Macintyre, *supra* note 138, at 3.

and adaptation, or the brink of total demise. In the foreword to Robinson and White's book, *Envoys of Mankind: A Declaration of First Principles for the Governance of Space Societies*, Gene Rodenberry (best known as the creator of Star Trek) writes:

> [O]ur children, whom we are sending into space as our cultural couriers, our intelligence agents, are constantly growing different from us . . . this must be recognized and accommodated if we are to help ensure the ongoing survival of *Homo sapiens* and its envoys—its progeny—*Homo spatialis*. Grow, change, or perish. [275]

In the interest of ensuring future generations grow beyond Earth more sustainably and peacefully than our historical predecessors, the following chapter will discuss how an off-world community like Valinor might adapt its 21st-century legal toolkit to satisfy the needs of a people living tenuously on the edge of disaster.

II. CHAPTER TWO

Informed observations—based on historical precedents set by previous colonial societies—as to how a newly created human community on Mars might adapt its 21st-century legal toolkit to satisfy the needs of a community living on the edge of oblivion.

In the previous chapter, this author provided examples of ways in which the English Common Law—along with its associated court systems, methods, and values—evolved through its transplantation and adaptation in North America and Australia. Both in the New World and New South Wales, colonists arrived with English legal structures and soon discovered the limits of their usefulness in a colonial/frontier context. Due in-part to the effects of the five factors discussed in the previous chapter, legal systems that began as complex, overly bureaucratic systems in England shifted, morphed and evolved over time to become simpler and more efficient systems in North America.[276] Whereas a convoluted and complex legal system

---

[275] Robinson & White, *supra* note 5, at xx.

[276] Robinson, Must There Be Space Colonies?, *supra* note 21. Robinson writes on the likelihood of parallel evolutions between new world colonialism and off-world settlements:

may have served the needs of the oligarchical elite in petrified English society, the imperial colonies lived entirely different lives and encountered wildly different challenges, necessitating innovation and adaptation within practically every aspect of the law. England loved its ancient and sophisticated legal system, but the "new world" colonists needed a user-friendly system to help their budding economic and social structure succeed. Similarly, today's rising generation is preparing to venture from Earth's cosmic cradle and set foot on its nearest celestial neighbors, this time to stay. Similar to how English colonists' arrived in North America and Australia with an inherited Common law system, today's generation of space explorers leave the Earth with an inherited body of international space law, founded on the UN Space Treaties.[277] While the UN Space Treaties are beautiful manifestations of higher ideals and aspirations of the human species, they are likely not, on their own, fully equipped to provide for a future where humans explore the stars in harmony with the cosmos for the benefit of all humankind. George S. Robinson writes regarding the risk that humanity is ill-equipped from a legal perspective to expand beyond Earth;

> [D]espite the hopeful attitudes of the statesmen, jurists, and others who have attempted to mold what they think the socio-political and economic structures of space communities ought to be, the chances are great that we are entering another era of imperialism, with all the trappings of imperialistic warfare. And for that, history has shown us that we must first establish

---

> [t]he whole area of noncommercial social law, both civil and criminal, in space communities also might take a chapter from US history. Inevitably, marriage and divorce laws, as well as sanctions against violation of criminal laws, were formed by a region's practices and sentiments—despite the assertion that state and church were the keepers of social morals. This is directly reflected in the creation of common law marriages, property ownership by women (encouraged by frequent desertions into the vastness of the frontier by husbands with burdensome debts, criminal records, or simple wanderlust and enforcement of antislavery laws. In the same vein, rather than imposing Earth-indigenous, unresponsive and insensitive social or personal status laws on space community inhabitants, they are likely to evolve from the prevailing values of the space inhabitants themselves.

Id. at 218.

[277] *Supra* notes 7-14.

> communities not of free trade and thought but of exploitation from which wars of independence spring. The long history of Earth colonizations tells us that our lofty wishes to the contrary, particularly as they were articulated and emphasized in the Outer Space Treaty of 1967, space colonies will be established with social, commercial and political characteristics with which we have become familiar.[278]

As with all great frontiers, the first human explorers on the surface of Mars will face not only the unknown, but unknown unknowns: hardships and challenges unlike any previously faced on the Earth. Regardless of infinite planning, massive resources, and decades of preparation, the first waves of off-world humans will undoubtedly need solutions they do not have, tools they did not know to bring and skillsets they did not know were necessary. This will in turn require its leaders to take actions that are as-of-yet unauthorized, make controversial priorities and revise the playbook for survival. Nonetheless, novel circumstances do not require the abandonment of all prior legal and philosophical infrastructure. Even Benjamin Franklin, in the midst of the American revolution, wrote to Charles Guillaume Frédéric Dumas on the importance of consulting sources of international law. Prefacing Franklin's request to the French for various weapons of war, he writes in December of 1775,

> I am much obliged by the kind present you have made us of your edition of Vattel [Emer de Vattel's *The Law of Nations*]. It came to us in good season, when the circumstances of a rising state make it necessary frequently to consult the law of nations. Accordingly, that copy . . . has been continually in the hands of the members of our congress[.][279]

For both the American and Australian colonists, special circumstances required special adaptations to the law, resulting in a hybrid framework of both old and new ideas. Is it possible that future off-world settlements may find utility in a similar process, keeping and adapting those aspects of their inherited legal

---

[278] Robinson, Must There Be Space Colonies?, *supra* note 21, at 219.

[279] Letter from Benjamin Franklin to Charles-Guillaume-Frédéric Dumas (Dec. 9, 1775) (on file with Founders Online, National Archives), https://founders.archives.gov/documents/Franklin/01-22-02-0172.

frameworks that are useful, and parting ways with those aspects which are not?

A quick disclaimer, the contents of this chapter follow Valinor down a specific narrative path some would consider extreme. However, an objective of this paper is to study the development of law in previous colonial societies in the hope that this will inform speculation as to the development of law in future space settlements. To provide plot points in service of that objective, Valinor's narrative arc[280] assumes certain socioeconomic catastrophes, failures in Government oversight, and apathy on the part of the international community. The following sections make observations and tentative predictions regarding the ways in which Valinor could respond to these curated narrative elements, keeping in mind relevant aspects of the previous chapter on colonial law. It is entirely possible that a future community like Valinor could experience similar circumstances and respond in entirely different ways. Nonetheless, for the sake of meaningful discussion, it is posited that Valinor's path will "rhyme," to a limited extent, with that of colonial North America and Australia, where a satellite community undergoes a process of adaptation, evolution, and eventually transformation into an entity with a unique social and legal identity.

A. Valinor's Inherited Legal Structures

In order to discuss how a human Mars community like Valinor may develop its own legal framework, one must first understand the framework Valinorians brought with them from Earth. To help effectuate this discussion, the fictional history of Valinor is contrived intentionally. Firstly, Valinor is a human community established by a US private company and comprised of primarily US citizens, with the exception of a few representatives from other space agencies around the world.

Article VIII of the Outer Space Treaty[281] (and relevant articles of the Registration Convention[282] and Liability Convention[283]) grants a launching State jurisdiction and control over "an object launched into outer space . . . and over any personnel thereof, while

---

[280] *See generally supra* Preface: A Brief History of Valinor.

[281] *See* Outer Space Treaty, *supra* note 3, art. VIII.

[282] Registration Convention, *supra* note 10, arts. I, II.

[283] Liability Convention, *supra* note 9, arts. I, II.

in outer space or on a celestial body . . . including objects landed or constructed on a celestial body. . ."[284]

Furthermore, Article VI of the Outer Space Treaty states that, "the activities of non-governmental entities in outer space, including the Moon and other celestial bodies, shall require authorization and continuing supervision by the appropriate State Party to the Treaty."[285] The traditional interpretation of this language demands that the laws, policies and authority of the launching State[286] – so long as they are in accordance with that State's obligations under the UN space treaties—follow the crew of a spacecraft from the surface of the Earth to the surface of Mars, whether said crew is located within the space object or in structures "constructed on a celestial body."[287] Although there is countless legal literature dissecting and debating the minutia of these provisions ad infinitum,[288] the most commonly accepted interpretation is that current Earth-based law—including international law, domestic law and State supervision/oversight—follows humans (and their vehicles) to Mars.

Consequently, the legal fate of Valinor's settlers falls either under the jurisdiction of the launching State—as personnel thereof—or under the jurisdiction of their States of origin (in the case of representatives from other State's public/private space agencies). This approach has been implemented by the Intergovernmental Agreement (IGA) and associated Memorandums of Understanding (MOUs) for nearly forty years on the International Space Station (ISS).[289] While the OST and ISS models have successfully facilitated humanity's presence in Earth-orbit for decades, they have never been utilized by more than a dozen people (at the same time) in an off-world environment and (with the exception of the Apollo missions) have never reached beyond the safety rails of

---

[284] Outer Space Treaty, *supra* note 3, art. VIII.

[285] *Id*. art. VI.

[286] Liability Convention, *supra* note 9, art. I. "The term "launching State" means: (i) a State which launches or procures the launching of a space object; (ii) a State from whose territory or facility a space object is launched."

[287] Outer Space Treaty, *supra* note 3, art. VIII.

[288] *See generally* MANFRED LACHS, THE LAW OF OUTER SPACE—AN EXPERIENCE IN CONTEMPORARY LAW-MAKING (1972); STEPHAN HOBE, SPACE LAW—A HANDBOOK (2019); BIN CHENG, STUDIES IN INTERNATIONAL SPACE LAW (1997); Lyall & Larsen, *supra* note 13; HANDBOOK OF SPACE LAW, *supra* note 13.

[289] *See generally* Agreement Concerning Cooperation on the Civil International Space Station, Can.-ESA-Japan-Russ-U.S., Jan. 29, 1998, 1998 U.S.T. LEXIS 212.

Earth's gravitational cradle. The practice of space law—and international law for that matter—is famously vague and ambiguous. Nearly eighty years of meaningful thought and discussion on the topic has served to reveal its ever-evolving ambiguities and uncertain ends, as it is inherently a weird combination of international treaties, international customary law and State practice, all stumbling over each other to ensure a "rule book" for Mars precedes the first human boot print on red soil.

Furthermore, the vague and ambiguous legal regimes already binding space actors are arguably premature and fanciful, representing "wishful expression of what ought to be, not what is or is likely to be."[290] Space law scholars have argued for decades that, while the "'peaceful-use-of-outer-space' ambience fostered and cultivated in the Outer Space Treaty . . . attempts to elevate space exploration and occupation to a higher level of human dignity and integrity than that characterizing the evolutionary history of civilizations on Earth," it is fundamentally impossible to create sanctuaries free from human conflict and suffering where humans are present.[291] The traditional approach to regulating space activities may work for space settlements of few people—like the ISS— but for a community of hundreds, or even thousands, legal frameworks brought from the old world to a new planet will likely experience similar strains and shortfalls as that of the common law in colonial America and Australia.

In a paper titled "Law and Public Order in Space" (expounding upon subject matter addressed his book of the same name), space law scholar Myres McDougal warns that it is evolutionarily the same humans currently on Earth who will be the first to settle on other planets, and that "these actors, group and individual, pursue precisely the same objectives which they have sought on [E]arth: they seek power, wealth, enlightenment, respect, and so on—the whole range of human values."[292] Consequently, it may well benefit contemporary space actors to anticipate and prepare for this potential future reality. In essence, the future of space settlement may yet be "as below, so above." In the event this prediction rings true, it will be critical that lawmakers and space actors understand the

---

[290] Robinson, Must There Be Space Colonies?, *supra* note 21, at 216.

[291] *Id.* at 209.

[292] McDougal, *supra* note 49, at 151, 153.

social patterns and legal evolution of early colonial societies as a case study for the development of law in future off-world settlements. Perhaps by anticipating and accommodating for the needs of future off-world communities, humanity might avoid needlessly repeating cycles of violence that have plagued us for millennia.

B. Based on Historical Precedent, Valinorians Will Not Play by the Rules—They Will Make New Ones

International law, as it stands today, is a comprehensive legal system practiced by international courts, tribunals and the United Nations. Although it has strayed away from Lauterpacht's original idea of "a complete, common law type of legal system that would lead to the liberation of individuals in a global federation under the rule of law,"[293] it is still considered a reasonably useful system with established hierarchies, general rules, core principles and a defined objective.[294] "When the rules run out, or regimes fail, then the institutions always refer back to the general law that appears to constitute the frame within which they exist."[295] Although the breadth and width of general international law (which includes the foundations of space law) provides Valinor a legitimate starting place from which to craft its own unique legal framework, the last four hundred years of history suggest it will function as exactly that: a starting point. As defined by functionalism, law is meeting the needs of efficiency in order to promote an optimal allocation of resources, effectively following a Darwinian process of natural selection.[296] George S. Robinson writes on the application of this principle in new world colonies, "[i]n North American colonies, the common law and equity law were in constant combat for dominance, and the formal common law survived only through deep and extensive compromise with the demands of equity and the growing laws indigenous and responsive to the unique requirements of colonial

---

[293] H. LAUTERPACHT, THE FUNCTION OF LAW IN THE INTERNATIONAL COMMUNITY 430-432 (2011).

[294] Martii Koskenniemi, *The Fate of Public International Law: Between Technique and Politics*, 70 MODERN L. REV. 15-17 (2007) [hereinafter Koskenniemi].

[295] *Id*.

[296] Robert C. Clark, *The Interdisciplinary Study of Legal Evolution*, 90 YALE L. J. 1238 (1981); E. Donald Elliott, *The Evolutionary Tradition in Jurisprudence*, 85 COLUMBIA L. REV. 38 (1985); Simon Deakin, *Evolution for Our Time: A Theory of Legal Memetics*, 55 CURRENT LEGAL PROBLEMS 1 (2002).

settlements."[297] The question then is whether the present legal reality is viable for the future functioning of a realistic colony like Valinor, and eventually, what kind of legal system will emerge from this extraterrestrial society?

Similarly to how a process of pseudo natural selection helped evolve the law in settler colonies of the 17th and 18th centuries, the legal principles most likely to survive in Valinor are those malleable enough to adapt in response to the unique circumstances and specific needs of an off-world entity. Thus far, the Outer Space Treaty and its several sister treaties have served the interests of an Earth-bound society. The language of these treaties helped place humans on the Moon, survived the Cold War and facilitated decades of peaceful cooperation in Earth-orbit. Even today (as will be discussed later), the space agencies of leading powers flexibly interpret the UN space treaties so as to best facilitate their current explorative and developmental initiatives in Earth-orbit and beyond,[298] incorporating these interpretations of international law into their respective systems of domestic law. US domestic space law is, theoretically, limited in scope and practice by those international agreements to which the US is a Party. Title 51 of the United States Code consistently references that it is limited by international obligations and specifically references the Outer Space Treaty.[299] However, can current systems of domestic law—as fashioned according to the principles established in the UN space treaties—secure the long-term survival of a community on Mars? Although it is generally assumed by the legal community that an entity like Valinor would adhere to both US domestic space law and those principles established by the UN space treaties, historical precedent suggests the possibility that a distant settlement like Valinor is less likely to hold itself accountable unto principles of domestic or international law if those principles fail to promote its immediate survival, economic interests, or social evolution.[300]

---

[297] Robinson, Must There Be Space Colonies?, *supra* note 21, at 213.

[298] *See The Artemis Accords: Principles for Cooperation in the Civil Exploration and Use of the Moon, Mars, Comets, and Asteroids for Peaceful Purposes*, NAT'L AERONAUTICS & SPACE ADMIN. (Oct. 13, 2020), https://www.nasa.gov/specials/artemis-accords/img/Artemis-Accords-signed-13Oct2020.pdf [hereinafter Artemis Accords].

[299] 51 U.S.C. §§ 50134, 50919, 51302, 51303, 60121, 60122, 60146.

[300] *See* Steven Freeland & Ram Jakhu, *Space and International Human Rights Law*, *in* HANDBOOK OF SPACE LAW 225, 228 (Ram S. Jakhu & Paul Stephen Dempsey eds.

Although Valinor began its existence subject to both national oversight and jurisdiction—as implemented in part by US domestic space law and policy[301] under Articles VI[302] and VIII[303] of the OST—as well as general principles of international law, applicable to space pursuant to Article III,[304] history suggests it is likely to mold this inherited legal clay (with or without the consent of its national and international *fundator terrani*) into vessels that better serve its immediate needs.

When considering historical precedents established by previous colonial entities, and in light of the likelihood that there will be shortcomings on the part of domestic law and general international law as it relates to space activities, it is submitted that Valinor will not, after great duress or passage of time, act exclusively within the limits of pre-existing rules as they are interpreted today: the hardy folk of Valinor will instead adjust the rules to better serve their unique needs and interests. Like settlers in the American and Australian colonies, Valinorians traversed extraordinary distances, began new lives in an alien environment, face extraordinary hardships and are likely to experience profound changes in their values and identity as a result. In considering how these factors will affect the off-world settler, Robinson and White write:

2017); *see also* Robinson, Must There Be Space Colonies?, *supra* note 21, at 214 (noting the similarities between English common law "shipped off" to the new world and Earth-based international law in that "[t]hese circumstances and practices are very similar to the present-day activities of lawyers, statement, and politicians who are busily establishing legal regimes and structures for outer space exploitation and occupation, regimes that are not now, and very likely never will be, responsive to the actual circumstances of humankind's permanent movement into space.").

[301] For an example of how United States crafts domestic space law in accordance with its obligations under international law, *see* 51 U.S.C. § 51303 (2015) ("A United States citizen engaged in commercial recovery of an asteroid resource or a space resource under this chapter shall be entitled to any asteroid resource or space resource obtained, including to possess, own, transport, use, and sell the asteroid resource or space resource obtained in accordance with applicable law, including the international obligations of the United States.").

[302] Outer Space Treaty, *supra* note 3, art. VI.

[303] *Id.* art. VIII.

[304] *Id.* art. III ("States Parties to the Treaty shall carry on activities in the exploration and use of outer space, including the Moon and other celestial bodies, in accordance with international law, including the Charter of the United Nations, in the interest of maintaining international peace and security and promoting international co-operation and understanding.").

> In addition, space migration, and the concomitant sophistication of intelligence necessary to bring it about, may be unique in its effect on human behavior, perception, and consciousness. The environment and outlook offered by space are unique. The artificial life-support requirement imposes a high degree of biotechnological integration. The degree of sophistication required even necessitates the use of thinking machines—computers. How is this radical change in survival requirements, cultural norms, social expectations, knowledge, and point of view going to affect the space settler? . . How can the new migration be facilitated—made beneficial for both earthkind and, ultimately, spacekind? . . These concerns underlie the success or failure of the newly developing space law.[305]

Influenced by the totality of these combined circumstances—and a number of specific deficiencies within current legal structures—Valinor will likely both proactively and reactively evolve its legal identity. This choice will have two primary drivers: (1) exclusively inherited legal structures, whether domestic or international in nature, cannot reasonably anticipate or sufficiently respond to all the probable circumstances that will arise on a hostile foreign planet, and (2) strict adherence to the legal structures of the *fundator terrani*, whether a sovereign State or international governing body, will not always promote the best interests of the off-world settlement. Essentially, inherited legal structures can neither prepare Valinor from what lies ahead, nor protect it from what looms behind.

1. Exclusively Inherited Legal Structures Cannot Accommodate for and Quickly Respond to all the Probable Circumstances that Will Arise on a Hostile Planet

As previously discussed, governing Valinor through a conglomeration of international and domestic laws may prove a difficult task to implement, much less to effectively enforce from more than one hundred million miles away. Although Earth's mature body of general international law arguably functions for the purpose and context in which it was developed, it has evolved to serve its Earth-based problems, not those of a desperate frontier

---

[305] Robinson & White, *supra* note 5, at 65-66.

community living in a different sector of the solar system. Unless Valinor manages to re-establish a supply chain with Earth, it will never encounter those entities under the immediate jurisdiction and scrutiny of either domestic or international legal enforcement. In a paper titled, "The Art of Living in Space: International Law and Settlement Autonomy," space law scholars Patricia M. Sterns and Leslie Tennen argue:

> It is unrealistic to assume that settlers will accept a situation where they do not share in the decision-making mechanisms for the internal functioning of the community…the determination of applicable law must consider the alternative that a permanent space settlement will have the need for new law, unique unto itself.[306]

Echoing this sentiment, renowned space law scholar and one-time director of the National Center for Remote Sensing, Air and Space Law at the University of Mississippi School of Law, (now the Center for Air and Space law) Professor Joanne Gabrynowicz, writes of the development of law in future off-world communities:

> This is a very long-term consideration, but the question of what law will apply to humans settling on Mars or on another celestial body somewhere certainly arises. Based on human history, what can be expected is that humans will take the law they know from the place they came; however, this body of law will not address everything that needs addressing. Humans will then begin to write their own law based on local needs and experience. The new, local law will be a combination of both bodies of law.[307]

Like settlers of previous centuries, Valinorians will encounter physical, psychological and environmental hardships that have never before been experienced by humankind. Any aspect of a legal regime that is not capable of accounting for, quickly responding to and adapting to meet these challenges will likely fade into

---

[306] Sterns & Tennen, Art of Living in Space, *supra* note 15, at 417. *See also* Sterns & Tennen, Jurisprudential Philosophies, *supra* note 15; Sterns & Tennen, Settlement Autonomy, *supra* note 15.

[307] Joanne Irene Gabrynowicz, *Some Legal Considerations Regarding the Future of Space Governance*, 48 GA. J. INT'L & COMP. L. 739, 746 (2020).

irrelevance. Sterns and Tennen valiantly argue that "extant jurisprudential philosophies may prove to be inadequate in the context of a settlement in space, as national and/or international instrumentalities cannot accommodate all the probable situations which are likely to arise and require immediate resolution."[308] Consequently, Robinson argues that "law born of the very special circumstances of space communities could well demand deep compromises in the application of space treaties prefabricated on Earth and shipped off to space habitats."[309] Ultimately, Valinor could very well handicap itself by attempting to maintain compliance with Earth regimes. Not to mention, Earth entities would be fooling themselves in thinking they could exert effective short-term control over a community of human beings living unimaginable lives on another planet. Even today, Earth's most technologically capable space agency and billions of appropriated dollars, at times, are unable to exert enough meaningful influence to correct a Mars rover's robotic probe stuck in the dirt, much less a human settlement.[310] Much like NASA's now defunct InSight[311] lander, Valinor has little choice but to face its problems alone.

2. Strict Adherence to the Legal Structures of the *Fundator Terrani* Will not Always Promote the Best Interests of the Community

Not only would relying on inherited legal structures imposed by a *fundator terrani* (of any kind) likely prove inefficient for a settlement located between 33 and 142 million miles from Earth, but those legal structures—and the *fundator terrani* itself—may not have Valinor's best interests at heart. Much like Britain and the American colonies before the Revolution, Earth entities like OnlyEarth Corp. are unlikely to share the same values as Valinorians

---

[308] Sterns & Tennen, Art of Living in Space, *supra* note 15, at 417.

[309] Robinson, Must There Be Space Colonies?, *supra* note 21, at 213.

[310] *See* Jeff Foust, *NASA Ceases Efforts to Deploy Mars InSight Heat Flow Probe*, SPACENEWS (Jan. 15, 2021), https://spacenews.com/nasa-ceases-efforts-to-deploy-mars-insight-heat-flow-probe/ (last visited Feb. 11, 2024).

[311] *Id. See also NASA Retires InSight Mars Lander Mission After Years of Science*, NAT'L AERONAUTICS & SPACE ADMIN. MARS INSIGHT MISSION (Dec. 21, 2022) https://mars.nasa.gov/news/9321/nasa-retires-insight-mars-lander-mission-after-years-of-science/?site=insight (last visited Feb. 11, 2024).

over time.[312] Sterns and Tennen warn of the potential risks involved with the exercise of detached control by a *fundator terrani*, noting that "the founding entity or other entities given extended jurisdiction by Article VIII is not in a realistic position to effectively administer the everyday operation of the settlement."[313] They also warn of potential conflicts arising due to fluctuating financial interests a *fundator terrani* may develop in an off-world settlement.[314] Robinson echoes this concern in that "the dependence upon a multinational space transportation system, commerce between space communities and supporting Earth governments and private and public consortia will quite likely be guided with a keen eye to the needs of the latter."[315]

In the same way that the law in Britain evolved to serve British interests, Earth law evolved over time to serve and regulate Earth entities with Earth problems. Like previous colonial societies in the North American and Australian continents, history suggests that Valinorians will likely find sufficient cause to take whatever actions necessary to survive and thrive, regardless of whether inherited laws facilitate those actions. Similar to the use of tobacco notes as a liquid currency,[316] or allowing convicts to meaningfully contribute to a fledgling economy,[317] if a set of actions or activities become routinely useful for survival, Valinorian society will wrap

---

[312] *See* Sterns & Tennen, Art of Living in Space, *supra* note 15; *see also* Robinson & White, *supra* note 5, at 70 (predicting that Earth entities are unlikely to accept the evolving nature of a Mars settlement):

> Throughout the history of civilized societies, the cultural evolution of humankind has suffered the deadly aristocratic habits of anthropocentric and ethnocentric chauvinism. Those habits are now recognized, in so-called open societies, to include the familiar blandishments of nationalism, religious persecution, and unmerited discrimination by birth, unearned wealth, racism, sexism, and institutionalized bigotry. The resistance of civilizations to change is obvious and natural, just as it is predictable down to the simplest biological specimen.

Robinson & White, *supra* note 5, at 70.

[313] Sterns & Tennen, Art of Living in Space, *supra* note 15, at 215.

[314] *Id*. at 215.

[315] Robinson, Must There Be Space Colonies?, *supra* note 21, at 217.

[316] *See* Beutel, *supra* note 103.

[317] *See supra* notes 168-182.

those activities with legal protections and those protections will in turn become part of Valinor's socioeconomic and legal identity.

There are doubtless many who would argue that this discussion of evolving identities and self-governance is unnecessarily extreme this early in the process of settling Mars. Could not future Mars settlements exercise a modicum of self-governance similar to "companye" towns of the early 17th century?[318] As discussed in the previous chapter, those settlements were afforded broad discretion to establish laws deemed necessary for the "good and welfare of the said companye," so long as those laws were not "contrarie or repugnant to the lawes and Statutes of this our Realme of England."[319] To this day, the fifty states of the United States enjoy a similar form of self-governance through their state constitutions. For example, Article 3, Section 6 of the Constitution of the state of Mississippi states,

> [t]he people of this state have the inherent, sole, and exclusive right to regulate the internal government and police thereof, and to alter and abolish their constitution and form of government whenever they deem it necessary to their safety and happiness; provided, such change be not repugnant to the constitution of the United States.[320]

In theory, the state of Mississippi has the authority to govern itself, so long as it governs within the bounds proscribed by the US Constitution. While such an arrangement may seem like an obvious and convenient approach to employ off-world, one must recall that both the American and Australian colonies quickly outgrew their modicum of self-governance. The thirteen American colonies even fought a bloody war against the British to secure a higher level of self-governance. Even if Valinor temporarily functions as the satellite extension of a corporate entity or a big budget Government project, it is posited (as will be discussed in the next chapter) that such would not preclude its right to pursue self-governance as a functionally independent entity under the international law principle of self-determination. In fact, failure to do so may provide an opportunity for entities like OnlyEarth to take advantage of Valinor's

---

[318] *See* Friedman, *supra* note 19, at 7.

[319] *Id.*

[320] M.S. CONST. art. 3, § 6.

vulnerable position, without due regard for its inherent fragility. When considering the danger posed to fledgling off-world settlements by larger corporate or State entities, Sterns and Tennen write:[321]

> Unrestrained by a declaration of principles or an international agreement granting recognition and capacity to the settlement, any *fundator terrani* could exploit the settlers and their condition to achieve its own economic advantage. Such exploitation would be in total disregard of humanitarian rights, obligations and responsibilities . . . with all necessary aid and assistance required by the settlement, particularly with regard to essential life support functions. The founding entity or the international community could render the *exinde civitas pofiticae* helpless by refusing to make needed materials and supplies available.

If Valinor lacks the authority to advocate for and defend its own interests, a powerful space actor like OnlyEarth could seize the opportunity to use both domestic and international law as leverage to simultaneously manipulate and subdue the settlement. After all, as the corporate "owner" of Valinor, OnlyEarth is theoretically in possession of all relevant licenses, authorizations and information necessary to operate a settlement on a far-away celestial body, not to mention OnlyEarth stands as the *de-facto* "middle man" between Valinor and the rest of Earth. With OnlyEarth at the helm of Valinor's equivalent to mission control/CAPCOM, it follows that OnlyEarth is better positioned to lobby for its own corporate interests—at both the national and international level— above those of Valinorians. It is for these reasons that Valinor, and future off-world settlements under similar circumstances, will likely not choose to suffer long under their inherited legal structures: they will instead build and defend new ones.

---

[321] Sterns & Tennen, Art of Living in Space, *supra* note 15, at 418-420.

3. Ways in Which Modern, Well-Established Principles of Space Law Would Likely Require Adaptation, Adjustment and Re-imagination by a Human Community on Mars During its Legal Formation.

In the case of Valinor, and arguably any Mars community experiencing similar circumstances, achieving at least a modicum of self-reliance is the quickest way to ensure long-term survival. When no longer able to rely on essential supplies from Earth, Valinor will be forced to shift its focus from primarily scientific pursuits to the creation of fuel, food, breathable air and economic resources. In light of the ecopolitical standoff with OnlyEarth, and considering the failure of the US and UN to provide for Valinor's aid, Valinor must quickly incentivize other space actors to make the expensive and dangerous journey to Mars for more lucrative reasons than the general goodwill endowed under Article V of the Outer Space Treaty and the Rescue and Return Agreement.[322] To accomplish this, the inhabitants of Valinor must leverage not only their expansive scientific potential, but also whatever capabilities at their disposal for the extraction and processing of Martian raw materials like titanium, iron, nickel, aluminum chlorine and calcium.[323] Once sufficient raw materials are extracted and processed for trade, Valinor will have logical incentives to guard these resources against unwanted interference by entities like OnlyEarth or any other space actors able to leverage power and technology against the vulnerable settlement. Finally, if Valinor is fortunate enough to extract and defend enough valuable materials to incentivize trade

---

[322] *See* Rescue Agreement, *supra* note 4. The Rescue and Return Agreement is an expansion upon Articles V and VIII of the Outer Space Treaty; however, only Article V of the Outer Space Treaty includes language specifically referencing the rescue/return of astronauts off-world:

> In carrying on activities in outer space and on celestial bodies, the astronauts of one State Party shall render all possible assistance to the astronauts of other States Parties." Otherwise, the langauge of Article V and the Rescue and Return Agreement deals primarily with the rescue and return of astronauts and vehicles "in the event of accident, distress, or emergency landing on the territory of another Sate Party or on the high seas.

Outer Space Treaty, *supra* note 3, art. V.

[323] Samir Jaber, *Materials That Could Bring Life to Mars*, SPACE NEWS (Sept. 24, 2020), https://spacenews.com/op-ed-materials-that-could-bring-life-to-mars/.

with Earth, it must wield enough perceived authority to initiate and execute binding agreements with other States (and their respective spacefaring corporations) to conduct such trade. Therefore, like other new world societies in the past, Valinor will eventually seek to establish and maintain its own independence as a sovereign people, capable of negotiating in its own self-interest, defending itself and choosing its own path forward.

III. CHAPTER THREE

How a fledgling off-world community like Valinor might attempt to defend potentially unprecedented actions under existing international law concepts, including the principle of self-determination.

This final chapter will follow Valinor down one of the potential paths anticipated by the historically informed perspectives presented in Chapters One and Two. Specifically, that Valinor's unique circumstances and precarious position may, similar to previous colonial societies on "new worlds," incentivize Valinior to adapt, clarify and evolve its legal framework to better facilitate its immediate survival and long-term success. Please understand, the discussion presented in this chapter pertains to only one of many possible paths a future Mars community may choose to take. It is this author's hope that future off-world communities grow and evolve harmoniously with Earth's nations, corporations, governing bodies and legal frameworks. Nonetheless, the purpose of this paper is to explore what, if any, relevance English colonial history could have for human expansion across this solar system and—based on these findings—make informed predictions as to how a future off-world community may adapt and evolve its inherited legal framework to better facilitate its own interest. While there are countless ways in which said community could break with traditional understandings of both domestic and international law, this chapter will focus on three key factors necessary for a community like Valinor to succeed: 1) the ability to extract and utilize natural resources, 2) the ability to create exclusionary zones as part of a greater right to self-defense and 3) the right to self-determination.

A. Extraction and Use of In Situ Resources for Survival and Trade

As previously discussed, the types of colonization imposed on the New World under British imperialism played a catalytic role in the types of institutions established in these areas. In extractive colonies, imperial institutions afforded property rights over natural resources exclusively to elite classes, creating unequal distributions of wealth and weaker long-term economic models.[324] Alternatively, institutions promulgated in settler societies created opportunities for the dispersal of property rights to a wider swath of the colonist population, resulting in a more equal distribution of wealth and the growth of colonial society to greater levels of prosperity.[325] Thus, colonial history teaches that one of the key differences between successful and failed colonies (at least with respect to the success or failure of European settlers in North America and Australia) are their approach to the distribution and use of property.[326] As previously noted, Valinor shares some analogous circumstances with past settler colonies. Like colonial New South Wales and the American colonies, Valinor is a small community six-months-travel from its metropole, aiming to settle and survive in a severely harsh environment. In order to succeed in the long term, future off-world legal institutions will likely turn towards the provision and protection of property rights over *in situ* resources for a majority of the society. In the event historical patterns rhyme, a settlement like Valinor could leverage *in situ* resources to create incentives not only for its own immediate survivability, but also for long term economic sustainability via trade with Earth. As space law commentators Alan Wasser and Douglas Jobes note:

> [T]he sole purpose of land claims recognition is to generate an incentive for privately funded space development and settlement by creating the only product that a successful space settlement could sell to the public back on Earth for sufficient

---

[324] *See supra* Chapter One, Section A, notes 29-40.

[325] *Id.*

[326] *See supra* Chapter One, Section E.4, notes 251-267.

> profit to justify the tremendous cost of establishing the space line and settlement.[327]

However, despite the fact that utilizing Martian resources is likely an imperative for Valinor's survival, there remains significant resistance in the international law community as to whether *in situ* resource utilization, by either Governments or nongovernmental entities, is permissible under Article II of the Outer Space Treaty.[328] When approaching space-resource utilization in the context of Valinor, one might suggest its legal ramifications are obsolete if Valinor becomes an independent entity, seeing as the nonappropriation principle enshrined in Article II of the Outer Space Treaty applies exclusively to those States that are signatories to the treaty. While this is technically accurate, it is not yet clear whether Valinor could achieve its independence (the subject of self-determination is discussed at length later in this chapter). Furthermore, it is now widely accepted that Articles I-IV of the Outer Space Treaty have attained the status of customary international law, meaning the content of those articles could have legal authority over entities that are not party to the treaty itself.[329] Regardless of whether Article II applies to Valinor as a signatory to the treaty (via the United States) or under customary international law, its meaning and application carry considerable consequences for the inhabitants of Valinor.

Decades of discussion and countless scholarly publications have debated the true meaning and intent of Article II, with compelling arguments from many perspectives.[330] However, the

---

[327] Alan Wasser & Douglas Jobes, *Space Settlements, Property Rights, and International Law: Could a Lunar Settlement Claim the Lunar Real Estate It Needs to Survive*, 73 J. AIR L. & COM. 37, 65 (2008).

[328] Outer Space Treaty, *supra* note 3, art. II (stating that "Outer space, including the Moon and other celestial bodies, is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means.").

[329] *See generally supra* note 14; *see also* Fabio Tronchetti, *Non-Appropriation Principle as a Structural Norm of International Law: A New Way of Interpreting Article II of the Outer Space Treaty*, 33 AIR & SPACE L. 277, 278-79 (2008); Lyall & Larsen, *supra* note 13, at 54, 180.

[330] *See generally* 43(1) J. SPACE L. 1 (2019); *see also* McKellar, Dangerous Business, *supra* note 14; *see also* Fabio Tronchetti, *Title IV – Space Resource Exploration and Utilization of the US Commercial Space Launch Competitiveness Act: A Legal and Political Assessment*, 41 AIR & SPACE L. 143, 154 (2016); Gbenga Oduntan, *Who Owns Space? US Asteroid-Mining is Dangerous and Potentially Illegal*, THE CONVERSATION (Nov. 25,

question remains unresolved: are the resources imbedded within celestial bodies freely available for use by humans, or does international law bar their use under the principle of non-appropriation?[331] This author and many others have spent considerable time and effort discussing this question with zealous interest, awaiting the day humanity, especially an off-world community, can put these efforts to the test. Within the last decade, a significant shift in the conversation about space resource utilization took place in the form of the 2015 US Commercial Space Launch Competitiveness Act (CSLCA),[332] which included the highly controversial Space Resource Exploration and Utilization Act. The act states:

> A United States citizen engaged in commercial recovery of an asteroid resource or a space resource under this chapter shall be entitled to any asteroid resource or space resource obtained, including to possess, own, transport, use, and sell the asteroid resource or space resource obtained in accordance with applicable law, including the international obligations of the United States.[333]

The CSLCA was effectively the first legislative act by a space superpower implementing a progressive interpretation of Article II. In this case, the United States made known, in no uncertain terms, that it interprets Article II of the OST as permitting the extraction and use of space resources.[334] The United States—via NASA—has

---

2015), http://theconversation.com/who-owns-space-us-asteroid-mining-act-is-dangerous-and-potentially-illegal-51073; Lyall & Larsen, *supra* note 13, at 54, 180; Henry R. Hertzfeld, Brian Weeden, et al., *How Simple Terms Mislead Us: The Pitfalls of Thinking about Outer Space as a Commons*, 58 PROC. INT'L INST. SPACE L. 533, 536 (2015); Guoyu Wang & Yangzi Tao, *Who Owns the Natural Resources on Asteroids?*, 58 PROC. INT'L INST. SPACE L. 549, 554 (2015); Position Paper on Space Resource Mining, *supra* note 14; Hope M. Babcock, *The Public Trust Doctrine, Outer Space, and the Global Commons: Time to Call Home ET*, 69 SYRACUSE L. REV. 191, 210 (2019); Ezra J. Reinstein, *Owning Outer Space*, 20 NW. J. INT'L L. & BUS. 59, 70 (1999).

[331] *See generally* McKellar, Dangerous Business, *supra* note 14.

[332] U.S. Commercial Space Launch Competitiveness Act, 51 U.S.C. § 10101 (2015) [hereinafter CSLCA].

[333] *Id*. § 51303.

[334] Since the enactment of the CSLCA, other States, including Japan, Luxembourg, and the UAE, have implemented their own space resource legislation in similar fashion to the CSLCA. *See* Morgan M. DePagter, *"Who Dares, Wins:" How Property Rights in Space Could be Dictated by the Countries Willing to Make the First Move*, CHICAGO J. INT'L L. (Online 1.2) (Summer 2022), https://cjil.uchicago.edu/online-archive/who-dares-wins-how-property-rights-space-could-be-dictated-countries-willing-make; Jeff Foust,

since expanded upon the CSLCA in Agency practice through the controversial Artemis Accords,[335] an inter-agency accord now signed by at least 35 international space agencies, including Luxembourg, the United Arab Emirates, Japan, India and the United Kingdom.[336] The Accords state, in part:

> The Signatories emphasize that the extraction and utilization of space resources, including any recovery from the surface or subsurface of the Moon, Mars, comets, or asteroids, should be executed in a manner that complies with the Outer Space Treaty and in support of safe and sustainable space activities. The Signatories affirm that the extraction of space resources does not inherently constitute national appropriation under Article II of the Outer Space Treaty, and that contracts and other legal instruments relating to space resources should be consistent with that Treaty.[337]

While the Accords do not represent hard law (such as a treaty), adherence to the Artemis principles are a prerequisite to collaborate with NASA on its mission to place humans on the Moon and Mars.[338] The Artemis Accords arguably represent a leap forward in both State practice and *opinion juris* for the legality of space resource utilization under international law.[339] However, neither the

---

Luxembourg Adopts Space Resources Law, SPACE NEWS (July, 2017), https://spacenews.com/luxembourg-adopts-space-resources-law/; Jeff Foust, *Japan Passes Space Resources Law*, SPACE NEWS (July 17, 2017), https://spacenews.com/japan-passes-space-resources-law/; Space Resources Regulation – Regulatory Framework on Space Activities of the United Arab Emirates, UAE SPACE AGENCY (2023), https://space.gov.ae/Documents/PublicationPDFFiles/POLREG/SpaceResourcesEN.pdf.

[335] Artemis Accords, *supra* note 298.

[336] *Artemis Accords*, U.S. DEPT. OF STATE, https://www.state.gov/artemis-accords/ (last visited Feb. 13, 2024).

[337] Artemis Accords, *supra* note 298, at section 10.

[338] Jeff Foust, *NASA Announces Artemis Accords for International Cooperation in Lunar Exploration*, SPACE NEWS (May 15, 2020), https://spacenews.com/nasa-announces-artemis-accords-for-international-cooperation-in-lunar-exploration/.

[339] Charter of the United Nations and Statute of the International Court of Justice art. 38, June 26, 1945, 3 Bevans 1179, 59 Stat. 1031 (establishing that international customary law is "evidenced by a general practice that is accepted as law."). This two-prong system for proving something is customary—showing both State practice and *opinio juris*—is further explained in Nicaragua v. U.S., where the ICJ held that, "for a new customary rule to be formed, not only must the acts concerned "amount to a settled practice," but they must be accompanied by the opinion juris *sive necessitatis*. Either the States taking such action or other States in a position to react to it, must have behaved so that their conduct is "evidence of a belief that this practice is rendered obligatory by

CSLCA nor the Artemis Accords have been implemented in a real-world scenario, and it remains to be seen whether these efforts will survive the test of time and international criticism.

Valinor, on the other hand, does not have the luxury of wading through 60+ years of substantive space law discussion, international treaties, domestic space policy, various bilateral and multilateral agreements and wider public opinion before taking action to preserve itself as the single known collection of living organisms on the face of Mars. With respect to the use of *in situ* resources for sustenance and trade, many space law experts have recognized the immense challenges a settlement like Valinor would face when tasked with building a sustainable space economy without first guaranteeing for itself the right to utilize available resources.[340] Therefore, it is posited that—when subjected to both external and internal pressures—Valinor will move to extract and utilize Martian resources for the purpose of benefiting itself and its inhabitants exclusively (at least, at first) and will subsequently make declarations self-certifying the legality of its actions. In the face of OnlyEarth's trade/resupply embargo, Valinor's efficient utilization of Martian resources, whether for growing food, mining precious minerals or generating rocket fuel, is effectively its only means of success.

If Valinor hopes to survive its most critical hour, much less endure long enough to establish a profitable trade network with Earth, its inhabitants will have little choice but to maximize the utility of the settlement's surrounding environment, regardless of

---

the existence of a rule of law requiring it." *See* Military and Paramilitary Activities in and Against Nicaragua (Nicar. v. U.S.), Judgment, 1986 I.C.J. Rep. 14, ¶ 108, 109 (June 27) (quoting North Sea Continental Shelf Cases (F.R.G. v. Den./F.R.G. v. Neth.), 1969 I.C.J. 3, 44 (Feb. 20)).

[340] *See* Reinstein, *supra* note 330 ("A legal system that is unclear as to the rights of developers in the land they develop is almost as prohibitive of positive development as a system forbidding development altogether."); David Everett Marko, *A Kinder Gentler Moon Treaty: A Critical Review of the Current Moon Treaty and a Proposed Alternative*, 8 J. NAT. RESOURCES & ENVTL. L. 293, 315 (1993) ("Free enterprise institutions simply cannot make significant investments in space while they are under the threat of lawsuits over the meaning of treaty terms . . ."); Lynn M. Fountain, *Creating Momentum in Space: Ending the Paralysis Produced by the 'Common Heritage of Mankind Doctrine*, 35 CONN. L. REV. 1753, 1777 (2003) ("Another crucial element in attracting private industry to the development of outer space is the protection of property-both real and intellectual. Private industry will not invest in outer space unless there is a significant return on the investment.").

whether Earth's current space law perspective supports it. Under analogous circumstances, it would be difficult to expect a small group of starving frontiersmen—perhaps wandering the frozen landscape of the Yukon—to spend valuable energy perfectly adhering to the legal opinions and formalities of an industrial mecca, comfortably nested in opulence and excess thousands of miles away. Wasser and Jobes arrive at a similar conclusion when anticipating the future needs of a small lunar settlement, writing, "[e]ven if that restrictive view of the Outer Space Treaty were to prevail, sooner or later, and probably as soon as possible, Lunar colonists would most certainly decide to scrap it and start claiming ownership of the land they occupy . . ."[341] Wasser and Jobes effectively argue that, "there is no need to push the legal envelope . . . once a space settlement is established, a property rights regime will evolve naturally."[342] The contemporary expectation that settlers of other planets will effortlessly live and abide by the constructs which currently serve our needs on Earth conveniently ignores the lessons of history. Where laissez-faire was "much more a practice in the 1800s than a theory," Robinson argues such "likely will be the practice of commercially productive space communities among themselves and with Earth."[343] When taking into account historical precedent, Valinor's circumstances may prove Robinson's prediction accurate.

B. Clarified Right to Exclusionary Zones and the Right to Self-Defense

The following section posits that Valinor, in response to growing external pressures, will establish and defend exclusionary zones

---

[341] Wasser & Jobes, *supra* note 327 (further recognizing the absurdity of Earth's position when confronting a rebellious extraterrestrial settlement):

> At that point, the governments of the Earth will have to decide what to do. Go to war against the Lunar colonists over it? Of course not. They will spend endless hours in legal wrangling about it, but in the end, they will have no choice but to acquiesce to some sort of reasonable Lunar property regime. The US, and every other nation on Earth, will eventually have to agree to accept and/or recognize the settlement's claims.

Id. at 68.

[342] *Id.* at 70.

[343] Robinson, Must There Be Space Colonies?, *supra* note 21, at 217.

on Mars. In the unlikely event that Valinor is successful in re-organizing itself and its inhabitants to optimize resource production (without OnlyEarth resupply missions on which it has been completely reliant since its inception), those life-giving resources are only meaningful if they can be aggregated in-mass, organized and protected from interference by potentially hostile entities. Valinor's leadership must face the harsh reality that OnlyEarth's actions since acquiring SpaceX indicate an intent to either unjustly exploit or completely abandon its costly Mars experiment, regardless of whether the greater world community would rather see Valinor succeed. Due to Earth's sociopolitical and economic climate, the immediate rescue of Valinor by another spacefaring nation is a temporary impossibility, pending some miraculous trade opportunity robust enough to incentivize massive risk on the part of friendly Earth governments/private companies. As it stands, Valinor is vulnerable, hungry (both physically and economically), isolated and forced to make do with limited, up-cycled technology and a desperate populace.

To make matters worse, Valinor's leadership must prepare for the possibility that OnlyEarth is devising a means of mitigating its financial losses on Mars by less than accommodative, cooperative or peaceful means. Although such concerns may seem far-fetched under the long-standing ideals manifested in the UN space treaty regime, Valinor does not have the luxury of relying on Earth-normative "checks and balances,"[344] such as the "common interest of all [hu]mankind in the progress of the exploration and use of outer space for peaceful purposes,"[345] or the previous century's reliance on "mutually assured destruction."[346] The people of Valinor need protection from entities that are not concerned with conducting their activities "with due regard to the corresponding interests" of

---

[344] *See generally* Eric Suy, *Democracy in International Relations: The Necessity of Checks and Balances*, 26 ISR. Y.B. HUM. RTS. 125 (1996); Stephen J. Schulhofer, *Checks and Balances in Wartime: American, British and Israeli Experiences*, 102 MICH. L. REV. 1906 (2004); Ashley Deeks, *Checks and Balances from Abroad*, 83 U. CHI. L. REV. 65 (2016).

[345] Outer Space Treaty, *supra* note 3, at preamble.

[346] *See generally* Thomas E. Plank, *A New System of Electronic Chattel Paper: Notification of Assignment*, 71 S.C. L. REV. 77 (2019); Surya Gablin Gunasekara, *Mutually Assured Destruction: Space Weapons, Orbital Debris, and the Deterrence Theory for Environmental Sustainability*, 37 AIR & SPACE L. 141 (2012).

Valinor.[347] Consequently, any useful materials, minerals, metals and liquids extracted from the Martian surface by Valinorians will likely be considered highly valuable and zealously protected for use by the community, even to the exclusion of other entities' interests. After all, OnlyEarth already evidenced its intent to "reclaim" or "liquidate" its alleged assets on Mars. Not to mention, other States (and their corporations) may seek to capitalize on Valinor's perceived vulnerability by attempting to unjustly acquire its growing stockpile of *in situ* resources and strategic planetary position.

Consequently, in the interest of protecting itself, Valinor will likely establish exclusionary zones around its most valuable assets, beginning with the settlement itself and expanding to envelop auxiliary structures used for housing raw materials, any useable launch/landing pads outside of the settlement (Valinor's launch/landing pads are located approximately three kilometers from the human settlement for safety reasons) and any key mining/extraction areas in use by the settlers. By establishing these exclusionary zones, Valinor could initiate a formalized process for defending itself from external hostilities, regardless of whether those hostilities are ever realized.

With regard to the relative legality of exclusionary zones, it must be noted that Valinor's potential legal arguments for establishing and enforcing exclusionary zones differ depending on what entity Valinor is excluding. As will be discussed later in this section, the international legal underpinnings for exclusionary zones necessitate that the entity being excluded is a foreign State. This provides Valinor legal protection from the hostile approach of non-US space actors. However, the same international law arguments do not protect Valinor from intervention by its own State. As previously discussed, Articles VI and VIII of the OST give the US jurisdiction over Valinor and require that it maintains "authorization and continuing supervision" over the settlement.[348] To legally justify the forcible exclusion of a duly authorized US entity would require complex maneuvering within domestic law. Accordingly, for the purposes of this paper, a legal discussion of whether Valinor could justify excluding US entities under US domestic law is unnecessary, given that a central focus of this paper is Valinor's exercise

---

[347] *See* Outer Space Treaty, *supra* note 3, art. IX.

[348] *Id*. arts. VI, VIII.

of its right to self-determination under international law. While the discussion of self-determination comes later in this chapter, bear in mind that Valinor establishes exclusionary zones concurrently with its declaration of independence from Earth. For the purpose of this narrative, Valinor considers all outside influences, including OnlyEarth and the United States government, as foreign entities when enforcing exclusionary zones and exercising self-determination.

Like their analogous colonial predecessors in Australia and North America, the pressures of necessity will likely influence Valinor to act in its own interest above all others. History teaches that the interest of self-preservation is a powerful force in the evolution of a society, manifesting itself not only in the adaptation of economic and social structure but also in the exercise of force or the threat thereof.[349] Valinor's use of exclusionary zones would likely serve as an effective first step in the exercise of the international law principle of self-defense, a complex and heady process that is arguably at the heart of international law and the foundation of organized human civilization. The next section will explore how Valinor could legally defend—whether compelling or not—the enforcement of exclusionary zones on Mars, and how doing so may help Valinor along its path to self-determination.

1. Exclusionary Zones

The concept of using exclusion zones in the context of space exploration has long been discussed by the world's major space powers since the early 1960s, a natural progression of the widespread use of special zones by world powers since the second world war.[350] Various special zones, such as safety zones, protective areas, exclusive zones, identification zones, self-defense areas, zones of

---

[349] *See* Robinson, Must There Be Space Colonies?, *supra* note 21, at 208-09. Robinson writes, "At the outset, it is the economic reality of such a large and costly venture, as well as pressing military requirements in space, that will dictate most of the lifestyles and, also, the social and political structures of, say, a permanently manned space manufacturing facility or orbiting military station."

[350] *See* McDougal, *supra* note 49, at 162-64. During WWII, the United States claimed a contiguous safety zone of more than 1,300 miles along the American coastline, a precedent that eventually allowed for the creation of the ADIZ.

responsibility, security and warning zones and even *cordons sanitaire*[351] zones over the land and sea have experienced varying degrees of acceptance by the international community, so long as "the zones under the circumstances were reasonable and did not unduly hamper or interfere with another nation's freedom to navigate the seas or supra-adjacent airspace."[352]

According to lauded international law scholar Charles C. Hyde, "[t]here is a clear distinction between sovereignty and the right to exercise a preventative, protective, or regulatory jurisdiction."[353] This is especially relevant in the context of space exploration, seeing as Article II of the OST prohibits "appropriation by claim of sovereignty, by means of use or occupation, or by any other means" in space.[354] International law formally recognized the legitimacy of various exclusionary zones in the 1949 Geneva Convention Relative to the Protection of Civilian Persons in Time of War.[355] As the authoritative treaty body on the law of war, the Geneva Conventions specifically provide for the establishment of "hospital and safety zones," "neutralized zones"' and "demilitarized zones."[356]

---

[351] F. Kenneth Schwetje, *Protecting Space Assets: A Legal Analysis of Keep-Out Zones*, 15 J. SPACE L. 131, 134 (1987) ("Another type of zone utilized in both times of tension and hostilities is the *cordon sanitaire.* Not universally recognized in international law because of its restrictive form, the establishment of a *cordon sanitaire* normally allows a nation to engage and destroy a potential enemy or unidentified aircraft or vessel without further notice.") [hereinafter Schwetje]; *See also* Jane Gilliland, *Submarines and Targets: Suggestions for New Codified Rules of Submarine Warfare*, 73 GEO. L.J. 975, 991-96 (1985).

[352] *Id*. at 134.

[353] *Id*.

[354] Outer Space Treaty, *supra* note 3, art. II.

[355] Geneva Convention Relative to the Protection of Civilian Persons in Time of War art 14, Aug. 12, 1949 6 U.S.T. 3516, 3528, 75 U.N.T.S. 287 (1949) (provides for the creation of areas designed "to protect from the effects of war, wounded, sick and aged persons, children under fifteen, expectant-mothers and mothers of children under seven.") [hereinafter Convention IV]. Convention IV, art. 15 provides for the creation of areas "intended to shelter from the effects of war the following persons, without distinction: a) wounded and sick combatants or non-combatants; b) civilian persons who take no part in hostilities." *See also* Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts, June 8, 1977, 1125 U.N.T.S. 3 [hereinafter Protocol I].

[356] Eian Katz, *Between Here and There: Buffer Zones in International Law*, 84 U. CHI. L. REV. 1379, 1384-85 (2017) ("These zones are limited in application…first, they require a formal pact among the concerned parties whereas many buffer zones are in fact effectuated by unilateral imposition or de facto neutralization…") [hereinafter Katz, Buffer Zones].

These kinds of humanitarian buffer zones are most likely familiar to Americans from US military operations in Iraq and Kosovo, as well as the United Nations Security Council's (UNSC) implementation of "safe zones" in southern Iraq during the Gulf War.[357] The "effective preemptions of areas on [E]arth without sovereign claims"[358] has long been implemented by States for "common, if usually temporary, uses of such non-national areas as the high seas or for fleet maneuvers and nuclear and missile testing and of bases in unclaimed areas, as in Antarctica, often for longer periods."[359] The 1958 Convention on the Continental Shelf allows for the creation of safety zones of up to 500 meters around human-made installations on the continental shelf.[360] The 1982 United Nations Convention on the Law of the Sea expands those rights to allow for safety zones around artificial islands, research facilities and even mining activities.[361] In addition to the special zones provided for via

---

[357] *Id.* at 1387.

[358] Howard J. Taubenfeld, *Progress in International Law: Outer Space and International Accommodation*, 4 I.C.J. REV. 29, 35 (1969) [hereinafter Taubenfeld].

[359] *Id.*

[360] Convention on the Continental Shelf art. 5, Apr. 5, 1958, 1 U.S.T. 471, 499 U.N.T.S. 311; United Nations Conference on the Law of the Sea, *Convention on the Continental Shelf*, U.N. Doc. No. A/CONF. 13/L 55 (Apr. 27, 1958); 52 AM. J. INT'L L. 858 (1958); *see also* Marjorie M. Whiteman, *Conference on the Law of the Sea: Convention on the Continental Shelf*, 52 AM. J. INT'L L. 629 (1958); J. A. C. Gutteridge, *The 1958 Geneva Convention on the Continental Shelf*, 35 BRIT. Y. B. INT'L L. 102 (1959).

[361] U.N. Convention on the Law of the Sea art. 60, Dec. 10, 1982, 1833 U.N.T.S. 397 (entered into force Nov. 16, 1994) [hereinafter UNCLOS].

> (4) The coastal State may, where necessary, establish reasonable safety zones around such artificial islands, installations and structures in which it may take appropriate measures to ensure the safety both of navigation and of the artificial islands, installations and structures.
> (5) The breadth of the safety zones shall be determined by the coastal State, taking into account applicable international standards. Such zones shall be designed to ensure that they are reasonably related to the nature and function of the artificial islands, installations or structures, and shall not exceed a distance of 500 meters around them, measured from each point of their outer edge, except as authorized by generally accepted international standards or as recommended by the competent international organization. Due notice shall be given of the extent of safety zones.
> (6) All ships must respect these safety zones and shall comply with generally accepted international standards regarding navigation in the vicinity of artificial islands, installations, structures and safety

international treaties, many States have also unilaterally implemented special zones to protect their interests. Perhaps the most notable of these are the Air Defense Identification Zones (ADIZ) used continuously by the US, Canada, France, Japan, the United Kingdom, China, India and many other countries for decades.[362] Some scholars have defined an ADIZ as, "an area of airspace, adjacent to but beyond the national airspace and territory of the state, where aircraft are identified, monitored and controlled in the interest of national security."[363] The US ADIZ in particular extends twelve miles out from the US coastline and across open sea, requiring that all incoming aircraft report their position within an hour of attempting to enter the ADIZ; failure to comply with ADIZ requirements can result in the interception of the aircraft or total denial of entry into US airspace by diplomatic or forceful means.[364] Both Canada and France have at times created even more expansive and restrictive zones than those exercised by the US.[365] The US military originally coined the term "keep-out zone" for space applications as part of the Strategic Defense Initiative (SDI) and the first

---

> zones.
> (7) Artificial islands, installations and structures and the safety zone around them may not be established where interference may be caused to the use of recognized sea lanes essential to international navigation.
> (8) Artificial islands, installations and structures do not possess the status of islands. They have no territorial sea of their own, and their presence does not affect the delimitation of the territorial sea, the exclusive economic zone or the continental shelf.

Id.

[362] Raul Pedrozo, *Air Defense Identification Zones*, 97 INT'L L. STUD. SER. U.S. NAVAL WAR COL. 7, 8 (2021) [hereinafter Pedrozo].

[363] Ted Adam Newsome, THE LEGALITY OF SAFETY AND SECURITY ZONES IN OUTER SPACE: A LOOK TO OTHER DOMAINS AND PAST PROPOSALS 45 (Aug. 2016) (LL.M. thesis, McGill University) (quoting Roncevert Almond, *Clearing the Air Above the East China Sea: the Primary Elements of Aircraft Defense Identification Zones*, 1 HARV. NAT'L. SEC. J. 129 (2015); 14 C.F.R. § 99.3 (defines an ADIZ as "an area of airspace over land or water in which the ready identification, location, and control of all aircraft (except for Department of Defense and law enforcement aircraft) is required in the interest of national security.")).

[364] Schwetje, *supra* note 351, at 136; Pedrozo, *supra* note 362, at 9; *see also* FED. AVIATION ADMIN., ENTERING, EXITING AND FLYING IN UNITED STATES AIRSPACE, https://www.faa.gov/air_traffic/publications/us_restrictions/airspace/_(last visited Mar. 23, 2022).

[365] Schwetje, *supra* note 351, at 136-37.

deployment of anti-satellite weapons (ASATs), seeking to establish the legality of exclusionary zones in space for the protection of multi-billion dollar space weapons.[366]

Both the US and Russian military industrial complexes carried on discussions regarding the use and limits of keep-out zones in space, even seeking to establish connections in international law to previous US/Russian treaties governing collisions/incidents on the high seas.[367] Using the UN Charter as an example, space law experts, such as Howard J. Taubenfield, also note the potential impossibility of preventing certain space powers from establishing and maintaining exclusionary zones:[368]

> The ability of States administering Mandates and Trust Territories, without claims of sovereignty, to exclude others, make it clear that, even without claims to sovereignty, if technological change and discovery make acquisition in space possible and attractive, it is likely that there will be grave difficulty in asserting an international interest or direct international control over major nations which establish preemptive positions, despite the 1967 treaty.[369]

Taubenfeld notes that history readily reveals States' proclivity for asserting exclusive rights to the resources in *res communis* areas, "as has been true for fish on the high seas and may be for mineral and other resources in space and particularly, in time, on the celestial bodies."[370] Writing in 1969, only two years after the

---

[366] Horst Bittlinger, *Keep-Out Zones and the Non-Appropriation Principle of International Space Law*, 31 PROC. ON L. OUTER SPACE 6, 9 (1988) ("the OTA points to a country's territorial waters and contiguous airspace being considered sovereign and defendable elements of that country. "Keep-out zones" was extrapolation of this concept.") [hereinafter Bittlinger]. *See* U.S. CONGRESS, OFF. TECH. ASSESSMENT, STRATEGIC DEFENSE: ANTI-SATELLITE WEAPONS, COUNTER MEASURES, AND ARMS CONTROL 118 (Sept. 1, 1985).

[367] Bittlinger, *supra* note 366, at 6 ("The establishment of 'keep-out zones' may legally be based on an international agreement comparable to the 'International Regulations for Preventing Collisions at Sea' of 1960 or to the U.S. – Soviet treaty on the 'Prevention of Incidents On and Over the High Seas' of 1972.").

[368] U.N. Charter arts. 73-85.

[369] Taubenfeld, *supra* note 358, at 35.

[370] *Id.*; *see also* Schwetje, *supra* note 351.

> [A]ppropriate non-aggressive uses of the space environment are permitted as long as no claim of exclusive use is based on sovereignty. Certain areas of the earth's surface are considered *res communis,* that is, the territory of no nation, available for all to use. However,

creation of the Outer Space Treaty, Taubenfeld is already thinking critically about problems space lawyers will not face in practice for decades. Despite the fact that Article II and the non-appropriation principle was at that time in its infancy, he aptly notes the inextricability of resource utilization and exclusion zones, recognizing that future conflicts will arise from the interplay of these parallel concepts:

> The question of resource appropriation remains open today and, if important resources become available, a conflict over shares seems likely. Perhaps as a substitute for the older tradition of claims, we may now be witnessing the development of a demand not for sovereignty but for what Nicholas De B. Katzenbach has called the recognition of the 'primary rights of a nation in a localized facility created by its own efforts.'[371]

It is interesting to note that Soviet views were consistent with those of their western counterparts during the heyday of safety/exclusion zone discussion. Writing in 1984, premier Russian space law jurists Zhukov and Kolosov state:

> Soviet legal experts have raised the question of surrounding space objects with safety zones, within which the states on whose registry the objects are carried would exercise their sovereign rights of jurisdiction and control... The establishment of such zones could obviously not be tantamount to the appropriation of territory. International maritime law is familiar with the establishment of various zones of medical and customs control on the high seas adjacent to territorial waters.... Just as the establishment of such zones cannot be interpreted as appropriation of territory, so the establishment of safety zones around space objects cannot be seen as a sovereignty claim to the territory or space occupied by these zones. This is not just because such safety zones are temporary - they may be established for a sufficiently long period.... A territory under the

---

> historically the international community has recognized the right of jurisdictional competence, but not sovereignty over limited areas of what is recognized as *res communis*.

Schwetje, *supra* note 351, at 141.

[371] Taubenfeld, *supra* note 358, at 35 (quoting LEON LIPSON & NICHOLAS DE B. KATZENBACH, THE LAW OF OUTER SPACE 69, 78 (1961)).

> sovereignty of some state differs essentially from any functional zones on territories in common use in that its status and forms of use are not subject to international settlement, but are determined exclusively by the authority of the state exercising sovereignty over it.[372]

It is also worth noting that, in 1993, the Russian Federation expressly permitted the implementation of safety zones around Russian space objects.[373]

Space law scholar M. I. Lazarev also predicted the need for special zones around space habitats decades before humans even possessed the technological capacity to live in orbit for more than a few days. He writes, "[o]bviously, it will be necessary to create a special security zone around each space city in the interest of the space city itself and also in the interest of the security of international space navigation."[374] Recognizing the successful precedent of special zones in the law of the sea, Lazarev suggests, "one cannot discount the notion that instead of zones of security it will be necessary to establish the space equivalent of territorial waters, with space cities and energy producing spacecraft and factories forming the backbone of the territory."[375] Schwetje also argues that the rejection of special zones for "various purposes of safety, security, and traffic management" would be "a grave mistake. If we truly believe that space can be colonized by earthkind, these concepts should be considered to promote safety, security, and stability."[376] Even the great Myres McDougal predicts the inevitability of exclusionary zones in his landmark work on space law:

> [C]onsidering the enormous threats to security and other values which space activities may impose upon particular states, it would appear highly probable that the states of the world will demand, and reciprocally honor, an occasional exclusive

---

[372] GENNADY ZHUKOV & YURI KOLOSOV, INTERNATIONAL SPACE LAW 64 (Boris Belitzky trans. 2d ed. 2014), Sec. IV, art. 17.5.

[373] *See* Law of the Russian Federation "About Space Activity" [Decree No. 5663-1 of the Russian House of Soviets], UNITED NATIONS OFFICE FOR OUTER SPACE AFFAIRS, https://www.unoosa.org/oosa/en/ourwork/spacelaw/nationalspacelaw/russian_federation/decree_5663-1_E.html.

[374] M. I. Lazarev, *Future Space Cities (International Legal Aspects)*, 5 ANNALS AIR & SPACE L. 529, 532 (1980) [hereinafter Lazarev].

[375] *Id*.

[376] Schwetje, *supra* note 351, at 146.

> competence within the domain of space not unlike that which has been established upon the oceans.[377]

Essentially, the concept of safety/exclusion zones in space is not only plausible from an international law perspective (especially in light of its strong precedent in the law of the sea and aviation law), but that decades of meaningful discussion on the subject (from space actors on either side of the political, economic and ideological spectrum) suggest it is both inevitable and necessary for the advancement of sustainable human settlement in space and on celestial bodies.

The question, it seems, is not whether exclusion zones will find applications in space/on celestial bodies, but whether those applications will find applications comparable in scope and severity to similar zones on Earth. The primary hurdle to overcome when attempting to exert special influence over a zone devoid of national sovereignty (e.g. outer space, the high seas) is successfully exerting the desired level of influence without constructively claiming sovereignty over the zone.[378] This could prove a recurring problem for Valinor as it seeks to both collect and secure their local *in situ* resources. In order to maintain adherence to international law, proponents of utilizing exclusionary zones in space collectively recognize the importance of an established reasonableness standard when deducing whether a particular exclusionary zone was admissible on the high seas. Schwetje writes:

> [H]istorically the international community has recognized the right of jurisdictional competence, but not sovereignty over limited areas of what is recognized as *res communis.* This limited jurisdictional authority must meet the criteria of reasonableness under the circumstances, both with regard to the size of the zone created and the restrictions imposed on the use of the zone by other nations... If such zones are created and they unduly interfere with space navigation, the zone created would be

---

[377] McDougal, *supra* note 49, at 162.

[378] Keep in mind, Article II of the Outer Space Treaty states, "Outer space, including the Moon and other celestial bodies, is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means." Outer Space Treaty, *supra* note 3, art. II.

> deemed unreasonable and therefore not legal under international law.[379]

Myres McDougal became a famous advocate of this reasonableness standard (referenced above)—albeit, for application by coastal States/communities—years before the drafting of the Outer Space Treaty, effectively describing one of the customary law principles that would eventually serve as part of the legal foundation for both the OST and its counterparts. McDougal describes his 8-part test of reasonableness as follows:

> The test which has been developed in historic practice for appraising the lawfulness of particular assertions of occasional, exclusive competence by coastal states has been that of reasonableness—of necessity and proportionality—as determined by the careful balancing of important variables in context. The burden of establishing reasonableness is of course upon the state asserting the competence to apply its authority to the craft of other states within the shared domain. The factors taken into account in determination of reasonableness have included [1] the importance of the interests sought to be protected, [2] the particular measures in authority claimed to be applicable to the craft of other states, [3] the relation between the interests sought to be protected and the measures demanded, [4] the kind of activities engaged in by the craft of other states and the interests of the other states in these activities, [5] the relation between claimed immunities from competence and such interests, [6] the precise location of the contested activities and the degree of their impact upon the coastal community, [7] any conditions suggesting necessity for unilateral action, and, finally, [8] the alternatives open to the various states for avoiding both injury and the imposition of injury upon others.[380]

When analyzing McDougal's eight primary factors of reasonableness, it is not difficult to find a common thread connecting each of the individual factors; that is, the common denominator of whether the action itself is actually necessary. In his 1969 book titled, *Space Law*, Gyula Gal also recognizes the importance of

---

[379] Schwetje, *supra* note 351, at 141-42.

[380] McDougal, *supra* note 49, at 162.

necessity when appraising the use of special zones for space applications. He argues that the implementation of special zones around either space stations or establishments on celestial bodies is reconcilable with Article II of the OST to the extent that the special zone is actually necessary for the existence and continued operation of the orbital/extraterrestrial establishment.[381] Gal's perspective essentially echoes for space communities the crux of McDougal's 8-part test of reasonableness for coastal communities. In summary, while the UN space treaties do not contain specific language expressly authorizing the use of exclusionary zones by a future Mars settlement, there is arguably sufficient legal precedent and analogous State practice from which Valinor could extrapolate a legal justification for its actions. Like previous frontier settlements in North America and Australia, history suggests that a community like Valinor would take whatever steps necessary to evolve what useful aspects of its legal heritage are available to facilitate its own success.

Despite the absence of express language defining the use of exclusionary zones in space, Article XII of the Outer Space Treaty potentially anticipates and facilitates the creation of a pseudo "safety zone" around space objects and installations on celestial bodies for the specific purpose of maintaining their safety and preventing the interference of their normal activities:

> All stations, installations, equipment and space vehicles on the Moon and other celestial bodies shall be open to representatives of other States Parties to the Treaty on a basis of reciprocity. Such representatives shall give reasonable advance notice of a projected visit, in order that appropriate consultations may be held and that maximum precautions may be taken to assure safety and to avoid interference with normal operations in the facility to be visited.[382]

The plain language of Article XII has direct relevance for the protection of Valinor's life-support structures on the surface of

---

[381] GYULA GAL, SPACE LAW 198 (1969); Bittlinger, *supra* note 366, at 8*;* McDougal, *supra* note 49, at 161 (recognizing that "the general community has in recent decades . . . honored the assertion . . . of such an occasional, exclusive competence in relation to the ships or aircraft of other states as is reasonably necessary and proportionate to secure certain important interests.").

[382] Outer Space Treaty, *supra* note 3, art. XII.

Mars, indicating that a State's installations are not openly accessible to all external entities without condition. Instead, installations on the Moon or other celestial bodies shall be open "on a basis of reciprocity," implying that, absent situational reciprocity, there is no obligation to maintain open access to an installation. Furthermore, representatives of an external entity "shall give reasonable advance notice of a projected visit, in order that appropriate consultations may be held and that maximum precautions may be taken . . ."[383] Here we see clearly that not only is open access to installations a conditional obligation, but entities wishing to approach an installation must 1) identify themselves in advance, 2) make appropriate consultations with the State of the installation and 3) take maximum precautions while conducting the activity "to assure safety and to avoid interference with normal operations in the facility to be visited."[384] A primary purpose behind this article, as revealed in its final sentence, is to 1) assure safety and 2) avoid interference with the normal operations of the installation. What Article XII essentially describes is an air defense identification zone: a spatial area between a celestial installation and an approaching visitor, the purpose of which is to maintain the safety of approaching interactive entities, prevent the interruption of activities taking place on/in the installation and provide an opportunity for the installation State and approaching visitor to determine whether the installation shall be open "on a basis of reciprocity."[385] The plain language of Article XII reinforces the strong opinion of some scholars that "there may be no absolute legal impediment to the establishment of zones around any type of space object," seeing as "it is unreasonable to expect the people associated with crewed objects in space to allow the uncontrolled approach of other satellites."[386] Even the great Stephen Gorove recognized, "[t]he fact that some measure of at least temporary exclusive jurisdiction may be exercised over a particular area on the [M]oon or other celestial bodies, such as a space station and its adjacent grounds, is also apparent from Article XII, which makes access by representatives of a foreign

---

[383] *Id.*

[384] *Id.*

[385] *Id.*

[386] Schwetje, *supra* note 351, at 144.

State contingent on reciprocity."[387]As of yet, there are few space-based practices in use similar to an exclusionary zone. For example, NASA—in coalition with the Department of Defense's Joint Space Operations Center (JSpOC)—has designated a 30 x 30 mile "pizza box" around the International Space Station for the purpose of orbital debris and spacecraft collision avoidance.[388] The "pizza box" does not assert any exclusive right to maneuver within a specific space, but only sets spatial parameters for maintaining situational awareness and risk mitigation procedures.[389] The International Telecommunication Union (ITU) also regulates the allocation of orbital "slots" for geostationary satellites, attempting to safely and fairly provide for the most efficient use of the increasingly limited geosynchronous Earth Orbit (GEO). Once again, the ITU does not give exclusive rights over orbital slots to satellite operators, it merely establishes the various loci in which States are aware to exercise due regard.[390] However, multiple States and their representative space agencies have recently united to put special zone theory into broader practice (albeit, through a non-legally-binding agreement) via NASA's Artemis Accords, which affirms the future use of "safety zones" on celestial bodies and asserts their legal consistency with the Outer Space Treaty, even claiming such zones are essential for safety and cooperation in space activities:

> In order to implement their obligations under the Outer Space Treaty, the Signatories intend to provide notification of their activities and commit to coordinating with any relevant actor to avoid harmful interference. The area wherein this notification and coordination will be implemented to avoid harmful interference is referred to as a 'safety zone'. A safety zone should be the area in which nominal operations of a relevant activity or an anomalous event could reasonably cause harmful

---

[387] Stephen Gorove, *Interpreting Article II of the Outer Space Treaty*, 37 FORDHAM L. REV. 349, 354-55 (1969); *see also* Taubenfield, *supra* note 358, at 33.

[388] *Space Debris and Human Spacecraft*, NAT'L AERONAUTICS & SPACE ADMIN. (May 26, 2021), https://www.nasa.gov/mission_pages/station/news/orbital_debris.html.

[389] *Id*.

[390] *See* Francois Rancy, *Welcome to ITU-R*, INT'L TELECOMM. UNION (Jan 27, 2011), https://www.itu.int/net/ITU-R/index.asp?category=information&rlink=itur-welcome&lang=en.

> interference. The Signatories intend to observe the following principles related to safety zones:
>
> (a) The size and scope of the safety zone, as well as the notice and coordination, should reflect the nature of the operations being conducted and the environment that such operations are conducted in;
>
> (b) The size and scope of the safety zone should be determined in a reasonable manner leveraging commonly accepted scientific and engineering principles;
>
> (c) The nature and existence of safety zones is expected to change over time reflecting the status of the relevant operation. If the nature of an operation changes, the operating Signatory should alter the size and scope of the corresponding safety zone as appropriate. Safety zones will ultimately be temporary, ending when the relevant operation ceases; and
>
> (d) The Signatories should promptly notify each other as well as the Secretary-General of the United Nations of the establishment, alteration, or end of any safety zone, consistent with Article XI of the Outer Space Treaty.[391]

It is interesting to note in Section 11 of the Artemis Accords that the scope and function of "safety zones" shall be determined 1) based on principles of reasonableness[392] and 2) to avoid harmful interference of any space actor's activities. While the language of Section 11 as a whole expressly draws its inspiration and authority from Article IX of the Outer Space Treaty,[393] its overall objective to

---

[391] Artemis Accords, *supra* note 298, at Section 11(7)(a)-(d).

[392] *See* McDougal, *supra* note 49, at 162.

[393] Section 11(3) of the Artemis Accords expressly references Article IX:

> Consistent with Article IX of the Outer Space Treaty, a Signatory authorizing an activity under these Accords commits to respect the principle of due regard. A Signatory to these Accords with reason to believe that it may suffer, or has suffered, harmful interference, may request consultations with a Signatory or any other Party to the Outer Space Treaty authorizing the activity.

Artemis Accords, *supra* note 298, at Section 11(3).

prevent the harmful interference of space activities is an undeniable echo of the principles contained in both Article IX and Article XII.[394] It is important to note here that safety zones and exclusionary zones are not the same thing. As previously discussed, exclusionary zones over air and sea were first implemented during the second world war as a means of practicing self-defense. To this day, ADIZ are used to protect national borders and ensure national security. Safety zones, on the other hand, are a less severe version of exclusionary zones, intended for routine use during normal activities. The use of safety zones on the surface of Mars would likely be far less controversial than a strictly enforced ADIZ. While the Artemis Accords arguably describe a stronger safety zone than the benign "pizza box" surrounding the ISS, neither premeditates the violent destruction of approaching hostile entities. Nonetheless, both the Artemis Accords and Articles IX and XII of the OST anticipate

---

Article IX of the Outer Space Treaty states:

> In the exploration and use of outer space, including the Moon and other celestial bodies, States Parties to the Treaty shall be guided by the principle of cooperation and mutual assistance and shall conduct all their activities in outer space, including the Moon and other celestial bodies, with due regard to the corresponding interests of all other States Parties to the Treaty. States Parties to the Treaty shall pursue studies of outer space, including the Moon and other celestial bodies, and conduct exploration of them so as to avoid their harmful contamination and also adverse changes in the environment of the Earth resulting from the introduction of extraterrestrial matter and, where necessary, shall adopt appropriate measures for this purpose. If a State Party to the Treaty has reason to believe that an activity or experiment planned by it or its nationals in outer space, including the Moon and other celestial bodies, would cause potentially harmful interference with activities of other States Parties in the peaceful exploration and use of outer space, including the Moon and other celestial bodies, it shall undertake appropriate international consultations before proceeding with any such activity or experiment. A State Party to the Treaty which has reason to believe that an activity or experiment planned by another State Party in outer space, including the Moon and other celestial bodies, would cause potentially harmful interference with activities in the peaceful exploration and use of outer space, including the Moon and other celestial bodies, may request consultation concerning the activity or experiment.

Outer Space Treaty, *supra* note 3, art. IX.

[394] *See supra* notes 382-393.

the need for space actors to prevent the "harmful interference" of their space activities by other space actors.[395]

As discussed previously in this paper, historical analysis suggests that frontier societies not only seek to acquire/mine/extract/forage/hunt/build their own means of survival, but those societies then seek to establish a means of protecting their life-giving resources so that their maximum utilitarian potential may be realized. International law has long recognized the rights of peoples and nations to utilize and benefit from natural resources,[396] within the realm of reasonableness, and has passed down these concepts into the lexicon of space law, evidenced by the language of the CSLCA and the Artemis Accords.[397] Despite the inherent ambiguity of current international space law as to the specifics of resource utilization and exclusionary/safety zones, entities capable of actually conducting space activities continue to interpret and adapt today's space law faculties to better facilitate the success of their exploratory endeavors. This recurring theme was predicted decades before the Artemis Accords or the 2015 Space Act by George S. Robinson. He writes:

> [A]s in colonial, postcolonial, or any imperialistic circumstances (economic, political, or military), the actual development of the space frontier will not be by lawyers and judges. Rather, the development and practical use (as opposed to "exploration undertaken by governments) will be through the efforts of the merchants, business people, stockholders, multinational corporate personalities, and the ever-present military. These entities already view international space treaties and related complex domestic laws as obfuscations and wishful thinking.[398]

While the future use of exclusionary zones for space applications—like celestial resource extraction and utilization—appears inevitable, it is only the tip of an iceberg of potential actions under the greater principle of self-defense. While these concepts have not

---

[395] *See supra* notes 391, 393.

[396] G.A. Res. 1803 (XVII), at 15 (Dec. 14, 1962).

[397] *See* CSLCA, *supra* note 332; Artemis Accords, *supra* note 298. Both the CSLCA and the Artemis Accords espouse compliance with Article II of the Outer Space Treaty and all other obligations under applicable general international law.

[398] Robinson, Must There Be Space Colonies?, *supra* note 21, at 215.

yet been applied in the context of an extraplanetary settlement, questions regarding sovereignty, resource utilization, special zones and self-defense are critical for Valinor's leadership to understand and consider, especially if its people choose to break from the socio-political and legal confines of their *fundator terrani* and embark on a journey toward self-determination. The remainder of this chapter addresses how Valinor could adapt and utilize its inherited legal framework—for both self-defense and the right to self-determination—to help ensure the immediate survival and long-term success of its people.

2. Exclusionary Zones as Part of the Right to Self-Defense

The concept of exclusionary zones arguably owes its existence to and depends upon one's interpretation of Article 51 of the UN Charter (to which all current space faring nations are a Party), especially when taking into account that certain kinds of exclusionary zones (such as ADIZ) are fundamentally defensive in nature. Article 51 states in part, "[n]othing in the present Charter shall impair the inherent right of individual or collective self-defense if an armed attack occurs against a Member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security."[399] According to international law scholar Eian Katz, "all provisions of the UN Charter are subject to qualification by Article 51,"[400] making it one of the most fundamental and fiercely debated articles under international law. The nature and interpretation of this article is especially important for activities in space, seeing as all parties to the Outer Space Treaty are bound under Article III of the OST to "carry on activities in the exploration and use of outer space . . . in accordance with international law, including the Charter of the United Nations."[401] Therefore, the principle of self-defense under Article 51 of the Charter is

---

[399] U.N. Charter art. 51.

[400] Katz, Buffer Zones, *supra* note 356, at 1397.

[401] Outer Space Treaty, *supra* note 3, art. III ("States Parties to the Treaty shall carry on activities in the exploration and use of outer space, including the Moon and other celestial bodies, in accordance with international law, including the Charter of the United Nations, in the interest of maintaining international peace and security and promoting international cooperation and understanding.").

also applicable to space activities.[402] However, if Article 51 only applies to Members of the United Nations, what relevance does Article 51 have for a non-State entity like Valinor? Theoretically, so long as the settlement is under the jurisdiction of the US, it could exercise self-defense in the event of an attack by a foreign State actor. But what if the attack comes from a non-State actor? While there exists a longstanding debate amongst scholars as to the scope of self-defense against attack by non-State actors, international legal scholar Daniel Bethlehem notes, "[t]here is little intersection between the academic debate and the operational realities . . . the reality of the threats, the consequences of inaction, and the challenges of both strategic appreciation and operation decision making in the face of such threats frequently trump a doctrinal debate . . ." He writes further, "[i]t is by now reasonably clear and accepted that states have a right of self-defense against attacks by nonstate actors—as reflected, for example, in UN Security Council Resolutions 1368 and 1373 of 2001, adopted following the 9/11 attacks in the United States."[403] Both Resolutions 1368 and 1373 recognize "the inherent right of individual or collective self-defense in accordance with the Charter" in response to the "horrifying terrorist attacks" by non-State actors on 9/11.[404]

Alternatively, would Valinor retain the right to self-defense if it is neither under the jurisdiction of the United States nor formally recognized as an independent Member of the United Nations? Could Valinor legitimately exercise self-defense if it declares itself an independent, sovereign People under the principle of self-determination? The following section discusses the principle of self-defense as it relates to States under international law—essentially, what would potentially constitute Valinor's inherited legal framework for self-defense. However, regardless of whether Valinor

---

[402] For a brilliantly thorough discussion of self-defense in outer space, *see* Isavella Maria Vasilogeorgi, *Military Uses of Outer Space: Legal Limitations, Contemporary Perspectives*, 39 J. SPACE L. 379 (2014); Isavella Maria Vasilogeorgi, MILITARY USES OF OUTER SPACE: LEGAL LIMITATIONS, CONTEMPORARY PERSPECTIVES (August 2011) (LL.M. thesis, McGill University) (on file with eScholarship, McGill University), https://escholarship.mcgill.ca/concern/theses/w0892g10f.

[403] Daniel Bethlehem, *Self-Defense Against an Imminent or Actual Armed Attack by Nonstate Actors*, 106 AM. J. INT'L L. 770, 773-74 (2012).

[404] S.C. Res. 1368, ¶ 1, U.N. Doc. S/RES/1368 (Sept. 12, 2001); S.C. Res. 1373, ¶ 1, U.N. Doc. S/RES/1373 (Sept. 28, 2001).

successfully self-determines (the process for which is discussed at length later in this chapter), it is posited that a future Mars settlement experiencing similar circumstances to Valinor will adapt and evolve its inherited legal framework in ways beneficial to its survival, including adaptations necessary to ensure self-defense.

A key aspect of Article 51 often debated is whether its language bars a State from practicing self-defense before the occurrence of an armed attack, or whether certain actions may be taken in anticipation of an attack that has not yet occurred (e.g., the use of ADIZ zones in times of peace). The answer to this question is often associated with the additional argument as to whether Article 51 was intended to nullify the pre-existing customary law principle of self-defense or to simply affirm and reinforce it?[405] In response to both of these questions, international law scholar Oscar Schachter writes,

> On one reading [of Article 51] this means that self-defense is limited to cases of armed attack. An alternative reading holds that since the article is silent as to the right of self-defense under customary law (which goes beyond cases of armed attack), it should not be construed by implication to eliminate that right . . . It is therefore not implausible to interpret [A]rticle 51 as leaving unimpaired the right of self-defense as it existed prior to the Charter.[406]

Furthermore, many scholars argue that the specific language "inherent right to self-defense" recognizes and affirms the more "permissive pre-Charter customary law."[407]After all, it would be unreasonable and contrary to the purpose of international law if States facing imminent peril were required to await physical bombardment before activating an organized defense.[408] There is no principle under International Law requiring States to turn the

---

[405] Oscar Schachter, *The Right of States to Use Armed Force*, 82 MICH. L. REV. 1620, 1633 (1984) [hereinafter Schachter].

[406] *Id*. at 1633-34.

[407] Katz, Buffer Zones*, supra* note 356, at 1398-99 (referencing *A More Secure World: Our Shared Responsibility,* from the Secretary-General's High-Level Panel on Threats, Challenges, and Change, UN Doc A/59/565 63 (2004)) [hereinafter A More Secure World].

[408] *See* Myres McDougal, *The Soviet-Cuban Quarantine and Self-Defense*, 57 AM. J. INT'L. L. 597 (1963).

other cheek.[409] This is why, as early as 1946, the US Government expressed that "the term 'armed attack' should be defined to include not merely the dropping of a bomb but 'certain steps in themselves preliminary to such action.'"[410]

In practice, States have frequently and successfully relied on Article 51 to take defensive actions without the authorization of the United Nations Security Council (UNSC).[411] The UN itself has interpreted Article 51 to permit preemptive defensive strikes absent UNSC authorization when "the threatened attack is imminent," so long as those actions do not constitute a lesser and more general "preventive military action" against less defined, remote threats.[412] Although the International Court of Justice (ICJ) has adopted a far more restrictive interpretation of Article 51, "refusing to admit the self-defense justification in the absence of an armed attack and disapproving of 'security needs that are essentially preventative,'"[413] the ICJ's position does not necessarily represent an international consensus, seeing as the Court's jurisdiction and authority is technically limited to those parties that agree to it.[414] Instead, the legal discussion surrounding Article 51 tends to acknowledge that "states facing an imminent threat of attack will take defensive measures irrespective of the law," even if "it is preferable to have states make that choice governed by necessity than to adopt a principle that would make it easier for a state to launch an attack on the pretext of anticipatory defense."[415] Some authors emphasize this point when recognizing that Article 51 is essentially conditional upon a fast and efficient UNSC response to conflicts, "which history has

---

409 Schachter, *supra* note 405, at 1636.

410 *Id*. at 1634 (quoting PHILIP JESSUP, A MODERN LAW OF NATIONS 166-67 (1948)).

411 Katz, Buffer Zones, *supra* note 356, at 1398.

412 *Id*. (referencing A More Secure World, *supra* note 407, at 63).

413 *Id*. (quoting Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v. Uganda), Judgment, 2005 I.C.J. 168, 222-23, ¶¶143, 147 (Dec. 19)).

414 *See id*. at 1419; *see also* Mark Angehr, *The International Court of Justice's Advisory Jurisdiction and the Review of Security Council and General Assembly Resolutions*, 103 NW. U. L. REV. 1007, 1025-27 (2009); Kathleen Cronin-Furman, *The International Court of Justice and the United Nations Security Council: Rethinking a Complicated Relationship*, 106 COLUM. L. REV. 435, 444-47 (2006); Michael J. Matheson, *ICJ Review of Security Council Decisions,* 36 GEO. WASH. INT'L L. REV. 615, 619-22 (2004).

415 Schachter, *supra* note 405, at 1634 (referencing L. HENKIN, HOW NATIONS BEHAVE 141-45 (2d ed. 1979)).

revealed to be woefully overoptimistic."[416] In response to the UN's burgeoning bureaucracy and sluggishness, and "noting that the 1969 Vienna Convention on the Law of Treaties nullifies pacts founded on false premises,"[417] Robert Delahunty writes of Article 51, "[a] treaty that deprives a state of the means to protect itself against external threats to its existence is immoral and void."[418]

Although customary international law requires that the forceful exercise of self-defense must be necessary,[419] proportionate[420] and only occur after "recourse to peaceful means,"[421] none of these

---

[416] Katz, Buffer Zones, *supra* note 358, at 1399; *see also* Robert J. Delahunty, *Paper Charter: Self-Defense and the Failure of the United Nations Collective Security System*, 56 CATH. U. L. REV. 871, 940-43 (2007) [hereinafter Delahunty].

[417] Katz, Buffer Zones, *supra* note 356, at 1399.

[418] Delahunty, *supra* note 416, at 942.

[419] Schachter, *supra* note 405, at 1634-35 (quoting FRANCIS WHARTON & JOHN B. MOORE, DIGEST OF INTERNATIONAL LAW 412 (1906); L. HENKIN ET AL, INTERNATIONAL LAW 890-91 (1980)). It is widely accepted that the formal customary requirement of "necessity" prior to the exercise of self-defense was well expressed by US Sec. of State Daniel Webster in a letter to the British in 1842. In this letter, Webster denied the assertion that the British had a legal right to attack an American vessel carrying soldiers (the Caroline) on the US side of the Niagara River in 1837. Webster denied that the British attack was justified under the doctrine of necessity and argued that self-defense may only be exercised when "the necessity of that self-defense is instant, overwhelming, and leaving no choice of means, and no moment for deliberation." Although Schachter provides that the Webster prerequisites to self-defense are accepted as authoritative, they are not always reflected in State practice. However, the UNSC cited Webster and the Caroline Incident when rejecting the legality of Israel's 1981 attack on an Iraqi nuclear reactor, *see* U.N. SCOR, 36th Sess., 2285-88th mtgs., U.N. Docs. S/PV.2285-88 (1981).

[420] Schachter, *supra* note 405, at 1637 ("Acts done in self-defense must not exceed in manner or aim the necessity provoking them. This general formula obviously leaves room for differences in particular cases. But uncertainties in some situations do not impair the essential validity of the principle or its practical application in many conflicts."); *See also* D. W. Bowett, *Reprisals Involving Recourse to Armed Force*, 66 AM. J. INT'L. L. 1, 33-36 (1972); UNSC rejection of Israel's "Peace for Galilee" action in 1982 (S.C. Res. 508, 509, 517 (1982)); U.N. GAOR, 31st Sess., 7th plen. mtg., U.N. Doc. A/RES/ES-7/9 (Sept. 24, 1982).

[421] U.N. Charter art. 2(3) ("All Members shall settle their international disputes by peaceful means in such a manner that international peace and security, and justice, are not endangered"); *see also* Schachter, *supra* note 405, at 1635-37:

> As a matter of principle, there should be no quarrel with the proposition that force should not be considered necessary until peaceful measures have been found wanting or when they clearly would be futile. However, to require a state to allow an invasion to proceed without resistance on the ground that peaceful settlement should be sought first, would, in effect, nullify the right of self-defense.

requirements may abridge a State's right to self-preservation and "no state has given up the right of self-defense wherever it sees a threat to its national security."[422] Furthermore, major space powers have made it clear since the 1960s that "[s]erious threats arising from hostile acts in outer space will be countered just as they would [on Earth]."[423] A famous example of this ideology is the "Blau-Goure Doctrine," which posits that the right of self-defense extends to space without distinguishment from its application on Earth.[424] Even seminal legal scholar Bin Cheng found that "neither in the Preamble, nor any provisions of the Space Treaty other than Article IV, do we find any restriction of outer space to exploration or use exclusively for peaceful purposes, or limiting the military use of outer space."[425] This is the foundation of the logic scholars have used for decades to support the legality of unilaterally imposed buffer zones/exclusionary zones as a form of anticipatory self-defense, so long as the use of these zones is "a necessary and proportionate response to provocation."[426]

As previously mentioned, space powers like the US, France and Canada have actively practiced the idea that the right to self-defense permits the creation of ADIZ/exclusionary zones in the air and over the seas,[427] a right that these States (and others) believe extends to self-defense requirements in space and on celestial bodies.[428] Authors like Horst Bittlinger and others have agreed with this assessment, holding that Article 51 not only allows for the

---

Schachter, *supra* note 405, at 1635.

[422] Taubenfeld, *supra* note 358, at 35.

[423] *Id*. at 35, 36.

[424] Schwetje, *supra* note 351, at 143 (referencing T. BLAU & D. GOURE, MILITARY AND DIPLOMATIC ISSUES IN ACTIVE SPACE DEFENSE 39 (1980)).

[425] Bin Cheng, *Properly Speaking, Only Celestial Bodies Have Been Reserved for Use Exclusively for Peaceful (Non-Military) Purposes, but Not Outer Void Space*, *in* INTERNATIONAL LAW ACROSS THE SPECTRUM OF CONFLICT: ESSAYS IN HONOUR OF PROFESSOR L.C. GREEN ON THE OCCASION OF HIS EIGHTIETH BIRTHDAY 81 (Michael N. Schmitt ed. 2000).

[426] Katz, Buffer Zones, *supra* note 356, at 1398, 1399 (noting that, "buffer zones will ordinarily more easily satisfy the necessity and proportionality principles due to their territorial and operational limitations. But the imminence prong remains a challenging hurdle to overcome.").

[427] Pedrozo, *supra* note 362, at 8, 9.

[428] Taubenfeld, *supra* note 358, at 35-36 (revealing that both US and Russian representatives have previously indicated that they will protect space assets from attack as zealously as if they were assets in the air or on the high seas and that they believed these actions would be fully justified under the UN Charter and customary law.).

creation of keep-out zones in space, but that the use of force may be justified when a State enters another State's keep-out zone without its consent, citing once again the widespread use of analogous exclusionary zones such as "national claims on temporary exclusive use of portions of the High Seas for nuclear arms tests or the unilateral declaration of [ADIZ] above coastal zones of the High Seas."[429] However, many authors vehemently disagree with legality of imposing special zones in space as a means of self-defense, believing them contrary to the Outer Space Treaty and a misapplication of international law as a whole.[430]

Nonetheless, Valinor's unique circumstances predicate unique responses. Trapped on the hostile surface of Mars, at odds with its corporate financier and with (at least temporarily) no hope of rescue from other space fairing nations/corporations, Valinor has no choice but to fend for itself and defend the survival interests of its inhabitants, perhaps even prior to achieving UN Member status. Based on the historical review of other frontier societies facing analogous circumstances, Valinor will be forced to put legal theory into legal practice, implementing those concepts of law which are useful, casting aside any that would hinder its survivability and ultimately generating innovative new faculties specially designed to service the needs of a small community experiencing an entirely new chapter of humanity's story in the cosmos. Consequently, this author suggests that a Martian settlement under similar circumstances as Valinor will inevitably adapt and evolve its inherited legal framework for self-defense in ways necessary to facilitate its own survival, regardless of whether it achieves UN Member status and recognition as a sovereign State. Schachter writes:

> One is compelled to conclude that a state being attacked is under a necessity of armed defense, irrespective of probabilities as to the effectiveness of peaceful settlement. We reach a similar conclusion in the case of an imminent threat involving danger to the lives of persons coupled with unreasonable demands for concessions. It would be hard to deny the necessity for

---

[429] Bittlinger, *supra* note 366, at 7.

[430] *Id.*; *see also* R. Dalbello, *Rules of the Road: Legal Measures to Strengthen the Peaceful Uses of Outer Space*, 18 PROC. ON L. OUTER SPACE 8 (1985); Von Kries, *International Space Law Implications of the U.S. SDI and ASAT Programs: The Current Legal Debate*, 35 ZLW 309 (1986).

> forcible action in that case on the ground that a peaceful means might succeed.[431]

Schachter's observations are important to note for the inhabitants of Valinor, seeing as they are unquestionably facing imminent danger from their planetary environment, coupled with unreasonable demands from OnlyEarth that could turn hostile if OnlyEarth perceives that its financial investments are at risk. There is also the risk that foreign State entities will seek to leverage an economic or military advantage from Valinor's vulnerable position. While Valinor's immediate legal arguments for the imposition of exclusionary zones—as well as forceful means of practicing self-defense—is by no means unshakable, history suggests Valinor will bend, adapt and evolve its inherited legal structures in the interest of survival.

In order for Valinor to effectively establish and benefit from a fledgling micro-economy, utilize its surrounding natural resources and defend itself from outside hostilities, it will need to act on its own authority to establish trade agreements with other private space companies and/or States, lobby for its own interests in the "international" theatre and unilaterally determine its own social and economic development. In order to accomplish this feat, Valinor will likely throw a "Hail Mary" down the proverbial field of international law by declaring itself an independent entity, fully capable of executing all meaningful functions inherent in traditional concepts of sovereignty (these functions will be discussed in detail later). While previous colonial entities in North America and Australia achieved self-rule by means of either violent revolution or long-term political and economic pressure, Valinor's precarious position affords neither approach. As a scientific community technically "owned" by a private company with "authorization and continuing supervision" by the United States, Valinor has at its disposal a proven method of achieving self-rule that is both urgent and nonviolent. The means of potentially accomplishing this radical initiative can be found in the international law principle of self-determination.

---

[431] Schachter, *supra* note 405, at 1635.

C. The Right to Self-determination

This final section of the paper will address the international law principle of self-determination as a potential means for a future Mars community to achieve meaningful self-rule for the purposes of long-term success and survival. On its face, the concept of a small Mars community declaring its independence from Earth admittedly sounds like the plot of a low-budget sci-fi series. However, the lessons of history demand that the eventuality of humans "recognizing the passionate yearning for freedom in all dependent peoples and the decisive role of such peoples in the attainment of their independence"[432] is neither far-fetched nor far-off. On the contrary, space law scholars and international law experts have anticipated such an impending reality for decades. As discussed in previous sections, multiple national space agencies and space corporations have set out to establish a human presence on Mars within a decade, perhaps even sooner. Interestingly, SpaceX has already made a preemptive—albeit humorous—declaration of Martian independence. Section 10 of SpaceX's Starlink Pre-Order Agreement states:

> For Services provided to, on, or in orbit around the planet Earth or the Moon, this Agreement and any disputes between us arising out of or related to this Agreement, including disputes regarding arbitrability ("Disputes") will be governed by and construed in accordance with the laws of the State of California in the United States. For Services provided on Mars, or in transit to Mars via Starship or other spacecraft, the parties recognize Mars as a free planet and that no Earth-based government has authority or sovereignty over Martian activities. Accordingly, Disputes will be settled through self-governing principles, established in good faith, at the time of Martian settlement.[433]

In response to this bold (if satirical) language, space law commentator Antonino Salmeri appropriately notes that "any attempt to declare 'Mars as a free planet' and reject the authority of 'Earth-

---

[432] G.A. Res. 1514 (XV), Declaration on the Granting of Independence to Colonial Countries and Peoples, at 66 (Dec. 1960) [hereinafter Dec. on Colonial Peoples].

[433] *Starlink Pre-Order Agreement* art. 10, SPACEX (Feb. 9, 2021), https://www.starlink.com/legal/terms-of-service-preorder [https://web.archive.org/web/20210209133630/https://www.starlink.com/legal/terms-of-service-preorder].

based government' over Martian activities is in violation of international space law and consequently bear[s] no legal effect on third parties."[434] Salmeri also recognizes the grave significance of any space actor unilaterally making declarations as to the legal status of celestial bodies, warning that "declaring Mars a 'free planet' would condemn its first inhabitants to the indisputable will of a private corporation — a dangerous situation threatening the fundamental rights of any human traveling with SpaceX."[435] Despite its relatively informal nature, both SpaceX's Starlink user agreement and the legal community's summary response pose multiple important questions regarding concepts of independence, contracts, private activities in space, fundamental human rights and self-determination. All of these ideas are fundamentally interconnected and made manifest in the international legal principle of self-determination.

While the inclusion of broad-stroked declarations of Martian independence are both interesting and entertaining in the context of a user agreement for Earth-based consumers of satellite internet, it is important to recognize that each year brings humanity closer to the realization of true interplanetary habitation and the many complex problems that will invariably accompany it. As expressed through the fictional narrative of Valinor, it is not difficult to imagine—especially when carefully considering colonial history—a near future where a scientific community similar to Valinor will make difficult decisions under difficult circumstances, permanently affecting the nature of their social, economic and political identity. It is with these future communities in mind that this paper was written, and why the next section is perhaps most important for consideration by future settlers of other worlds.

1. The Principle of Self-Determination

Although the first half of this paper focused primarily on the evolution of law during the height of European colonialism, this section will discuss its veritable end. The post WWII era saw the world community—acting predominantly through mechanisms of the

---

[434] Antonino Salmeri, *No, Mars is Not a Free Planet, No Matter What SpaceX Says*, SpaceNews (Dec. 5, 2020), https://spacenews.com/op-ed-no-mars-is-not-a-free-planet-no-matter-what-spacex-says/.

[435] *Id.*

United Nations General Assembly and Security Council—progressively recognize the concept of self-determination, first as a principle of international law and then (arguably) as a fundamental human right. An astounding body of literature teases apart the microfibers constituting self-determination, cross-pollinating the several treaties and covenants, countless General Assembly resolutions, substantive case law and expert arguments of renowned jurists, generating legal conclusions across a vast spectrum of potential uses for the idea of self-determination. In light of the vast body of work already available on the subject, this paper dares not attempt to substantively contribute to the legal discourse of self-determination, but only to summarize its most basic tenants in an effort to postulate how the people of Valinor might leverage self-determination as a means of securing their continued survival on Mars. In many ways, the entirety of this paper is a discussion on humanity's historic pursuit of self-determination, whether exercised by English colonists in North America and Australia who sought to break from "Old World" society, the native peoples of "New World" continents fighting to stave off the growing assault on their own right to choose their social, economic, cultural, political and religious fate, or future scientists and explorers scratching out a living on far-away planets.

Previous sections have already described the plight of Valinor[436] and discussed potential ways in which Valinor's people may seek to facilitate their continued survival off-world, despite growing animosity from OnlyEarth and the lack of support from an international community crippled by unprecedented socioeconomic turmoil. If Valinor is to jump-start its own microeconomy, defend its resources from potentially unethical and exploitative actions by OnlyEarth or other hostile actors and incentivize trade with other Earth entities, it will likely need to establish itself as an independent and sovereign People, capable of exercising all rights and privileges traditionally associated with sovereignty under international law. However, accomplishing this feat in a "legal" fashion is far easier said than done and typically hinges on one's interpretation of what self-determination means in practice. Therefore, this section will discuss some of the key international instruments, substantive case law and opinions of jurists regarding the application of self-

[436] *See* "Pointing Rick Dalton," ONCE UPON A TIME IN HOLLYWOOD (Columbia Films 2019), https://media.giphy.com/media/kd9BlRovbPOykLBMqX/giphy.gif.

determination, exploring how a community of extraordinary people under extraordinary circumstances could leverage self-determination as a means of survival. It is not this author's intent to make a determination as to whether Valinor does or does not have a right to self-determination, self-rule or secession under the law, but only to investigate the extent to which a community like Valinor might pursue one or more of these objectives within the current international law framework, notwithstanding the possibility that Valinor will altogether break, adapt and evolve its inherited legal framework to facilitate its own survival.

2. Key International Instruments

This section provides a brief summary of several key international legal instruments that have helped define the principle of self-determination over the last 75 years. While not an exhaustive list, the following instruments are those most often cited by courts applying the principle to real-world scenarios; therefore, those instruments most likely useful or relevant to Valinor's predicament. As this analysis progresses, it will bring recurring attention to certain crucial language most relevant to an extra-planetary people pursuing self-rule.

Considering that the UN space treaties are largely considered *lex specialis*[437] for activities conducted in outer space and on celestial bodies, and noting that none of the UN space treaties expressly mention self-determination, students of space law may ask how the principle of self-determination comes into play for future Mars settlements? Assuming Valinor is under the jurisdiction of the Outer Space Treaty of 1967—at least, so long as it is under the

---

[437] *Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law*, Int'l Law Comm'n, Rep. on the Work of Its Fifty-Eighth Session, U.N. Doc. A/CN.4/L.682 34, at ¶¶ 85-110 (Apr. 13, 2006) [hereinafter Report on Fragmentation of Int'l Law].

> There is no formal hierarchy between the sources of International law. A number of writers have – correctly, it is submitted – nonetheless suggested that there is a kind of informal hierarchy between them. Inasmuch as "general law" does not have the status of *jus cogens*, treaties generally enjoy priority over custom and particular treaties over general treaties.

Id. at ¶85.

authorization and continuing supervision of the United States—Article III of the OST indirectly incorporates concepts of self-determination articulated in both the UN Charter (1947) and general international law, stating that:

> "States Parties to the Treaty shall carry on activities in the exploration and use of outer space . . . and other celestial bodies, in accordance with international law, including the Charter of the United Nations, in the interest of maintaining international peace and security and promoting international co-operation and understanding."[438]

Further, Article 103 of the UN Charter states, "[i]n the event of a conflict between the obligations of the Members of the United Nations under the present Charter and their obligations under any other international agreement, their obligations under the present Charter shall prevail."[439] Essentially, for those entities subject to both the Charter and the OST, the principle of self-determination (insofar as it is addressed by the charter) is (1) incorporated by indirect reference under Article III of the OST and (2) protected from derogation by any other international agreement (including the OST) under Article 103 of the Charter.[440]

Self-determination as an actionable principle owes much of its modern authority to Articles 1(2) and 55 of the United Nations Charter (1945), which "expressly establishes the right to self-determination" and reveals that a majority of the UN's purposes and objectives hinge on the full realization and application of self-determination across the world.[441] Article 1(2) states in part, "The Purposes of the United Nations Are . . . [t]o develop friendly relations among nations based on respect for the principle of equal rights and self-determination of peoples, and to take other appropriate

---

[438] Outer Space Treaty, *supra* note 3, art. III.

[439] Report on Fragmentation of Int'l Law, *supra* note 437, at 168 (quoting U.N. Charter art. 103).

[440] *Id.* at 175-176.

[441] AURELIU CRISTESCU, THE RIGHT TO SELF-DETERMINATION – HISTORICAL AND CURRENT DEVELOPMENT ON THE BASIS OF UNITED NATIONS INSTRUMENTS 2-3 (1981) [hereinafter Cristescu]. Cristescu quotes part of the deliberations regarding this Article (found in I/1/A/19 9703-04) that, "an essential element of the principle in question, is a free and genuine expression of the will of the peoples . . ."

measures to strengthen universal peace."[442] Article 55 calls once again on self-determination, stating:

> With a view to the creation of conditions of stability and well-being which are necessary for peaceful and friendly relations among nations based on respect for the principle of equal rights and self-determination of peoples, the United Nations shall promote:
>
> higher standards of living, full employment, and conditions of economic and social progress and development;
>
> solutions of international economic, social, health, and related problems; and international cultural and educational cooperation; and
>
> universal respect for, and observance of, human rights and fundamental freedoms for all without distinction as to race, sex, language, or religion.[443]

Taken together, Articles 1(2) and 55 not only expressly establish self-determination as a principle of international law, but also make important connections between self-determination, the purposes of the UN and concepts of human rights, fundamental freedoms, economic and social progress and peaceful relations amongst States – a set of connections the UN would later develop further in additional treaties, covenants and resolutions. Articles 73 and 76 of the UN Charter further expand upon ideas integral to the application of self-determination (albeit, without mentioning the term itself) as part of the Charter's eleventh and twelfth chapters addressing the Declaration Regarding Non-Self-Governing Territories and the International Trusteeship System respectively. Article 73 states in part:

> Members of the United Nations which have or assume responsibilities for the administration of territories whose peoples have not yet attained a full measure of self-government recognize the principle that the interests of the inhabitants of these territories are paramount, and accept as a sacred trust the obligation to promote to the utmost, within the system of

---

[442] U.N. Charter art. 1(2).
[443] U.N. Charter art. 55.

> international peace and security established by the present Charter, the well-being of the inhabitants of these territories, and, to this end:
>
> a. to ensure, with due respect for the culture of the peoples concerned, their political, economic, social, and educational advancement, their just treatment, and their protection against abuses;
>
> b. to develop self-government, to take due account of the political aspirations of the peoples, and to assist them in the progressive development of their free political institutions, according to the particular circumstances of each territory and its peoples and their varying stages of advancement;
>
> c. to further international peace and security . . .[444]

Article 76 echoes the declaratory language of Article 73 with more specificity, expressing how the UN's trusteeship system works with regard to elevating the world's many colonized and conquered "sacred trust" territories to self-governance. The article states in full:

> The basic objectives of the trusteeship system, in accordance with the Purposes of the United Nations laid down in Article 1 of the present Charter, shall be:
>
> a. to further international peace and security;
>
> b. to promote the political, economic, social, and educational advancement of the inhabitants of the trust territories, and their progressive development towards self-government or independence as may be appropriate to the particular circumstances of each territory and its peoples and the freely expressed wishes of the peoples concerned, and as may be provided by the terms of each trusteeship agreement;
>
> c. to encourage respect for human rights and for fundamental freedoms for all without distinction as to race, sex,

---

[444] U.N. Charter art. 73.

> language, or religion, and to encourage recognition of the interdependence of the peoples of the world; and
>
> d.to ensure equal treatment in social, economic, and commercial matters for all Members of the United Nations and their nationals, and also equal treatment for the latter in the administration of justice, without prejudice to the attainment of the foregoing objectives and subject to the provisions of Article 80.[445]

It is important to note that both Article 73 and 76 express a definitive agreement and concerted effort by the international community to retreat from the grounds of past colonial conquests and re-establish self-rule for the various non-self-governing peoples and territories according to the will and wishes of the people themselves. While neither article expressly mentions self-determination, "the principle of the right to self-determination is established indirectly in Article 76"[446] under paragraph (b), where it expressly states that one of the objectives of the trusteeship system is to "promote the political, economic, social, and educational advancement of the inhabitants of the trust territories, and their progressive development towards self-government or independence as may be appropriate to the particular circumstances of each territory and its peoples and the freely expressed wishes of the peoples concerned."[447] To the extent that Article 76 replicates much of the language used in Article 73, it may be inferred that both articles' central purpose is the applied expression of self-determination through the recognition of the rights and will of non-self-governing peoples. These articles and their connection to "territories whose peoples have not yet attained a full measure of self-government"[448] are essential to the later development of self-determination in international instruments, as will be referenced in later discussion. Therefore, after a brief overview of the Charter, an advocate for Valinor's independence might surmise that 1) there exists a principle of self-determination under international law, 2) it is central to the purpose and objectives of the United Nations and 3) it is especially connected to

---

445 U.N. Charter art. 76.
446 Cristescu, *supra* note 441, at 2-3.
447 U.N. Charter art. 76(b).
448 *Id*. art. 73.

the oversight and development of trust territories and non-self-governing territories under the UN's Trusteeship system.[449]

Three years after the drafting of the Charter, the United Nations drafted the Universal Declaration of Human Rights of 1948, which reaffirmed many aspects of the Charter associated with self-determination. For example, Article 2 of the Declaration states in part that "[e]veryone is entitled to all the rights and freedoms set forth in this Declaration . . . Furthermore, no distinction shall be made on the basis of the . . . status of the country or territory to which a person belongs, whether it be independent, trust, non-self-governing or under any other limitation of sovereignty."[450] Article 15 then states that "everyone has the right to a nationality" and "no one shall be arbitrarily deprived of his nationality nor denied the right to change his nationality."[451] Finally, Article 21 provides that "everyone has the right to take part in the government of his country, directly or through freely chosen representatives," and ultimately, "[t]he will of the people shall be the basis of the authority of government; this will shall be expressed in periodic and genuine elections which shall be by universal and equal suffrage . . . "[452] For advocates of an independent Valinor, several key takeaways from the Universal Declaration are: 1) both the Charter and the Universal Declaration apply to all people without discrimination, 2) all people have the right to change their nationality, 3) all people have the right to have a meaningful voice in their government, whether directly or indirectly and 4) the foundation of authority for any government is the will of its people.

The next significant contribution to self-determination by the UN took shape as the Declaration on the Granting of Independence to Colonial Countries and Peoples of 1960,[453] described as a "legal and political instrument of exceptional importance"[454] whereby the United Nations General Assembly recognized the broad right of peoples to seek and establish their own form of governance, free from the centuries-old bindings of colonialism. In a comprehensive and exhaustive study of self-determination in United Nations

---

[449] *See* Cristescu, *supra* note 441, at 3.

[450] G.A. Res. 217 (III), A Universal Declaration of Human Rights, at 72 (Dec. 10, 1948) [hereinafter UDHR].

[451] *Id*. art. 15.

[452] *Id*. art. 21.

[453] *See generally* Dec. on Colonial Peoples, *supra* note 432.

[454] Cristescu, *supra* note 441, at 48.

instruments, Aureliu Cristescu, the Special Rapporteur of the Sub-Commission on Prevention of Discrimination and Protection of Minorities, writes regarding the effect of this Declaration:

> For the first time, the General Assembly solemnly proclaimed "the necessity of bringing to a speedy and unconditional end to colonialism in all its forms and manifestations". This proclamation was based on the following considerations: The peoples of the world ardently desire the end of colonialism in all its manifestations; The continued existence of colonialism prevents the development of international economic co-operation, impedes the social, cultural and economic development of dependent peoples and militates against the United Nations' ideal of universal peace; The process of liberation is irresistible and, in order to avoid serious crises, an end must be put to colonialism and all practices of segregation and discrimination associated therewith; All peoples have an inalienable right to complete freedom, the exercise of their sovereignty and the integrity of their national territory.[455]

Cristescu's sentiments are an accurate reflection of the Declaration's preamble, which profoundly recognizes "the passionate yearning for freedom in all dependent peoples and the decisive role of such peoples in the attainment of their independence" and that "the process of liberation is irresistible and irreversible and that, in order to avoid serious crises, an end must be put to colonialism and all practices of segregation and discrimination associated therewith."[456] In order to realize these ends, the Declaration states the following in Articles 1-5:

> 1. The subjection of peoples to alien subjugation, domination and exploitation constitutes a denial of fundamental human rights, is contrary to the Charter of the United Nations and is an impediment to the promotion of world peace and co-operation.

---

[455] *Id.* The author's purpose in drafting the report was to "review these resolutions . . . to demonstrate the contribution they have made, and any contribution made by the studies and debates which preceded them, to the definition of the right to self- determination as a fundamental human right; to the application of this right to Trust Territories and Non-Self-Governing Territories in general; to international respect for the right; and to the analysis of its different aspects . . .". *Id.* at 4.

[456] Dec. on Colonial Peoples, *supra* note 432.

> 2. *All peoples have the right to self-determination*; by virtue of that right they freely determine their political status and freely pursue their economic, social and cultural development.
>
> 3. Inadequacy of political, economic, social or educational preparedness should never serve as a pretext for delaying independence**.**
>
> 4. All armed action or repressive measures of all kinds directed against dependent peoples shall cease in order to enable them to exercise peacefully and freely their right to complete independence, and the integrity of their national territory shall be respected.
>
> 5. Immediate steps shall be taken, in Trust and Non-Self-Governing Territories or all other territories which have not yet attained independence, to transfer all powers to the peoples of those territories, without any conditions or reservations, in accordance with their freely expressed will and desire, without any distinction as to race, creed or colour, in order to enable them to enjoy complete independence and freedom.[457]

The language of Article 2 is especially important when considering the UN Charter's previous indications (see Articles 73 and 76) that the benefits of self-determination were intended exclusively for the peoples and territories subjected by centuries of colonialism, and perhaps not as immediately accessible outside of that realm.[458] Now the General Assembly clearly represents that self-determination is intended for "all peoples," whether colonized, indigenous or non-native and that any allegations of a people's "[i]nadequacy of political, economic, social or educational preparedness should never serve as a pretext for delaying independence."[459]

Cristescu writes that the essential understanding underlying the Declaration on Colonial Peoples was that "the principal meaning of self-determination is the establishment of a sovereign and independent State—the right to independence of peoples which aspire to it but do not possess it."[460] While this language has potentially far-reaching positive implications for the struggling

---

[457] *Id*. art. 1-5 (emphasis added).

[458] *See supra* notes 383-385.

[459] Dec. on Colonial Peoples, *supra* note 432, art. 2.

[460] Cristescu, *supra* note 441, at 47.

community of Valinor, Article 6 of the Declaration presents an all-important caveat to the exercise of self-determination that will echo across future covenants, declarations and international case law, clearly demarcating the limits of application for self-determination. Article 6 states, "[a]ny attempt aimed at the partial or total disruption of the national unity and the territorial integrity of a country is incompatible with the purposes and principles of the Charter of the United Nations."[461] Here is the concept first expressed that self-determination is by no means an open authority for secession or revolution, seeing as "the United Nations is comprised of states and not of groups of peoples. Thus, one of the central precepts of the United Nations is that the integrity of legitimate states must be respected and preserved."[462] While this limitation on self-determination is further developed and defined in later instruments and case law, the central principle remains consistent to this day: the exercise of self-determination is strictly scrutinized in the interest of preserving territorial integrity and national unity.

Nonetheless, Cristescu writes that the Declaration on the Granting of Independence to Colonial Countries and Peoples "revitalized the spirit of the Charter, restored strength to the Charter provisions on self-determination and gave a new sense of reality and greater validity to the Universal Declaration of Human Rights."[463] On an even broader spectrum, Cristescu observes that the Declaration represented a belief of the General Assembly (and the world) that self-determination was…

> not only as conducive to human dignity and the assertion of human personality, but also as elements of peace and conditions necessary for effective progress and international co-operation . . . the wider the extent of self-determination, the broader the basis for peace in the world, since freedom is as indivisible as peace.[464]

Further, the Declaration represented the ultimate belief that "[r]elations between dominant and subject peoples should be

---

[461] Dec. on Colonial Peoples, *supra* note 432, art. 6.

[462] Roya M. Hana, *Right to Self-Determination in In Re Secession of Quebec*, 23 MD. J. INT'L L. 213, 230 (1999) [hereinafter Hana].

[463] Cristescu, *supra* note 441, at 7.

[464] *Id.*

replaced by relations between free peoples on a footing of equality and trust. In that way, co-operation and peace could take the place of antagonism and war."[465] Thus, Cristescu clearly represents with few words what is the central theme of both the UN Charter and its progeny: the future of humankind's success lies in its capacity to recognize and facilitate the needs of those with lesser economic and political power rather than to simply conquer and exploit them.

The Declaration on Colonial Peoples was followed in 1967 by the International Covenant on Civil and Political Rights [Covenant on Political Rights],[466] which was the first UN instrument to officially recognize self-determination as not only a principle of international law but also a right. Article 1 of the Covenant states:

> 1. *All peoples have the right of self-determination*. By virtue of that right they freely determine their political status and freely pursue their economic, social and cultural development.
>
> 2. All peoples may, for their own ends, freely dispose of their natural wealth and resources without prejudice to any obligations arising out of international economic co-operation, based upon the principle of mutual benefit, and international law. *In no case may a people be deprived of its own means of subsistence.*
>
> 3. The States Parties to the present Covenant, including those having responsibility for the administration of Non-Self-Governing and Trust Territories, shall promote the realization of the right of self-determination, and shall respect that right, in conformity with the provisions of the Charter of the United Nations.[467]

The preamble to this Covenant also echoes and expands upon the claims of its immediate predecessor in recognizing that "the equal and inalienable rights of all members of the human family is the foundation of freedom, justice and peace in the world," and that "the ideal of free human beings enjoying civil and political freedom and freedom from fear and want can only be achieved if conditions

---

[465] *Id.*

[466] *See* G.A. Res. 2200A (XXI), International Covenant on Civil and Political Rights (Dec. 16, 1966) [hereinafter Covenant on Political Rights].

[467] *Id.* art. 1 (emphasis added).

are created whereby everyone may enjoy his civil and political rights, as well as his economic, social and cultural rights."[468] Of importance to note is the newly established connection between the Preamble's inclusion of economic rights in addition to civil, political, social and cultural rights, reinforced by the declaration of Article 1(2) that "[a]ll peoples may, for their own ends, freely dispose of their natural wealth and resources without prejudice to any obligations arising out of international economic co-operation, based upon the principle of mutual benefit, and international law,"[469] as well as the incredibly important statement that "in no case may a people be deprived of its own means of subsistence."[470] Furthermore, not only does the Covenant declare that self-determination is a right as expressed through civil, political, economic, social and cultural means, but Article 2 of the Covenant invariably demands that these rights be both recognized and enforced through constitutional, legislative and other means by each State Party to the Covenant. Article 2 states:

> 1. Each State Party to the present Covenant undertakes to respect and to ensure to all individuals within its territory and subject to its jurisdiction the rights recognized in the present Covenant, without distinction of any kind, such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status.
>
> 2. Where not already provided for by existing legislative or other measures, each State Party to the present Covenant undertakes to take the necessary steps, in accordance with its constitutional processes and with the provisions of the present Covenant, to adopt such laws or other measures as may be necessary to give effect to the rights recognized in the present Covenant to non-nationals.[471]

In describing debates among the General Assembly regarding the establishment of self-determination as a specific right, Cristescu writes, "those who opposed the inclusion of an article on self-determination affirmed, *inter alia,* that the Charter referred to

---

[468] *Id.* at 49.
[469] *Id.*
[470] *Id.* art. 1(2).
[471] *Id.* art. 2.

the 'principle', not the 'right', of self-determination."[472] He writes further that, although self-determination as a principle "had very strong moral force . . . it was too complex to be translated into legal terms in a mandatory instrument."[473] Additionally, there were concerns that "the principle of self-determination was interpreted in different ways in different places and raised sensitive problems such as that of minorities and the right of secession."[474] However, proponents of including self-determination in the Covenant were eventually victorious in asserting that "the right to self-determination was essential for the enjoyment of all other human rights" and that, "[a]lthough the right to self-determination was a collective right, it nevertheless affected every individual."[475] The Covenant on Political Rights also had a sister covenant titled, The International Covenant on Economic, Social and Cultural Rights of 1967,[476] drafted alongside the Covenant on Civil and Political Rights and featuring identical language in Article 1, with some notable exceptions thereafter. For example, the Covenant on Economic Rights includes the right to work, the right to form unions, the right to equitable working conditions and the right to education. [477] The key takeaways from these Covenants, at least for a future Mars settlement like Valinor, are: 1) all peoples have the right to self-determination, 2) all peoples may utilize their natural resources for their own benefit, 3) no people shall be deprived of its own means of sustenance.

The year 1970 saw the creation of yet another significant addition to the legal toolbox of self-determination: the Declaration on Principles of International Law concerning Friendly Relations and Cooperation Among States in Accordance with the Charter of the United Nations (Declaration on Friendly Relations).[478] Adopted without any objection from its drafting committee, the Declaration

---

[472] Cristescu, *supra* note 441, at 8.

[473] *Id*.

[474] *Id.*

[475] *Id.*

[476] G.A. Res. 2200A (XXI), International Covenant on Economic, Social and Cultural Rights (Dec. 16, 1966) [hereinafter Covenant on Economic Rights].

[477] *Id.* arts. 6-13.

[478] G.A. Res. 2625 (XXV), Declaration on Principles of International Law Concerning Friendly Relations and Cooperation Among States in Accordance with the Charter of the United Nations, at 121-24 (Oct. 24, 1970) [hereinafter Declaration on Friendly Relations].

is incredibly important for proponents of Valinor's potential independence because it serves as the "primary authority for extending the application of the term 'peoples' beyond the colonial context,"[479] requiring of States that they be "possessed of a government representing the whole people belonging to the territory without distinction as to race, creed, or color."[480] While the full length of the Declaration is too voluminous to replicate, several notable excerpts are included here:

> Convinced that the subjection of peoples to alien subjugation, domination and exploitation constitutes a major obstacle to the promotion of international peace and security,
>
> Convinced that the principle of equal rights and self-determination of peoples constitutes a significant contribution to contemporary international law, and that its effective application is of paramount importance for the promotion of friendly relations among States, based on respect for the principle of sovereign equality,
>
> . . . By virtue of the principle of equal rights and self-determination of peoples enshrined in the Charter of the United Nations, all peoples have the right freely to determine, without external interference, their political status and to pursue their economic, social and cultural development, and every State has the duty to respect this right in accordance with the provisions of the Charter.
>
> . . . and bearing in mind that subjection of peoples to alien subjugation, domination and exploitation constitutes a violation of the principle, as well as a denial of fundamental human rights, and is contrary to the Charter. . .
>
> . . . The establishment of a sovereign and independent State, the free association or integration with an independent State or the emergence into any other political status freely determined by a people constitute modes of implementing the right of self-determination by that people . . .

---

[479] MICHAEL MOSBERG, GUIDE TO RESEARCHING THE INTERNATIONAL PRINCIPLE OF SELF-DETERMINATION 18 (1997) [hereinafter Research Guide].

[480] Declaration on Friendly Relations, *supra* note 478, at 124.

> Every State has the duty to refrain from any forcible action which deprives peoples referred to above in the elaboration of the present principle of their right to self- determination and freedom and independence. In their actions against, and resistance to, such forcible action in pursuit of the exercise of their right to self-determination, such peoples are entitled to seek and to receive support in accordance with the purposes and principles of the Charter.
>
> Nothing in the foregoing paragraphs shall be construed as authorizing or encouraging any action which would dismember or impair, totally or in part, the territorial integrity or political unity of sovereign and independent States conducting themselves in compliance with the principle of equal rights and self-determination of peoples as described above and thus possessed of a government representing the whole people belonging to the territory without distinction as to race, creed or colour.[481]

This declaration contains by far the most material to unpack, despite that less than half the declaration is represented above. Nonetheless, the essential concepts most relevant to Valinor may be condensed as the following: 1) the domination and exploitation of a "people" by any State is contrary to international peace and security, 2) the subjugation or exploitation of any people violates fundamental human rights, 3) every State must refrain from any "forcible" action depriving a people of their right to self-determination, freedom and independence, 4) ways in which a people can

---

[481] *Id.* at 122, 123-24 (emphasis added). It is intriguing to note that the Declaration also includes the statement:

> [r]ecalling the established principle that outer space, including the Moon and other celestial bodies, is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means, and mindful of the fact that consideration is being given in the United Nations to the question of establishing other appropriate provisions similarly inspired . . .

Id. at 122.

While this statement is not clarified or addressed again in the body of the Declaration, one can only speculate that its inclusion in the Declaration was intended to evidence a recognition of the Outer Space Treaty (drafted only three years earlier) and its prohibition against claims of sovereignty on celestial bodies.

implement its right to self-determination include, but are not limited to, establishing itself as an independent State, freely associating with or integrating with another State, or establishing itself under any other political status as freely determined by the people and 5) the inevitable disclaimer that the Declaration as a whole does not in any way encourage the dismemberment, impairment, or disruption of a sovereign State's territorial integrity or national unity. However, with regard to this last point, the Declaration on Friendly Relations establishes an express condition—against the applicability of its disposition in favor of maintaining territorial integrity—by stating that only those States "conducting themselves in compliance with the principle of equal rights and self-determination of peoples as described above and thus possessed of a government representing the whole people belonging to the territory without distinction as to race, creed or colour" are entitled to maintain their territorial integrity and national unity.[482] International law scholar Roya M. Hana writes of this all important distinction:

> The Declaration on Friendly Relations counsels that in order to be legitimate states must have a government that represents all of the people in the state without racial or ethnic distinctions. Furthermore, it suggests that only states conducting themselves in compliance with this principle have the right to be free from interference. Paragraph seven of that declaration declares that secession may be a legitimate option for certain groups if the government is not representative . . . These Declarations indicate that secession may be legitimate in very limited circumstances and that a case-by-case analysis is necessary to determine whether the right to self-determination includes the right to secede.[483]

As Valinor's leadership analyze their community's rights under the law, along with the various potential outcomes of applying said rights, the Declaration on Friendly Relations has significant implications. Depending on the path Valinor chooses to pursue, could it "secede" from the authorization and oversight administered by the United States (Valinor's launching State) under Article VI of the Outer Space Treaty? Is an action comparable to secession even

---

[482] *Id.*

[483] Hana, *supra* note 462, at 230-31.

necessary when taking into consideration the broad spectrum of rights granted by these aforementioned Covenants and Declarations? Could Valinor not achieve meaningful self-determination within the framework of authorization and oversight by the United States? To what extent must Valinor self-determine before it can secure the safety and future success of its inhabitants? Furthermore, is achieving self-determination by legal means even necessary or efficient for Valinor to achieve its goals?

After considering each of these UN instruments in turn, two important questions must take precedent if Valinor is to choose an effective path forward: 1) who/what constitutes a "non-self-governing" territory and 2) who/what constitutes a "people" for the purposes of the various declarations, Covenants and the UN Charter? The question of what constitutes a "people" will be addressed later in this section. As to what constitutes a "non-self-governing" territory, the General Assembly does not provide a direct definition; however, the General Assembly does provide guidance as to what a "non-self-governing" territory is not. Resolution 742 (VIII), titled, "Factors which should be taken into account in deciding whether a territory is or is not a Territory whose people have not yet attained a full measure of self-government," was adopted on November 27, 1953 and establishes a list of factors indicative of a sovereign, self-governing State. The Resolution states in part:

> The General Assembly . . .
>
> . . . Reasserts that each concrete case should be considered and decided upon in the light of the particular circumstances of that case and taking into account the right of self-determination of peoples . . .
>
> . . . Considers that the manner in which Territories referred to in Chapter XI of the Charter can become fully self-governing is primarily through the attainment of independence, although it is recognized that self-government can also be achieved by association with another State or group of States if this is done freely and on the basis of absolute equality . .
>
> . . . Factors indicative of the attainment of independence:
>
> A. International status

1. *International responsibility.* Full international responsibility of the Territory for the acts inherent in the exercise of its external sovereignty and for the corresponding acts in the administration of its internal affairs.

2. Eligibility for membership in the United Nations.

3. *General international relations.* Power to enter into direct relations of every kind with other governments and with international institutions and to negotiate, sign and ratify international instruments.

4. *National defence.* Sovereign right to provide for its national defence.

B. Internal self-government.

1. *Form of government.* Complete freedom of the people of the Territory to choose the form of government which they desire.

2. Territorial government. Freedom from control or interference by the government of another State in respect of the internal government (legislature, executive, judiciary and administration of the Territory).

3. *Economic, social and cultural jurisdiction.* Complete autonomy in respect of economic, social and cultural affairs.

Second part: Factors Indicative of the Attainment of Other Separate Systems of Self-Government:

A. General

Opinion of the population. The opinion of the population of the Territory, freely expressed by informed and democratic processes, as to the status or change in status which they desire.

> Freedom of choice. Freedom of choosing on the basis of the right of self-determination of peoples between several possibilities, including independence . . . [484]

As evidenced by the factors listed above, attaining a full measure of self-determination is a tall order indeed, allowing for the broadest possible definition of a "non-self-governing" territory to take shape. This then facilitates the widest possible application of self-determination across the world by anticipating a vast spectrum of varying circumstances amongst non-self-governing territories and peoples. Cristescu writes that the General Assembly's intent when drafting Resolution 742 (VIII) was to represent that,

> [t]he principle of equal rights and self-determination of peoples comprises, for a people organized as an independent State, the right to take its own decisions concerning its political, economic, social and cultural systems. All peoples have the right to equip themselves with the political, economic and social institutions of their choice, the right to decide their own future, to choose their own form of government, to set their political objectives, to construct their systems and to draw up their philosophical programmes without any pressure, whether direct or indirect, internal or external.[485]

Considering that Valinor cannot be said to currently possess full legal eligibility for membership in the UN, is unsure of its ability to enter into relations with Earth entities other than OnlyEarth and cannot yet claim "freedom from control or interference by the government of another State," nor "complete autonomy in respect of economic, social and cultural affairs,"[486] it follows that Valinor is not yet a fully self-governing entity. Therefore, Valinor may have reasonable grounds to assert that it satisfies the unwritten definition of a non-self-governing territory under international law.

It is also possible that claiming "non-self-governing" territory status for the application of self-determination is not the wisest path to self-rule for Valinor. As discussed in previous sections, the

---

[484] G.A. Res. 742 (VIII), Factors which should be taken into account in deciding whether a Territory is or is not a Territory whose people have not yet attained a full measure of self-government (Nov. 27, 1953).

[485] Cristescu, *supra* note 441, at 51.

[486] G.A. Res. 742 (VIII), *supra* note 484, at 22 .

realm of space law is particularly unwelcoming to the idea of traditional "territory" or "sovereignty" on celestial bodies. Granted, Articles VI and VIII of the Outer Space Treaty provide that sovereignty follows a spacecraft wherever it goes, including its parts thereof and any habitats or sheltering structures it may carry with it;[487] however, if Valinor hopes to expand beyond the confines of its original life-support infrastructure, it will inevitably need to construct new facilities the components which did not originate on the Earth. In an attempt to avoid sinking in the diplomatic and legal mud of establishing overt territorial sovereignty on a celestial body, Valinor may instead choose to pursue self-determination as a people, separate from considerations of geographical territory. Whether Valinor's inhabitants constitute a "people" for the purpose of implementing self-determination is among the most important questions Valinorian leadership must theoretically address in preparation for asserting the community as a legitimate player in the international/interplanetary theatre. While a more thorough discussion on the definition of "people" will take place later in this chapter, the next section will address several substantive cases on the application of self-determination by various peoples. During this analysis, bear in mind the question of who/what constitutes a "people" when observing how various juridical institutions have interpreted and applied the right of self-determination in the real world.

3. Several Substantive Cases on the Application of Self-Determination

Thus far, this section has provided a general overview of several key UN instruments associated with the principle/right of self-determination, along with some comments as to how these instruments might affect Valinor's pursuit of achieving self-rule with at least a modicum of legality. However, while General Assembly resolutions, declarations, covenants and even the Charter are excellent sources of general international law, how these sources are applied in the real world has a massive impact on whether said principles achieve their intended purpose[s]. This section will take a brief look at several cases in which the principle of self-

---

[487] *See* Outer Space Treaty, *supra* note 3, art. VI.

determination was applied to varying effect across time and varying circumstances. While international case law is not necessarily binding to entities not parties to the cases, it nonetheless provides helpful indicators of how general international law principles are capable of affecting real-world scenarios and provide persuasive material for use by international tribunals and States considering these issues in the future. While many cases have considered aspects of self-determination, the 1971 Namibia Case, the 1975 Western Sahara Case, the East Timor decision (1975-2001), the 1998 Reference Re Secession of Quebec and the Kosovo advisory opinion are especially interesting when observed from the perspective of Valinor and its pursuit of self-rule. A brief disclaimer, the purpose of this section is not to present a novel interpretation or definitive commentary on the several cases at hand, but only to summarize their various holdings and effects whilst considering how a future Mars settlement like Valinor might one day employ said holdings in the service of meaningful legal arguments for the exercise of self-determination.

a. The 1971 Namibia Case

Officially titled "Legal consequences for states of the continued presence of South Africa in Namibia (South West Africa) Notwithstanding Security Council Resolution 276 (1970)," [488] the ICJ's advisory opinion on the self-determination of Namibia/South West Africa was the first ICJ opinion to explicitly recognize the principle of self-determination as an actionable part of international law. The ICJ was asked for an advisory opinion by the UN Security Council in the face of South Africa's occupation of Namibia and subsequent implementation of apartheid, despite South Africa's conflicting obligations under a League of Nations Mandate and its "sacred trust" responsibilities under Articles 73 and 76 of the UN Charter.[489]

---

[488] *See* Legal Consequences for States of the Continued Presence of South Africa in Namibia (South West Africa) Notwithstanding Security Council Resolution 276, Advisory Opinion, 1971 I.C.J 16 (June 21) [hereinafter Namibia Advisory Opinion]; *see also* Legal Consequences for States of the Continued Presence of South Africa in Namibia (South West Africa) Notwithstanding Security Council Resolution 276, Opinion of Vice-President Ammoun, 1971 I.C.J 55 (June 21) [hereinafter Namibia Ammoun Opinion].

[489] *See* S.C. Res. 284 (July 29, 1970). Prior to the Security Council request, the General Assembly had already declared in G.A. Res. 2145 that South Africa had violated its obligations under the League of Nations Mandate, the U.N. Charter, and the Universal

Ultimately, the ICJ agreed with the Security Council and General Assembly's findings that, regardless of South Africa's espoused noble motives, its implementation of apartheid in Namibia was in violation of South Africa's obligations under the UN Charter to "observe and respect, in a territory having an international status, human rights and fundamental freedoms for all without distinction of race."[490] The Court held that "these measures establish limitations, exclusions or restrictions for the members of the indigenous population groups in respect of their participation in certain types of activities, fields of study or of training, labour or employment . . . and also . . . of residence and movement in large parts of the Territory."[491] Much to the dismay of Justice Ammoun, vice-president of the ICJ, the Court's majority opinion ends its analysis of South Africa's wrongdoing with its condemnation of apartheid as a means of oppressing ethnic minorities. However, Justice Ammoun writes in his separate opinion that South Africa's greatest crime was the denial of the Namibian people's right to complete self-determination, and as a result, he utilizes his separate opinion to clarify and expand upon the Court's ruling regarding self-determination:

> Thus, in addition to the violation of the stipulations of the Mandate, the Court did not omit consideration of the other two grounds for its termination. By referring, like resolution 2145(XXI), to the Charter of the United Nations and the Universal Declaration of Human Rights, the Court has asserted the imperative character of the right of peoples to self-determination and also of the human rights whose violation by the South African authorities it has denounced. It appears to me, however, that its reasoning and conclusions, to which, as I have said, I subscribe, leave room for explanations which, expressed in the separate opinions, may serve to strengthen those conclusions.[492]

To the Court's credit, the general advisory opinion did explicitly affirm that "the ultimate objective of the sacred trust [referring to Chapter XII/Art. 73, 76 of the Charter] was the self-

---

Declaration of Human Rights in its occupation and administration of Namibia. *See* G.A. Res. 2145 (XXI), at 2 (Oct. 17, 1966).

[490] Namibia Advisory Opinion, *supra* note 488, at ¶¶ 129-131.

[491] *Id.*

[492] Namibia Ammoun Opinion, *supra* note 488, at ¶ 3.

determination and independence of the peoples concerned,"[493] and that the "subsequent development of international law in regard to non-self-governing territories, as enshrined in the Charter of the United Nations, made the principle of self-determination applicable to . . . and expanded to all "territories" whose peoples have not yet attained a full measure of self-government."[494] While these holdings are undeniably positive for proponents of self-determination as a universal principle, Justice Ammoun further argues that the principle of self-determination has in fact achieved the status of customary international law:

> As for the "general practice" of States to which one traditionally refers when seeking to ascertain the emergency of customary law, it has, in the case of the right of peoples to self-determination, become so widespread as to be not merely "general" but universal, since it has been enshrined in the Charter of the United Nations (Art. 1, para. 2, and Art. 55) and confirmed by the texts that have just been mentioned: pacts, declarations and resolutions, which, taken as a whole, epitomize the unanimity of States in favour of the imperative right of peoples to self-determination. There is not one State, it should be emphasized, which has not, at least once, appended its signature to one or other of these texts, or which has not supported it by its vote.[495]

Not only does the Namibia case provide a real-world example of principles of self-determination in application, but the ICJ presents its first assertion as to the customary nature of self-determination. The Court's findings lend further support to the idea that concepts of self-determination—as represented in both the Charter and its many successive international instruments—are applicable on the greatest possible scale. As previously discussed, the principle of self-determination is arguably incorporated into the Outer Space Treaty under Article III, or at the very least, protected from abrogation under Article 103 of the Charter.[496]

Additionally, Justice Ammoun's separate opinion presents one of the most important legal conclusions to arise from the Namibia

---

[493] Namibia Advisory Opinion, *supra* note 488, at ¶ 53.
[494] *Id.* at ¶ 52.
[495] Namibia Ammoun Opinion, *supra* note 488, at ¶ 5.
[496] *See supra* notes 438-440.

case, that is, his total rejection of South Africa's assertion that a "plurality of ethnic groups precluded the existence of a unified people."[497] In essence, Justice Ammoun establishes that a "people" can be made up of many different races and ethnicities. He writes:

> How many of the peoples that have come into being, throughout history and in our times, have not in fact been made up of a variety of human elements? Multiplicity of ethnic entities has been no obstacle to the formation of peoples and States in Africa. Not to mention the ancient States of Ghana, Mali, Bornu, Axum, Kivu, Benin and that of the Bantus, or the Congo State of the Berlin Conference, it cannot be denied that a large number of the 30 or so States liberated since 1960 are multiracial.[498]

Ultimately, the Namibia advisory opinion paved the way for some sociopolitical, economic and cultural relief for the Namibian people. It also expanded the definition of "people" and provided strong support for the concept of self-determination as part of customary international law. Even so, the application of self-determination in the courtroom was just beginning.

From the perspective of Valinor's leadership, the Namibia opinion provides strong support for Valinor's potential pursuit of "people" status under the principle of self-determination, considering that Valinor's inhabitants are of diverse ethnic and racial backgrounds (a factor that will hopefully be true of any future off-world settlement). The Opinion also provides strong support for Valinor's general exercise of self-determination—in light of Justice Ammoun's prescription of self-determination as customary international law—despite the fact that Valinor is not a "trust territory" under the UN Charter. If self-determination is truly customary in nature, how does that affect interpretations of Articles II, VI and VIII of the Outer Space Treaty? Is it possible that, in the case of Valinor, the United States' national jurisdiction over the Mars community is inherently limited by Valinor's potential exercise of self-determination? Further, when the time comes for Valinor to choose

---

[497] Nathaniel Berman, *Sovereignty in Abeyance: Self-Determination and International Law*, 7 WIS. INT'L L.J. 51, 97 (1988) (referencing Namibia Ammoun Opinion, *supra* note 488, at ¶ 10).

[498] Namibia Ammoun Opinion, *supra* note 488, at ¶ 10.

whether it will pursue self-determination, will the above considerations even matter? These and other questions will be considered in greater detail throughout the remainder of this chapter.

b. The Western Sahara Case

The Western Sahara case of 1975[499] represents an even clearer implementation of self-determination in the international theater, where the ICJ was requested by the General Assembly to answer two distinct questions after Spain relinquished its colonial control over the Western Sahara (also known as the Rio de Oro and Sakiet El Hamra): 1) "was [Western Sahara], at the time of colonization by Spain, a territory belonging to no one (*terra nullius*)," and 2) if not, "what were the legal ties between this territory and the Kingdom of Morocco and the Mauritanian entity?"[500] The case originated from the events following the departure of Spain from the Western Sahara after nearly 100 years of colonial rule. As Spain departed, both Morocco and the Mauritanian entity invaded, claiming sovereignty over the entirety of the Western Sahara by asserting sovereign rights over the region that they alleged predated colonization by Spain.[501]

In opposition, Spain asserted the Western Sahara was a *terra nullius* at the time of colonization, meaning Spain's original "occupation" of the territory was valid as "an original means of peaceably acquiring sovereignty over territory belonging to no-one at the time of the act alleged to constitute 'occupation.'"[502] Further, if the Western Sahara was indeed a *terra nullius* at the time of colonization, then the tribes of the Western Sahara would not be bound by the limits of any pre-existing (pre-colonial) sovereignty and could practice self-determination free from concerns of compromising territorial integrity or national unity.[503] Spain considered that "the United Nations has already affirmed the nature of the decolonization process . . . in accordance with General Assembly resolution 1514 (XV)

---

[499] *See* Western Sahara, Advisory Opinion, 1975 I.C.J. 12 (Oct. 16) [hereinafter Western Sahara Advisory Opinion].

[500] G.A. Res. 3293 (XXIX), at 104 (Dec. 13, 1974); *Western Sahara, Overview of the Case*, INT'L CT. JUSTICE, https://www.icj-cij.org/en/case/61 (last visited Mar. 28, 2022).

[501] *See* Western Sahara Advisory Opinion, *supra* note 499, at ¶¶ 161-62.

[502] *Id.* at ¶ 79.

[503] *Id.* at ¶¶ 48-50.

[Declaration on Colonial Peoples];[504] that the method of decolonization—consultation of the indigenous population by means of a referendum to be conducted by the administering Power under United Nations auspices—has been settled by the General Assembly."[505] Conversely, Mauritania maintained that the application of self-determination "cannot be dissociated from that of respect for national unity and territorial integrity . . . particularly in situations where the territory had been created by a colonizing Power to the detriment of a State or country to which the territory belonged."[506] The irony of these competing arguments is that both sides are vetting for the exercise of self-determination, only in different ways. Spain argued for its application by the tribes of the Western Sahara *tabula rasa;* whereas Morocco and Mauritania argued for the application of self-determination by restoring the territorial integrity and national unity of a pre-existing State interrupted by colonial conquest.

However, the ICJ ultimately ruled against both Spain and Morocco/Mauritania. In answering the first question of whether the Western Sahara was a *terra nullius* pre-colonization, the Court ruled in the negative, finding that colonial history betrayed the Spanish claim:

> the information furnished to the Court shows that at the time of colonization Western Sahara was inhabited by peoples which, if nomadic, were socially and politically organized in tribes and under chiefs competent to represent them. It also shows that, in colonizing Western Sahara, Spain did not proceed on the basis that it was establishing its sovereignty over *terrae nullius.* In its Royal Order of 26 December 1884, far from treating the case as one of occupation of *terra nullius,* Spain proclaimed that the King was taking the Rio de Oro under his protection on the basis of agreements which had been entered into with the chiefs of the local tribes: the Order referred expressly to "the documents which the independent tribes of this part of the coast" had "signed with the representative of the Sociedad Espafiola de Africanistas", and announced that the King had confirmed "the deeds of adherence" to Spain.

---

[504] *See generally* Declaration on Colonial Peoples, *supra* note 432.

[505] Western Sahara Advisory Opinion, *supra* note 499, at ¶ 48.

[506] *Id.* at ¶ 50.

> Likewise, in negotiating with France concerning the limits of Spanish territory to the north of the Rio de Oro, that is, in the Sakiet El Hamra area, Spain did not rely upon any claim to the acquisition of sovereignty over a *terra nullius*.[507]

In answering the second question of whether there existed legal ties between the Western Sahara and Morocco/Mauritania, the Court found enough evidence to indicate that there were in fact legal ties between the tribes of Western Sahara and both Morocco and Mauritania pre-colonization; however, the Court also determined that these legal ties were insufficient to establish any claim of territorial sovereignty over the Western Sahara by either competing entity. The Court held as follows:

> The materials and information presented to the Court show the existence, at the time of Spanish colonization, of legal ties of allegiance between the Sultan of Morocco and some of the tribes living in the territory of Western Sahara. They equally show the existence of rights, including some rights relating to the land, which constituted legal ties between the Mauritanian entity, as understood by the Court, and the territory of Western Sahara. On the other hand, the Court's conclusion is that the materials and information presented to it do not establish any tie of territorial sovereignty between the territory of Western Sahara and the Kingdom of Morocco or the Mauritanian entity. Thus the Court has not found legal ties of such a nature as might affect the application of resolution 1514(XV) in the decolonization of Western Sahara and, in particular, of the principle of self-determination through the free and genuine expression of the will of the peoples of the Territory . . .[508]

Tragically, the Moroccan government ignored the ICJ's ruling and subsequently staged the "Green March" of approximately 350,000 Moroccans into Western Sahara as Spain's military withdrew, attempting to take the Western Sahara from the indigenous Saharawi people (now organized as the Polisario Front) by force. The Polisario Front and Moroccan forces engaged in sixteen years of guerrilla warfare before a UN-negotiated cease-fire temporarily

---

[507] *Id.* at ¶ 81.
[508] *Id.* at ¶ 162.

halted the bloodshed in 1991.[509] As of the drafting of this paper, the conflict between the Western Saharan people and Morocco remains unresolved, despite the continued efforts of the United Nations.[510] Nonetheless, the court's holding established that no claim of territorial sovereignty prevented the tribes of the Western Sahara from exercising self-determination as defined in the Declaration on the Granting of Independence to Colonial Countries and Peoples. From a certain point of view, the Polisario Front's multi-decadal battle against Moroccan aggression represents exactly that.

While the inhabitants of Valinor may have little in common with the Saharawi people, the Western Sahara case provides a real-world example of a forgotten people's struggle to liberate themselves from external oppression after the departure of their long-standing *fundator terrani*. Once Spain removed itself from the Western Sahara, the Saharawi people had no choice but to fight for their survival, regardless of pending legal and political actions in the UN and ICJ. If anything, this case represents the power of self-determination as a principle to elevate the will and well-being of a small, isolated people above the military interests of more powerful States. Additionally, this case reveals the unfortunate reality that even a positive legal holding from the world's highest international court does not guarantee the immediate or peaceful exercise of self-determination for a people under siege.

c. East Timor

The case of East Timor[511] also serves as a poignant example of the United Nations' attempted application of self-determination in the turmoil of real-world events. While the story of East Timor ultimately has a "happy ending," it is preceded by decades of trauma, violence and oppression experienced by the Timorese people. Colonized by Portugal in the 1600s, Timor was later split in half by the Portuguese and Dutch in the mid-18th century with Portugal retaining the eastern half of Timor—except for a temporary occupation by the Japanese from 1942-45—until the Portuguese withdrew in

---

[509] *See Western Sahara Profile*, BRIT. BROAD. CHANNEL (May 14, 2018), https://www.bbc.com/news/world-africa-14115273 (last visited Feb. 15, 2024).

[510] *Id.*

[511] *See* East Timor (Portugal v. Australia), Judgment,1995 I.C.J. 90 (June 30) [hereinafter East Timor Decision].

August of 1975.[512] After a brief conflict amongst competing military factions in East Timor, the Fretilin Revolutionary Front (pro independent East Timor) declared East Timor an independent, sovereign entity. However, less than a month passed before the Indonesian military invaded East Timor, annexing it as the 27th province of Indonesia.[513] To its credit, the UN General Assembly and Security Council quickly issued resolutions 3485[514] and 384,[515] respectively, condemning Indonesia's actions and demanding that Indonesia immediately remove its forces "to enable the people of the Territory freely to exercise their right to self-determination and independence" in accordance with the Declaration on the Granting of Independence to Colonial Countries and Peoples (G.A. Res. 1514).[516] However, Indonesia maintained its occupation of East Timor despite the disapproval of the UN, initiating a conflict with the Fretilin Revolutionary Front that led to the death of over 200,000 people.[517]

Over the next 23 years, the General Assembly generated a parade of resolutions, discussions, deliberations and attempts at diplomacy in an effort to solve the crisis in East Timor; nonetheless, the oppression levied against the East Timorese by Indonesia continued unabetted.[518] In 1995 the ICJ issued a decision in *East Timor*, more appropriately labeled (Portugal v. Australia), that had almost nothing to do with self-determination, save for the Court's quick reminder that East Timor had already been designated a Non-Self-Governing territory by the General Assembly and its people had the right to self-determination.[519] Despite the ICJ's affirmation of East Timor's right, it was not until 1999 that an agreement was finally reached between Indonesia, Portugal and the UN to allow the Timorese people an opportunity to decide for

---

[512] *East Timor Profile – Timeline*, BRIT. BROAD. CHANNEL (Feb. 26, 2018), https://www.bbc.com/news/world-asia-pacific-14952883 (citing a U.N. report estimate that more than 100,000 East Timorese people were killed as a result of Indonesia's 24-year occupation of East Timor) [hereinafter East Timor Profile].

[513] *Id.*

[514] *See generally* G.A. Res. 3485 (XXX) (Dec. 11, 1975).

[515] *See generally* S.C. Res. 384 (Dec. 22, 1975).

[516] G.A. Res. 3485, *supra* note 514, at ¶ 5.

[517] *See* East Timor Profile, *supra* note 512.

[518] *See id.*

[519] East Timor Decision, *supra* note 511, at ¶ 31.

themselves whether they wanted independence.[520] Unsurprisingly, the East Timorese overwhelmingly voted for independence, sparking renewed violence by Indonesia-backed military groups that killed over a thousand people and caused a quarter of the East Timorese population to flee into West Timor.[521] Finally, after decades of continuous human rights violations and unnecessary bloodshed, the Security Council intervened and sent an Australian-led peacekeeping force to East Timor in September of 1999 to restore order in the region.[522] That same month, Indonesia's parliament officially recognized the results of the Timorese referendum and surrendered Indonesia's claim to the region.[523] After a further two years of conflict and radical sociopolitical change, East Timor finally held its first democratic election of an 88-member Constituent Assembly and ratified its new constitution in February of 2002.[524]

While the story of East Timor is technically a victory for proponents of freedom and defenders of human rights, it is also a tragedy, showcasing the limits of an intentionally constrained Security Council and the purposefully slow bureaucratic process of the General Assembly. While international law was "exercised" by the international community, the people of East Timor were raped, killed and plundered by a more powerful entity for decades.[525] It is undeniable that there is an elegance and nobility to the appropriate use of international law when navigating the international theatre; however, there is also potential folly in the appropriate exercise of such principles when doing so endangers the life and liberty of human beings on a large scale. The story of East Timor's eventual independence provides an excellent, if bittersweet, negative case study for the future application of self-determination by communities on Mars (and Earth for that matter).

---

[520] *Id. See also* Ved P. Nanda, *Self-Determination and Secession under International Law*, 29 DENV. J. INT'L L. & POL'Y 305, 321-24 (2001).

[521] *See* East Timor Profile, *supra* note 512.

[522] *See generally* S.C. Res. 1264 (Sept. 15, 1999).

[523] East Timor Profile, *supra* note 512.

[524] *Id.*

[525] *See id.*

d. The Unilateral Secession of Quebec from Canada

The Canadian Supreme Court case regarding the unilateral secession of Quebec, generally referred to as Reference Re Secession of Quebec, is an elegant juridical work with compelling implications for the application of self-determination from both domestic and international law perspectives. While the Supreme Court of Canada did produce a ruling based on Canadian law and the Canadian Constitution, this paper will focus primarily on the Court's ruling under international law, seeing as this is the analysis more applicable to the context of a future Mars settlement like Valinor. Granted, the Supreme Court of Canada is neither an international tribunal nor a specially appointed juridical body dedicated to addressing questions of international law like the ICJ. However, the Court demonstrates a clear and concise application of self-determination in real-world circumstances that will undoubtedly echo across future decades of international jurisprudence addressing self-determination. As indicated by the name, the Supreme Court's purpose in this case was to address Quebec's desire and intent to secede from Canada by answering the following three questions:

> 1. Under the Constitution of Canada, can the National Assembly, legislature or government of Quebec effect the secession of Quebec from Canada unilaterally?
>
> 2. Does international law give the National Assembly, legislature or government of Quebec the right to effect the secession of Quebec from Canada unilaterally? In this regard, is there a right to self-determination under international law that would give the National Assembly, legislature or government of Quebec the right to effect the secession of Quebec from Canada unilaterally?
>
> 3. In the event of a conflict between domestic and international law on the right of the National Assembly, legislature or government of Quebec to effect the secession of Quebec from Canada unilaterally, which would take precedence in Canada?[526]

[526] Reference Re Secession of Quebec, [1998] 2 S.C.R. 217, 218 (Can.).

With regard to the first question, the Court found in the negative, holding that "Quebec could not, despite a clear referendum result, purport to invoke a right of self-determination to dictate the terms of a proposed secession to the other parties to the federation."[527] The Court held further that the democratic vote of Quebec's inhabitants "by however strong a majority, would have no legal effect on its own and could not push aside the principles of federalism and the rule of law, the rights of individuals and minorities, or the operation of democracy in the other provinces or in Canada as a whole."[528] And finally, that Quebec's actions were inadmissible under the Canadian Constitution because "Democratic rights under the Constitution cannot be divorced from constitutional obligations."[529] For the purposes of this paper, further review of the determinations of the Court under Canadian law is unnecessary.

In answering the second question, the Court turned to an analysis of international law with the purpose of determining whether Quebec could unilaterally secede from Canada, despite its illegality under Canadian law, by implementing principles of self-determination. After a detailed review of Quebec's legal claim, its colonial, cultural, economic and political history and current conditions as part of the federation of Canadian provinces, the Court determined that Quebec did not have a right to unilateral secessions under the international law principle of self-determination. The court made its determination based on three primary factors: 1) Quebec was not under contemporary colonial rule, 2) Quebec did not evidence that it was subject to foreign subjugation, domination or exploitation and 3) Quebec did not evidence it was denied any meaningful exercise of its right to self-determination within the confines of the Canadian federation:

> a right to secession only arises under the principle of self-determination of people at international law where "a people" is governed as part of a colonial empire; where "a people" is subject to alien subjugation, domination or exploitation; and possibly where "a people" is denied any meaningful exercise of its right to self-determination within the state of which it forms a part. In other circumstances, peoples are expected to achieve

---

[527] *Id.* at 221.
[528] *Id.*
[529] *Id.*

> self-determination within the framework of their existing state. A state whose government represents the whole of the people or peoples resident within its territory, on a basis of equality and without discrimination, and respects the principles of self-determination in its internal arrangements, is entitled to maintain its territorial integrity under international law and to have that territorial integrity recognized by other states. Quebec does not meet the threshold of a colonial people or an oppressed people, nor can it be suggested that Quebecers have been denied meaningful access to government to pursue their political, economic, cultural and social development. In the circumstances, the "National Assembly, the legislature or the government of Quebec" do not enjoy a right at international law to effect the secession of Quebec from Canada unilaterally.[530]

The Court further held that "international law expects that the right to self-determination will be exercised by peoples within the framework of existing sovereign states and consistently with the maintenance of the territorial integrity of those states. Where this is not possible, in the exceptional circumstance ... a right of secession may arise."[531] What the Court beautifully represents is an accurate condensation of the previously discussed UN Charter provisions and the subsequent Covenants, Declarations and Resolutions expanding and addressing the nuances of self-determination. In order to exercise self-determination (even up to the point of secession), a people must evidence that it is either 1) a colonial people, 2) an oppressed people, or 3) a people denied meaningful access to participating in its government so as to pursue its "political, economic, cultural, and social development."[532] Thanks to the Canadian Supreme Court, proponents of exercising self-determination under international law are essentially provided an approachable blueprint for practicing the principle with some measure of legal legitimacy.

The Court's findings also raise important questions regarding the ultimate limiting factor for practicing self-determination; that is, the deference under international law to maintain territorial

---

[530] *Id.* at 222.

[531] *Id.* at 280-81, ¶ 122.

[532] *Id.* at 222; *see also* Hana, *supra* note 462, at 239.

integrity. As referenced repeatedly across multiple UN Declarations and Resolutions, the practice of self-determination is for all peoples, so long as that practice does not disrupt the territorial integrity of a State. While the Court recognizes and delineates the requirements for legitimately disrupting territorial integrity in the name of self-determination, are these requirements even relevant if there is no territorial integrity to disrupt? In the case of Valinor, Article II of the OST prohibits the national appropriation of Martian land by the US or any US non-governmental entity, which included Valinor until its declaration of independence. While Article VIII of the OST gives the US national jurisdiction and control over "objects launched into outer space, including objects landed or constructed on a celestial body, and of their component parts[,]" does the national jurisdiction and control granted under Article VIII equate to traditional territoriality? According to renowned international legal scholar Bin Cheng, "[w]hilst a State may claim personal or quasi-territorial jurisdiction over individuals or vehicles possessing its nationality travelling in outer space, it cannot claim territorial sovereignty over any portion thereof."[533] He writes further, "until and unless territorial sovereignty has been established and recognized in outer space or on celestial bodies, no State will be entitled to exercise territorial jurisaction there."[534] Admittedly, Bin Cheng likely did not write this with the practice of self-determination in mind; nonetheless, his analysis supports the idea that traditional concepts of territoriality do not apply beyond Earth under the UN space treaty regime. Therefore, is it possible that future off-world settlements could argue for the exercise of self-determination without the constraint of maintaining territorial integrity? If the actions of previous colonial societies are an indicator, future Mars settlers will likely take advantage of whatever legal material supports their community's needs, even if it has never been applied under similar circumstances.

Perhaps the most interesting of the Court's conclusions in Re Secession of Quebec—at least, for Valinor—regarding self-determination is its explicit recognition of two distinct types of applied self-determination: self-determination under law and *de facto* self-determination. The court held first that:

---

[533] Cheng, *supra* note 12, at 10.

[534] *Id.* at 79.

> Although there is no right, under the Constitution or at international law, to unilateral secession, the possibility of an unconstitutional declaration of secession leading to a *de facto* secession is not ruled out. The ultimate success of such a secession would be dependent on recognition by the international community, which is likely to consider the legality and legitimacy of secession having regard to, amongst other facts, the conduct of Quebec and Canada, in determining whether to grant or withhold recognition. Even if granted, such recognition would not, however, provide any retroactive justification for the act of secession, either under the Constitution of Canada or at international law.[535]

Later in its analysis, the Court stated more definitely that:

> Although under the Constitution there is no right to pursue secession unilaterally, that is secession without principled negotiation, this does not rule out the possibility of an unconstitutional declaration of secession leading to a *de facto* secession. The ultimate success of such a secession would be dependent on effective control of a territory and recognition by the international community.[536]

In short, the Court represented in its official capacity as the highest juridical entity in Canada that, even though Quebec has no legal right to secede under domestic or international law, it could yet accomplish *de facto* self-determination by unilaterally seceding from Canada, so long as it achieved effective control over the province of Quebec and general recognition as a separate and sovereign people by the international community. Herein is revealed a unique moment in the history of self-determination where a superior Court recognizes an elephant in the room; specifically, that the most accessible and practical means for a people to achieve self-government may not always be a "legal" one as defined under currently accepted frameworks.

What are the implications of such ideas for the future of a settlement like Valinor, searching for a path out of obscurity and uncertainty? The Court's findings are especially compelling when considering the inconceivable costs borne by the peoples of Namibia

---

[535] Reference Re Secession of Quebec, *supra* note 526, at 222-23.

[536] *Id.* at 274-75, ¶ 106.

and East Timor (amongst many others) while pursuing self-determination under the law. While the General Assembly, Security Council and ICJ spent years (even decades) drafting resolutions and advisory opinions (with questionable effect) in response to these crises, the actual human beings seeking self-determination under the law in Namibia and East Timor were subjected to massacres, rape, mass displacement and economic ruin by the same entities politely and expertly articulating legal arguments before the ICJ in opposition to the people's application of self-determination. The next and final case study is an example of a unilateral secession in practice, exercised by Kosovo when it declared its independence from the former Yugoslavia. Although the Kosovo case is not necessarily analogous to Valinor's situation, it provides an example of a unilateral secession that was subsequently recognized (in part) by the ICJ and the international community.

e. The Unilateral Secession of Kosovo

The events leading up to Kosovo's declaration of independence entail nearly two decades of political, social, ethnic and military conflict in what formerly constituted the Socialist Federative Republic of Yugoslavia (former Yugoslavia).[537] Kosovo was the last geographic/ethnic territory to formerly separate itself from Yugoslavia, after Croatia, Slovenia, Macedonia and Bosnia-Herzegovina.[538] In totality, the dissolution of the former Yugoslavia is one of the most voluminous, complex and convoluted subjects in international law. It involves an ICJ advisory opinion,[539] many ICJ cases,[540] and

---

[537] *See Kosovo Profile – Timeline*, BRIT. BROAD. CHANNEL NEWS (July 23, 2019), https://www.bbc.com/news/world-europe-18331273 [hereinafter Kosovo Profile].

[538] *See generally* Tobias Thienel & Andreas Zimmermann, *Yugoslavia, Cases and Proceedings Before the ICJ*, *in* THE MAX PLANCK, ENCYCLOPEDIA OF PUBLIC INTERNATIONAL LAW (last updated Jan. 2019) [hereinafter Yugoslavia, Cases and Proceedings].

[539] *See generally* Accordance with International Law of the Unilateral Declaration of Independence in Respect of Kosovo, Advisory Opinion, 2010 I.C.J. 403 (July 22) [hereinafter Kosovo Advisory Opinion].

[540] *See* Legality of Use of Force (Yugoslavia v. United States of America), 1999 I.C.J. 916 (June 2); Legality of Use of Force (Yugoslavia v. Spain), 1999 I.C.J. 761 (June 2); Application for Revision of the Judgment of 11 July 1996 in the Case concerning Application of the Convention on the Prevention and Punishment of the Crime of Genocide (Bosnia and Herzegovina v. Yugoslavia), Preliminary Objections (Yugoslavia v. Bosnia and Herzegovina), 2003 I.C.J. 7 (Feb. 3); Application of the Convention on the Prevention and Punishment of the Crime of Genocide (Bosnia and Herzegovina v. Serbia and

such a vast body of scholarly commentary as cannot be recounted here. Nonetheless, the Kosovo Advisory Opinion[541] is worth a brief summary for the purposes of this paper.

Kosovo declared its independence from the former Yugoslavia on February 17, 2008, after nearly a decade of supervisory administration by the United Nations[542] and nearly two decades of bitter conflict with the various other former Yugoslavian States.[543] After its unilateral declaration, the General Assembly issued resolution 63/3,[544] requesting the ICJ submit an advisory opinion as to "whether or not the declaration of independence is in accordance with international law."[545] The Court notes that the General Assembly does not ask "about the legal consequences of that declaration. In particular, it does not ask whether or not Kosovo has achieved statehood. Nor does it ask about the validity or legal effects of the recognition of Kosovo by those States which have recognized it as an independent State."[546] Keeping its limited scope in mind, the Court looks exclusively at whether Kosovo's unilateral declaration of independence from Yugoslavia was in accordance with international law, ultimately holding that "general international law contains no applicable prohibition of declarations of independence. Accordingly, it concludes that the declaration of independence of 17 February 2008 did not violate general international law."[547] In arriving at its final opinion, the Court makes several important observations relevant to this paper. First the Court recognizes the widespread efforts of the world community in developing and applying the principle of self-determination:

> During the eighteenth, nineteenth and early twentieth centuries, there were numerous instances of declarations of

---

Montenegro), 2007 I.C.J. 43 (Feb. 26); Application of the Interim Accord of 13 September 1995 (the former Yugoslav Republic of Macedonia v. Greece) 2011 I.C.J. 664 (Dec. 5); Application of the Convention on the prevention and Punishment of the Crime of Genocide (Croatia v. Serbia), 2015 I.C.J. 3 (Feb. 3).

[541] *See generally* Kosovo Advisory Opinion, *supra* note 539.

[542] *See generally* Framework for the Interim Administration of Kosovo, S. C. Res. 1244 (June 10, 1999).

[543] *See* Kosovo Profile, *supra* note 537.

[544] *See generally* G.A. Res. 63/3 (Oct. 8, 2008).

[545] Kosovo Advisory Opinion, *supra* note 539, at 423, ¶ 51.

[546] *Id.*

[547] *Id.* at 438-39, ¶ 84.

> independence, often strenuously opposed by the State from which independence was being declared. Sometimes a declaration resulted in the creation of a new State, at others it did not. In no case, however, does the practice of States as a whole suggest that the act of promulgating the declaration was regarded as contrary to international law. On the contrary, State practice during this period points clearly to the conclusion that international law contained no prohibition of declarations of independence. During the second half of the twentieth century, the international law of self-determination developed in such a way as to create a right to independence for the peoples of non-self-governing territories and peoples subject to alien subjugation, domination and exploitation.[548]

The Court also recognized that some new States had also come into existence outside the context of the previous century's focus on ending colonialism, affirming that "the practice of States in these latter cases does not point to the emergence in international law of a new rule prohibiting the making of a declaration of independence in such cases."[549]

Second, the Court addresses the contention that "a prohibition of unilateral declarations of independence is implicit in the principle of territorial integrity," finding that the Declaration on Friendly Relations,[550] Article IV of the 1975 Helsinki Conference,[551] and Article 2(4) of the UN Charter—which states in part, "Members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any State"[552]—confines the scope of the principle of territorial integrity to "the sphere of relations between States."[553] Interesting to note here, the Court expressly states that the Declaration on Friendly Relations reflects customary international law, affirming the ICJ's previous opinion in the 1986 case, *Nicaragua v. United States*.[554]

---

[548] *Id.* at 436, ¶ 79.

[549] *Id.*

[550] Declaration on Friendly Relations, *supra* note 478.

[551] The Final Act of the Conference on Security and Cooperation in Europe art. IV, Aug. 1, 1975, 14 I.L.M. 1292 (Helsinki Declaration).

[552] UN Charter art. 2(4).

[553] *Id.* at 437, ¶ 80 (citing Declaration on Friendly Relations, *supra* note 478).

[554] *See* Nicar. v. U.S., *supra* note 339, at 101-103, ¶¶ 191-193.

Third, the Court addressed previous declarations of independence that were condemned by the Security Council, specifically in Rhodesia, Cyprus and Republika Srpska, and why these previous condemnations were not indicative of a prohibition against declarations of independence generally:

> [I]n all of those instances the Security Council was making a determination as regards the concrete situation existing at the time that those declarations of independence were made; the illegality attached to the declarations of independence thus stemmed not from the unilateral character of these declarations as such, but from the fact that they were, or would have been, connected with the unlawful use of force or other egregious violations of norms of general international law, in particular those of a peremptory character *(jus cogens)*. In the context of Kosovo, the Security Council has never taken this position. The exceptional character of the resolutions enumerated above appears to the Court to confirm that no general prohibition against unilateral declarations of independence may be inferred from the practice of the Security Council.[555]

Finally, the Court avoided altogether addressing the claims of some participants that Kosovo's declaration was legal as either 1) a manifestation of its right to self-determination, or 2) as a right of "remedial secession" in the face of the dismal situation in Kosovo. Instead, the Court held that the question of whether the right of self-determination existed "outside the context of non-self-governing territories and peoples subject to alien subjugation, domination and exploitation" was not necessary to resolve in the present case, seeing as "the General Assembly has requested the Court's opinion only on whether or not the declaration of independence is in accordance with international law."[556] Consequently, the Court firmly established that Kosovo's unilateral declaration did not violate international law. As to the details of why that is the case, we are left wanting.

Nonetheless, the ICJ's advisory opinion serves to further develop the concept that unilateral declarations of independence are both a possible manifestation of self-determination and not

---

[555] Kosovo Advisory Opinion, *supra* note 539, at 437-38, ¶ 81.

[556] *Id.* at 438, ¶ 84.

inherently prohibited under the law. Kosovo's example is also a reminder that gaining acceptance as an independent entity post-separation can be a long and difficult road. At the time of this paper's publication, Kosovo has not yet been accepted as a member of the United Nations, despite the hasty acceptance of other former Yugoslavian States.[557] While the United States and other major European Union countries have recognized Kosovo as a sovereign people/State, other powers in the region such as Serbia and Russia refuse to do so.[558] Despite Kosovo's pending UN Member status, the secession of Kosovo from the former Yugoslavia arguably represents a real-world application of what the Canadian Supreme Court called "*de facto* secession."[559] That is, Kosovo unilaterally separated from the former Yugoslavia, maintained control over its territory and was subsequently recognized by many States in the international community. While the ICJ made no determination as to the legality of the effect of Kosovo's declaration of independence, the Court did recognize the legality of the declaration itself, supporting the idea that any people/nation may make a declaration of independence.

The path of Kosovo to independence, though only a small piece of the overall dissolution of Yugoslavia, is an important data point when considering potential paths toward self-determination for Valinor and its people. After careful consideration of its own circumstances and the potential costs, how might Valinor choose to pursue its own self-determination? Will it require decades of conflict, burgeoning litigation or even a genocide? Alternatively, is there a path forward that could help ensure peaceful cooperation between Valinor and Earth, mutual benefits for both sides and perhaps even an opportunity for humankind to improve the source code for its ability to expand? To aid Valinor (and other future off-world communities) in answering this question, the remainder of this chapter will address—in light of the aforementioned case studies and international legal documents—whether the inhabitants of Valinor constitute a "people" under international law, and based on that conclusion, discuss how Valinor could leverage, adapt or evolve its

---

[557] *See* Kosovo Profile, *supra* note 537.

[558] *See id.*

[559] Reference Re Secession of Quebec, *supra* note 526, at 222-23.

inherited legal framework for self-determination to achieve independence as a sovereign People.

4. Self-Determination and Valinor

a. Could Valinor Claim it is a "People"?

Firstly, the purpose of this paper is not to suggest that any future off-world community must achieve independence, or anything close to that effect. Neither does this paper intend to declare with any objective certainty the legal arguments and conclusions future off-world communities like Valinor will employ in the interest of pursuing self-governance. However, this paper will briefly consider how a future community like Valinor—as it exists within a limited set of hypothetical/fictional circumstances—could potentially leverage its inherited legal framework to pursue meaningful self-determination. Bearing this in mind, the key factor when considering whether an entity can exercise the right of self-determination hinges on whether that entity is a "people." Thus far, neither the UN Charter, relevant case law, nor subsequent declarations, covenants and resolutions have clearly defined "people" for the purpose of applying self-determination. However, the language of the Charter and every subsequent UN document addressing self-determination in some way identifies "people" or "peoples" as the intended subject(s) for which self-determination is exercised.[560] Cristescu writes that the absence of an express definition of "people" was an intentional omission by the United Nations to facilitate the widest possible application of the term to colonial peoples around the world. He writes, "[i]n response to these needs, the policy pursued by the United Nations with regard to the application of equal rights and self-determination of peoples has tended towards recognizing a wider and wider entitlement to those rights, in order to avoid any discrimination between peoples."[561] After all, as of the UN Charter's ratification in 1945, over 750 million people on Earth lived under colonial subjugation. Today there are less than 2 million people designated as non-self-governing, and these numbers

---

[560] *See* Chapter 3, C.2 "Key International Instruments."

[561] Cristescu, *supra* note 441, at 39.

are steadily decreasing.[562] Amongst those nations and peoples that have successfully exercised self-determination are Namibia, Antigua, the Bahamas, French Somalia, Gibraltar, South Africa, Palestine, Guam, Bermuda, Brunei, the Solomon Islands, Belize, American Samoa, East Timor and many, many others, evidencing the "general recognition that independence is among the rightful aspirations of every nation."[563]

While it appears that avoiding an express definition of "people" may have greatly benefited the early application of self-determination, modern day applicants are not without some guidance. The international community has also voiced concerns that clearly defining "people" may, in some cases, "turn the right of peoples to self-determination into a weapon for use against the territorial integrity and political unity of States . . . where any group whatsoever might believe that it had an immediate and absolute right to create a State of its own."[564] Despite these solemn concerns, the United Nations Educational, Scientific and Cultural Organization has identified seven characteristics representative of a "People:" 1) a common history, 2) a common racial or ethnic identity, 3) cultural homogeneity, 4) linguistic unity, 5) common religion or ideological affinity, 6) territorial connectedness and 7) a common economic life.[565] Notwithstanding that documents like the Declaration on Colonial People, the Declaration on Friendly Relations and the Covenant on Political Rights clearly state that self-determination is for "all peoples,"[566] clever argumentation by Valinor could likely make a case for most, if not all, of the seven characteristics. For example, Valinor could argue 1) a *de-facto* shared history of its inhabitants post-settlement by SpaceX, 2) a common racial or ethnic identity for its growing number of inhabitants born on Mars to settler parents from "melting pot" backgrounds,[567] 3) a homogeneous culture influenced

---

[562] *Global Issues Decolonization*, UNITED NATIONS, https://www.un.org/en/global-issues/decolonization (last visited Mar. 31, 2022); *see* Cristescu, *supra* note 441, at 47.

[563] Cristescu, *supra* note 441, at 47.

[564] *Id.* at 40.

[565] Hana, *supra* note 462, at 231; Derege Demissie, *Self-Determination Including Secession vs. the Territorial Integrity of Nation-States: A Prima Facie Case for Secession*, 20 SUFFOLK TRANSNAT'L L. REV. 165, 172 (1996); Patrick Thornberry, *The Democratic or Internal Aspect of Self-Determination*, *in* MODERN LAW OF SELF-DETERMINATION 102, 126 (Christian Tomuschat ed. 1993).

[566] *See supra* notes 432, 478, and 466.

[567] *See* Robinson & White, *supra* note 5, at 72.

by shared scientific pursuits and an artificial life-support ecosystem,[568] 4) linguistic unity based on Valinor's use of a quickly evolving, efficiency-optimized adaptation of English as the accepted common tongue for its inhabitants, 5) a common ideological identity borne of its inhabitant's shared scientific pursuits and dependence on communal cooperation and teamwork for survival,[569] 6) *de facto* territorial connectedness in that all of Valinor's inhabitants are restricted to life within a clearly demarcated, limited, habitat structure (with the exception of short excursions beyond the central habitat by designated individuals for scientific research or resource extraction) and 7) a *de facto* shared economic life, considering that all of Valinor's inhabitants have little choice but to equitably share food, water and technology resources in the interest of survival as a community.[570] Admittedly, establishing elements of two and three may prove more difficult than others; however, Robinson and White make compelling observations regarding the potentially emergent identity of future off-world settlers, writing:

> Thus we stand in the late twentieth century, on the threshold of extending old civilizations into space, perhaps even of creating new ones, in which our own sons and daughters may be extraterrestrials from every point of view . . . Not only are our sons and daughters pioneers in the firmament, they could also become biologically, if not taxonomically, different. If that is true, are earthkind citizens preparing properly, sensitively, and adequately for contact and lasting relationships with the extraterrestrials they are creating?[571]

Robinson and White also comment on the potentially emergent social values of future off-world settlers, writing;

---

[568] *See id.* at 83.

[569] *See id.* at 65. Robinson and White write, "[a]s we have examined the developing political and organizational nature of our early space endeavors, we have seen that space migration is measureably different from other migrations, at least in the degree of social sophistication needed to accomplish biosurvival objectives. It requires complex complementary physical interrelations. It requires scientifically designed organization—an intricate machine for communal work—a socio-organism. Increasing amounts of energy are being converted into social structure."

[570] *Id.*

[571] *Id.* at 72.

> Assume for a moment that the biochemical, bioelectrical, neurophysicological, endocrinological, and psychological characteristics of a space station society or lunar community produce individuals with significantly different perceptual and value-forming processes from those of persons living on Earth . . . The initial manifestations of the transformation will be conscious and social. They will be manifested in values, behavior, and perception.[572]

While the intent of this paper is not to comprehensively develop—much less prove—the eventual emergence of the above seven characteristics in the context of an off-world settlement, it is posited that Valinor (under its hypothetical circumstances) could at the very least assert them within the bounds of reason. Based on the materials covered thus far, it appears that Valinor could indeed make a case for its inherent peoplehood, if for no other reason than that self-determination is for "all people."

b. Could Valinor Claim it is a "Colony"?

If Valinor successfully asserts itself as a people under international law, there remains several questions to address before self-determination is hypothetically within its reach. As discussed by the Supreme Court of Canada in Re Secession of Quebec, for a people to validly declare itself separate and sovereign under the authority of self-determination, it must evidence that it is either 1) a colonial people, 2) an oppressed people, or a people denied meaningful access to participating in its government so as to pursue its "political, economic, cultural, and social development."[573] Commentators have found reason to agree with the Canadian Supreme Court, generally concluding that any entity asserting the right to self-determination 1) must be a people, 2) must have been (or currently is) a colony, or 3) must be subject to oppression (the "Quebec Factors").[574] Except for notable exceptions like the secession of Croatia, Slovenia and Bosnia-Herzegovina from the former

---

[572] *Id.* at 83.

[573] Reference Re Secession of Quebec, *supra* note 526, at 222.

[574] Hana, *supra* note 462, at 231; *see* Gregory Marchildon & Edward Maxwell, *Quebec's Right of Secession Under Canadian and International Law,* 32 VA. J. INT'L L. 583, 608 (1992).

Yugoslavia,[575] the right of self-determination has predominantly been applied by peoples in former colonies.[576] However, is Valinor a "colony" under foreign subjugation? A reasonable layperson's first response is likely in the negative. After all, at no point did men with swords and muskets sail to Valinor to subjugate its native people and exploit their native lands. Nonetheless, the United Nations provided a working definition of "colony" in Principles I-V of the annex to the Declaration on Colonial Peoples.[577] Principle I of the annex states that Chapter XI of the UN Charter "should be applicable to territories which were then known to be of the colonial type," and that "an obligation exists to transmit information under Article 73(e) of the Charter in respect of such territories whose peoples have not yet attained a full measure of self-government."[578] Principle IV then states that "there is an obligation to transmit information in respect of a territory which is geographically separate and is distinct ethnically and/or culturally from the country administering it."[579] Additionally, once it has been established that the factors in Principle IV exist, "other elements may then be brought into consideration" if they evidence that a "metropolitan State" is administering a territory in such a way that it "arbitrarily places the latter in a position or status of subordination."[580] Put simply, indicators of a "colonial type" people are: 1) those that have not yet attained a full measure of self-government, 2) are geographically separate and distinct ethnically or culturally from the administering country and 3) are administered in a manner which places the people in a position or status of subordination.

Using the above definition, it is potentially more feasible for Valinor to assert that it is of the "colonial type." First, it is difficult to argue, at least for now, that Valinor has attained a full measure of self-government. Second, it is unquestionable that Valinor is geographically separate from the United States or any other entity that might attempt to exert authority over the Martian community.

---

[575] *See* Chapter 3, C.3 "The Unilateral Secession of Kosovo."

[576] Hana, *supra* note 462, at 239.

[577] G.A Res. 1541 (XV), annex (Dec. 15, 1960) ("Principles which should guide Members in determining whether or not an obligation exists to transmit the information called for under Article 73(e) of the Charter") [hereinafter G.A. Res. 1541].

[578] *Id.* at Principle I.

[579] *Id.* at Principle IV.

[580] *Id.* at Principle V.

While it is unlikely that Valinor is ethnically distinct—at least, in the near-term—from its corporate or national oversight on Earth, Valinorians could very well argue that they are culturally distinct from their counterparts on Earth (recall, for example, Valinor's short-hand dialect of English optimized for use in an artificial life-support environment).[581] Finally, Valinor's potentially life-threatening struggle under the heavy-handed corporate administration and unreasonable demands of OnlyEarth—paired with the silence and inaction of the United States Government on behalf of the Martian community—is at least a modest basis for claiming Valinor is in a position or status of constructive subordination. After all, OnlyEarth enjoys barely a modicum of State-sanctioned power compared to previous colonial corporate entities. The English Crown once gave the East India Company practically unfettered power to mint its own coins, independently acquire (conquer) territory, raise armies and navies, build and defend fortresses, execute international agreements and wage war at its discretion.[582] As a result, actions of the East India Company and the Crown were practically one and the same. In contrast, OnlyEarth remains bound by the limits of US domestic law and the entire body of international agreements to which the US is a Party. While there is great personal, corporate and financial separation (hypothetically) between OnlyEarth and the US Government, the simple fact that OnlyEarth's heavy-handed policies towards Valinor are not expressly authorized by the US Government does not abrogate the United States' failure to take responsibility for OnlyEarth's actions. Article VI of the OST demands that the United States not only "bear international responsibility for national activities in outer space . . . whether such activities are carried on by government agencies or by non-governmental entities," but also requires the "authorization and continuing supervision" of non-governmental entities' activities in space.[583] In failing to provide continuing supervision over its space corporation's activities, inaction by the US could be interpreted by Valinor (and the international community) as indirect or

---

[581] *Supra*, notes 567-572.

[582] Bruce Brunton, *The East India Company: Agent of Empire in the Early Modern Capitalist Era*, 77(2) SOC. EDUC. 78, 79 (2013), https://www.socialstudies.org/system/files/publications/articles/se_77021378.pdf.

[583] Outer Space Treaty, *supra* note 3, art. VI.

constructive subordination. Admittedly, proving subordination in Valinor's context is likely a tall order. Nonetheless, the extent to which Valinor can evidence that it has been subordinated by OnlyEarth or the US could meaningfully impact its potential satisfaction of the third Quebec Factor: whether Valinor is an oppressed people.

c. Could Valinor Claim it is Oppressed?

As described previously, the Declaration on Friendly Relations states:

> Every State has the duty to promote, through joint and separate action, realization of the principle of equal rights and self-determination of peoples, in accordance with the provisions of the Charter, and to render assistance to the United Nations in carrying out the responsibilities entrusted to it by the Charter regarding the implementation of the principle, in order:
>
> (*a*) To promote friendly relations and co-operation among States; and
>
> (*b*) To bring a speedy end to colonialism, having due regard to the freely expressed will of the peoples concerned;
>
> and bearing in mind that subjection of peoples to alien subjugation, domination and exploitation constitutes a violation of the principle, as well as a denial of fundamental human rights, and is contrary to the Charter.[584]

It was the language of this Declaration that influenced the Canadian Supreme Court in its holding that "the other clear case where a right to external self-determination accrues is where a people is subject to alien subjugation, domination or exploitation outside a colonial context."[585] As to whether Quebec was subjected to subjugation, domination, or exploitation by Canada, the Court resoundingly declared in the negative, finding that Quebec failed to show it was deprived of meaningful access to any aspect of Canadian culture, education, economics, or government, nor were the people of Quebec subjected to any physical attacks or threats to

---

[584] Declaration on Friendly Relations, *supra* note 478, at 124.

[585] Reference Re Secession of Quebec, *supra* note 526, at 285, ¶ 131.

their existence, integrity, or fundamental rights.[586] Instead, Quebec expressed frustration with its inability to amend the Canadian constitution through federalist channels. In response, the Court writes:

> The continuing failure to reach agreement on amendments to the Constitution, while a matter of concern, does not amount to a denial of self-determination. In the absence of amendments to the Canadian Constitution, we must look at the constitutional arrangements presently in effect, and we cannot conclude under current circumstances that those arrangements place Quebecers in a disadvantaged position within the scope of the international law rule . . . the international law right to self-determination only generates, at best, a right to external self-determination in situations of former colonies; where a people is oppressed, as for example under foreign military occupation; or where a definable group is denied meaningful access to government to pursue their political, economic, social and cultural development.[587]

The circumstances for Quebec stand in stark contrast to those experienced by the people of former Yugoslavia, Western Sahara, Namibia, or East Timor, where countless individuals were subjected to egregious human rights violations at the hands of violent factions. While Valinor has not yet faced subjugation via violent assault by an outside entity, its inhabitants live each day at risk of starvation, dehydration, death by extreme temperatures and suffocation if exposed to the thin Martian atmosphere. The urgency of these conditions are exponentiated by OnlyEarth's suspension of resupply missions, unreasonable demands for *in situ* resources and increasingly hostile threats against the lives and livelihood of Valinorians. Again, Valinor may argue indirect oppression/subjugation due to inaction by the United States under Article VI of the OST, seeing as the US is obligated to authorize and supervise the actions of spacefaring non-governmental entities like OnlyEarth. Further, the inaction of the US also exposes Valinor to potential threats from foreign States interested in taking advantage of Valinor's strategic position on Mars. As a result, Valinor arguably possesses more objective evidence of oppression than Quebec and could

---

[586] *Id.* at 287, ¶ 136.

[587] *Id.*

leverage its unique experiences in a bid for self-determination under the law.

In conclusion, there remains a final path for Valinor to follow in pursuit of its independence: *de facto* self-determination. As recognized by the Canadian Supreme Court, *de facto* self-determination is a real-world alternative to self-determination under the law.[588] Regardless of its legal ambiguity or perceived impropriety, a people may choose to cast traditional processes aside and achieve self-governance for itself even where the law is silent. As established by the Supreme Court of Canada, whether such a feat is successful "would be dependent on effective control of a territory and recognition by the international community."[589] With Earth in socioeconomic disarray, the United States lacking both public funds and public support for space activities, the UN largely tabling space-related issues indefinitely and a multiplanetary corporation aggressively seeking profit at Valinor's expense, the traditional legal processes for achieving self-determination may be inaccessible for the little Martian community merely trying to survive. Despite the plethora of legal resources available to Valinor, this entire academic exercise may be for naught. Whether exercised by American colonists in New England, English convicts in New South Wales, or a community of beleaguered scientists on a hostile planet, self-determination is historically messy and rarely follows expected timelines. The ways in which the law—or even the absence of law—develops in these different situations tells a story of its creators and the unique struggles they face. Valinor's legal progression will also tell a story; hopefully one of survival, growth, human excellence, cooperation with the rest of humanity and perhaps a proof of concept for sustainable methods of human expansion across the solar system. Regardless, Valinor will likely have no choice but to adapt and change its inherited legal frameworks to better facilitate its immediate survival and long-term success.

---

[588] Reference Re Secession of Quebec, *supra* note 526.

[589] *Id.* at 274-75, para. 106.

CONCLUSION

Not only does history suggest people groups under certain analogous or comparable circumstances appear to change and evolve in ways that catalyze the pursuit of functional independence; there is a longstanding legal methodology for non-independent entities hoping to become independent and operate on the international stage. Ideally, as the human species slowly marches towards building communities on the Moon and Mars, we are offered an important opportunity to consider the sins and tragedies of the past so as to avoid their needless repetition. Building new societies (no matter how small) and new economies (no matter how volatile) need not involve the haphazard mis-planning and greed drenched opportunism consistently levied either by or against fledgling "new world" settlements of the past. Instead, it is this author's suggestion that governments and space industry leaders would benefit more by carefully anticipating and facilitating the needs and proclivities of new world analogous communities like Valinor than by succumbing to the "destructive characteristics of parochial, chauvinistic human attitudes" typical of past imperialistic ventures, obfuscating "the self-knowledge and the evolutionary information that are necessary for survival" in an extra-planetary frontier environment.[590] If history suggests that Valinor will develop its own legal frameworks and eventually seek at least some measure of independence from Earth-based financial and regulatory bounds, why not anticipate this eventuality and strategically move to benefit from it rather than be caught unawares?[591] In the words of visionary science fiction writer Gene Roddenberry:

---

[590] Robinson & White, *supra* note 5, at 71-72.

[591] *See id.* at 113-114 (recognizing the important of preparing for the eventuality of an independent settlement on another celestial body, Robinson and White write, "Perhaps a more parental outlook on the part of earthbound precursors of spacekind might cause the devotion of more time to the responsibility for preparation of these extraordinary offspring, our envoys of mankind, of humankind. Nor should it be forgotten during this initial half century of inhabiting space that the value of the parental orientation is the recognition that earthkind, like good fathers and mothers, must accept, when the time arrives, the individuality and independence of their children. They must sever the political, legal, and cultural umbilicus and substitute for it a mutually understood, culturally determined, cooperative matrix for interaction and social order.")

> "as long as the focus of law is the human creature, then the jurisprudential concepts for Earth and space cannot be separated . . . We have arisen from the mud of the primeval shores of planet Earth to begin our return to the stars . . . it is our generation that will establish the jurisprudential matrix from which the ultimate principles of social order in space communities will be born."[592]

How then will history remember our generation, the founding fathers and mothers of humanity as an interplanetary species?

EPILOGUE

After nearly six months of radio silence between Valinor and its previous corporate management, millions on Earth feared the settlement collapsed in a social upheaval, or suffered a critical life-support systems failure. OnlyEarth remained defiant in their decision to withhold re-supply missions—claiming impossibility before the US Government and United Nations—and Valinor remained silent as to whether it would yield to OnlyEarth's aggressive demands for raw materials. Finally, as six months came and went, representatives of Valinor re-established communications once more with Only Earth and the greater world community, referring to the community as the Independent People of Valinor. Valinorian leadership then published (via the Starlink interplanetary internet) the Constitution of the Independent People of Valinor for Activities Conducted in Outer Space or on Celestial Bodies. A newly elected Valinorian president announced that the settlement was open for business to trade with any Earth entity willing to make the voyage to the red planet, declaring exclusive commercial rights over Valinor's growing stockpile of Martian raw materials and revolutionary intellectual property created by Valinorian scientists, engineers and biologists on the surface of Mars. OnlyEarth was shocked by Valinor's apparent sociopolitical stability and angered that their fledgling corporate asset was now venturing to independently trade Martian raw materials and intellectual property in

---

[592] *Id.* at xx, xxiii.

exchange for cryptocurrency,[593] critical supplies and Earth-based services.

As OnlyEarth deliberated as to how it should respond to Valinor's declarations, multiple rising powers in Earth's private space industry began negotiating trade agreements with Valinor, investigating ways to transfer large quantities of materials from Mars to Earth. Over the next five years, Valinor incentivized innovative ways to conduct trade with Earth, leveraging OnlyEarth's corporate competition to drive down the cost of interplanetary travel and increase access to Mars. Wielding the power of a determined community of brilliant survivors and a newly minted constitution, Valinor behaved like a young island nation, prompting Earth's United Nations to enter deliberations about the nature of off-world settlements and their right to self-determination. However, while the UN deliberated, Valinor remained hard at work shaping its laws and policies to better facilitate its continued survival. As Earth slowly crawled out of its greatest depression in over a century, a young generation of innovators and explorers once again dared to dream of leaving the Earth's cradle for a chance at starting over somewhere new, alongside a community bound together by hardship and ruthless necessity. Once again, the hopeful on Earth peered into the night sky and dreamed of becoming Valinorians.

---

[593] *See generally* Debra Werner, *Extending Cryptocurrency Networks Via Satellite*, SPACE NEWS (Nov. 24, 2021), https://spacenews.com/extending-cryptocurrency-networks-via-satellite/.