

A Trip to the Moon:  
Lunar Fantasies and Earthly Supremacy

by

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# CONTENTS

<i>Acknowledgements</i>	iii
<b>INTRODUCTION</b>	
Why the Moon?	1
Europe's Doctrine of Discovery	2
<i>Creatio Ex Nihilo</i> and <i>Terra Nullius</i>	9
French Colonial Literature	13
Manifest Destiny in the United States	17
Structure	19
<b>CHAPTER ONE</b>	
<b>17th-Century Lunar Imaginings: Fontenelle and French Colonial Thought</b>	
France, 1686	22
Fontenelle, Himself	26
Fontenelle's Form and Structure	28
Fontenelle's Lunar Imagery	32
Colonial Encounters in Fontenelle	41
<b>CHAPTER TWO</b>	
<b>19th-Century Lunar Imaginings: Verne and French Colonial Action</b>	
France, 1865	51
Verne, Himself	54
<i>Les Voyages Extraordinaires</i>	57
<i>From the Earth to the Moon</i>	60
<i>Around the Moon</i>	67
<b>CHAPTER THREE</b>	
<b>20th-Century Lunar Conquest: Apollo and American Colonial Action</b>	
From <i>Columbiad</i> to <i>Columbia</i>	75
United States, 1968	76
The Men of Apollo 8	82
Genesis in Space	85
<i>Creatio Ex Nihilo</i> in Apollo 8	87
The Response to Apollo 8	92
Apollo 11's Colonial Conquest of the Moon	94
<b>CONCLUSION</b>	100
<i>Appendix</i>	107
<i>Bibliography</i>	108

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Interplanetary travel is now the only form of “conquest and empire”  
compatible with civilization.

—Arthur C. Clarke, *Space Flight and the Spirit of Man*

# INTRODUCTION

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## Why the Moon?

Let's travel back a few decades. It's December 24<sup>th</sup>, 1968. Christmas Eve. You are sitting in front of the television. You have been watching the second live transmission of the Apollo 8 mission, witnessing humans orbit the moon for the first time in history. While you don't know it, there are an estimated two billion people watching this event across the globe. You've gotten the chance to see images of the lunar surface from a hitherto unknown perspective; you are out in space, with the astronauts, even as you sit in your home. And then, right before the telecasting reaches its end, as black and white images of the vast cosmos fill the small TV screen in front of you, you hear, through the static: "*In the beginning God created the heavens and the earth. And the earth was without form, and void; and darkness was upon the face of the deep.*" The three astronauts of Apollo 8, Bill Anders, Jim Lovell, and Frank Borman, are taking turns reciting the first ten verses from the King James Version of the Book of Genesis.

I first encountered this Genesis reading at a museum exhibit two summers ago at the Bullock Texas State History Museum in Austin. It was presented as the final, most important moment of 1968, a glimpse of hope after the otherwise tumultuous year of violence and upheaval. I stared at the tiny TV for at least ten minutes, watching and re-watching this clip. Listening to Genesis as I looked at a foggy image of the lunar terrain in the dark vastness of space. I was definitely hearing it right: the astronauts were

invoking the opening of the Bible in order to reinforce the power of their secular, scientific, American-sponsored mission to orbit the moon.

The religion major in me geeked out. I quickly typed a note on my iPhone (“Apollo 8 in the beginning 1968”) as if I were going to forget all the questions that were flooding my head: How had I never known about this event? What had led to this Genesis reading in *outer space*? Were there any consequences? Why the moon?

My encounter with this Genesis reading sent me searching, hoping to find some kind of common thread that would allow me to make meaning out of this puzzling amalgam of elements (i.e. NASA and Genesis, science and religion). After a great deal of reading and research, I started focusing my attention on the moon itself, rather than on the three men of Apollo 8. I zoomed outward and upward, investigating what was turning out to be a cross-temporal human obsession with traveling to, landing on, and finally conquering the moon. I found myself consistently wondering: why the moon? What is it that has galvanized the desire to get there, and to own it? How is it that we on earth care about something that is so far away from us? I want to suggest that there is an all-too-terrestrial logic operating within these lunar fantasies; specifically, the European logic of colonialism.

### Europe’s Doctrine of Discovery

Before we look to the cosmos to see the projection of this terrestrial logic onto the celestial body of the moon, let’s move back several centuries to locate the historical context for the initial deployment of this logic and its entanglement with Christianity.

First, it will be helpful to define a few key terms. Colonization, as elucidated by indigenous law research coordinator Steven T. Newcomb, “is derived from the Latin *colere*, ‘to till, cultivate, farm (land).’ Thus colonization might be thought of in terms of the steps involved in a process of cultivation.”<sup>1</sup> This “cultivation” paves the way for “civilization [which] may involve a process of colonization, which is a process by which an empire expands in land, population, wealth, and power.”<sup>2</sup> In this way, *colonization* is linked and layered with *cultivation* and *civilization*; the latter two processes are the primary goals of the former. Newcomb clarifies the relationship between *colonization* and *imperialism* when he writes, “colonization is a process of imperial expansion by means of colonists, colonies, and a host of colonial and empire-expanding activities.”<sup>3</sup> Colonization, then, can be considered a central tool of imperialism or empire building.

The European colonial impulse is sustained specifically by biblical authority. The genealogy of the Hebrew Bible presents Abram (later renamed Abraham) as a direct descendent of Adam and Eve, whom God commands once creation is completed to “subdue the earth, and exercise dominion over all living things” (Genesis 1:18).<sup>4</sup> Eighteen generations later, God “chooses” Abram, endowing him with exceptional authority as he commands, “Get thee out of thy country...unto a land that I will show thee: And I will make thee of a great nation, and I will bless thee, and make thy name great” (Genesis 12: 1-2). In this manner, Newcomb argues, “The Lord directs Abram to

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<sup>1</sup> Steven T. Newcomb, *Pagans in the Promised Land* (Golden: Fulcrum, 2008), 14.

<sup>2</sup> Ibid.

<sup>3</sup> Ibid.

<sup>4</sup> Ibid., 38.

embark on a journey of colonization” to the land of Canaan, which was already inhabited by indigenous Canaanites.<sup>5</sup> After Abraham arrives in Canaan, God says, “Unto thy seed will I give this land,” thereby bequeathing to Abram land that is inhabited, and ordering him and his people to “conquer and subdue” whatever (and whomever) they might encounter in this land (Genesis 12:7).<sup>6</sup> Tracing God’s orders to Abram, it becomes clear how Genesis instills supremacy in a “chosen people” who are mandated by God to claim power over land — even though it is inhabited by indigenous people. In this way, Genesis establishes the “Chosen People-Promised Land model,” a model that European powers have employed to justify colonization across centuries.<sup>7</sup>

In fact, one can consider European colonizing processes as direct enactments of this Chosen People-Promised Land model. Specifically during the Age of Discovery, a loosely-defined era spanning the fifteenth to eighteenth centuries, European “monarchies and nations of Christendom lifted the Old Testament narrative of the chosen people and the promised land” out of its context and used it as a rationalization for globalization.<sup>8</sup> In other words, Christian European imperialists looked to the Genesis story of Abram settling in Canaan as instruction and verification of colonial action. These Euro-Christian imperialists positioned themselves within this Chosen People-Promised Land model, which allowed them to believe they had the “divine right” to seize “all heathen or pagan lands throughout the world, a right previously

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<sup>5</sup> Ibid.

<sup>6</sup> Ibid., 39.

<sup>7</sup> Ibid., 37.

<sup>8</sup> Ibid., 43.

ascribed to Abraham and the Hebrews in relation to the land of Canaan.”<sup>9</sup> This European imperial grounding of colonial logic and action in Genesis is important as it points to an essential element of discovery: Christianizing as civilizing. It therefore seems appropriate for Newcomb’s definition of “discovery” to be “the act or event of having successfully located lands that can be conquered and subdued” – *by Christendom*.<sup>10</sup>

This connection between Christianity and colonization was solidified in the fifteenth century, by means of the Doctrine of Discovery, which was an international legal principle that Europeans and (eventually) white Americans utilized to justify government and property claims over new land from the fifteenth through the twentieth centuries.<sup>11</sup> This Doctrine was initially grounded in international law through fifteenth-century papal bulls, starting with Pope Eugenius’ 1436 *Romanus Pontifex*. This bull, which “authorized Portugal to convert the Canary Island natives and to control the islands on behalf of the pope,” inspired later popes to issue similar mandates, each time further increasing Portugal’s power and rights “over infidels and their lands.”<sup>12</sup> This religious authorization to convert was effectively an extension of “The Great Commission,” when Jesus instructed his disciples to “Go therefore and make disciples of all nations, baptizing them in the name of the Father and of the Son and of the Holy

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<sup>9</sup> Ibid.

<sup>10</sup> Ibid.

<sup>11</sup> Robert J. Miller, *Native America, Discovered and Conquered* (Westport: Praeger, 2006), 1. While Miller and Newcomb both focus on the formalization of this legal principle in regards to the 1823 case of *Johnson v. M’Intosh*, we are concentrating on the doctrine’s earlier, colonial and Christian, genealogy.

<sup>12</sup> Ibid., 14.

Spirit” (Matthew 28: 19-20).<sup>13</sup> The Doctrine of Discovery was expanded in 1455, when the *Dum Diversas* bull promulgated by Pope Nicholas V gave Portugal the legal right and endorsement to “invade, capture, vanquish and subdue all Saracens, pagans, and other enemies of Christ, to put them into perpetual slavery, and to take away all their possessions and property.”<sup>14</sup> In short, the Doctrine of Discovery justified the seizure of land and the destruction of indigenous nations under the auspices of bringing all of humankind to the “one true religion” of Christianity.<sup>15</sup> In 1493, after Columbus’s arrival in the New World, Pope Alexander VI issued three more bulls that affirmed Spain’s ownership of Columbus’s “discovered” territory.<sup>16</sup> Of these three, the second *Inter Caetera* bull specified that the land Columbus had found, insofar as it had been “undiscovered by others,” belonged to King Ferdinand and Queen Isabella.<sup>17</sup> Moreover, in this bull, “Pope Alexander VI did not use the term *Europeans* to express ‘the right to discovery’; he used the term *Christian*,” thereby reinforcing the Vatican’s implementation of the Discovery Doctrine “for the *religious* purpose of overthrowing (‘subjugating’) heathenism” (emphasis added) and for the propagation of the Christian empire.<sup>18</sup> Thus, the relationship between colonization and Christianity was clearly established and defined both internationally and legally during the fifteenth century

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<sup>13</sup> Lawrence Clayton, *Bartolomé De Las Casas: A Biography* (New York: Cambridge University Press, 2012), 44.

<sup>14</sup> Nicholas V, *Dum Diversas*, cited in Newcomb, *Pagans in the Promised Land*, 84.

<sup>15</sup> Miller, *Native America, Discovered and Conquered*, 14.

<sup>16</sup> Alexander VI’s three 1493 bulls: *Inter Caetera* [3 May 1493], *Eximiae Devotionis* [3 May 1493], and *Inter Caetera* [4 May 1493].

<sup>17</sup> Alexander VI, *Inter Caetera*, cited in Miller, *Native America, Discovered and Conquered*.

<sup>18</sup> Newcomb, *Pagans in the Promised Land*, 125; *ibid.*, 84.

through this Doctrine. Furthermore, Christianity became a moral justification for the theft and murder of the indigenous people of the New World. European colonial powers were religiously sanctioned to violently assert dominance through colonization in order to “propagate” Christianity across the globe.

Legal scholar Robert J. Miller identifies Christianity as one of ten essential elements to Discovery, each of which positions the European colonizers as all-powerful, divinely designated “conquerors” of the inferior, New World “heathens.”<sup>19</sup> Under the Doctrine of Discovery, “non-Christian people were not deemed to have the same rights to land, sovereignty, and self-determination as Christians.”<sup>20</sup> Indigenous people’s own “discovery” of the land, and their agency as humans, were summarily erased by the Europeans, who considered the land “undiscovered,” meaning un-colonized and uncivilized. Through claiming that non-Christian land was “undiscovered” land, the Christian European colonizers always managed to claim dominance over territory by denying the presence of preexisting indigenous people. Furthermore, these colonizers justified their actions by claiming that “God had directed them” to bring civilization and religion to these indigenous peoples.<sup>21</sup> In this way, then, while the colonizers denied the existence of those who lived in the New World in order to colonize the land, they subsequently openly avowed the indigenous peoples’ existence when it came to their European need to “civilize” them.

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<sup>19</sup> The 10 Elements are: 1) First discovery, 2) Actual occupancy and current possession, 3) Preemption/European title, 4) Indian title, 5) Tribal limited sovereign and commercial rights, 6) Contiguity, 7) Terra nullius, 8) Christianity, 9) Civilization, and 10) Conquest. (Miller, *Native America, Discovered and Conquered*, 3-5; Newcomb, *Pagans in the Promised Land*, 37.)

<sup>20</sup> Miller, *Native America, Discovered and Conquered*, 4.

<sup>21</sup> *Ibid.*

From examining this particular historical context, we can see how the logic of European colonialism was built upon logic originating in Christian sources; specifically, the Hebrew Bible, the New Testament, and papal proclamations. Moreover, we can see how the very act of *colonizing* is one of *civilizing*, which meant *Christianizing* for the colonizers of the New World, including Christopher Columbus when he landed on American soil in 1492. The explicit historical connection between these three processes is further reinforced by the fact that Columbus's first act upon arriving in Guanahani (an island in the Bahamas) was to plant the cross of Christ in the ground.<sup>22</sup> In one move he demonstrated his goal to claim and to Christianize the land.

Through ritual actions like Columbus's planting of the cross, European colonizers demonstrated and physicalized their seizure of territory. Historian Patricia Seed has asserted that "colonial rule over the New World was initiated through largely ceremonial practices," such as "planting crosses, standards, banners...marching in processions, picking up dirt, measuring the stars, drawing maps, [or] speaking certain words."<sup>23</sup> Through this lens, we can identify Columbus's cross planting as a "ceremonial" gesture that instilled him and his fellow Europeans with the authority to establish and claim political possession over land in the New World. Moreover, these ceremonial acts reinforced the colonizers' preexisting conceptions of themselves as

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<sup>22</sup> H.L. Wesseling, *The European Colonial Empires, 1815-1919*, trans. Diane Webb (New York: Pearson Education, 2004), 62.

<sup>23</sup> Patricia Seed, *Ceremonies of Possession in Europe's Conquest of the New World, 1492-1640* (New York: Cambridge University Press, 1995), 2.

having the “*right to rule*” over these pagan lands and people.<sup>24</sup> Thus, the colonizing Europeans cyclically reinstalled their own sense of dominance in the non-Christian New World by reasserting their Christian inheritance and therefore God-given authority over it — an authority that was doctrinally assured and ritually claimed. Flag planting, in particular, will become a motif throughout this thesis, as it demonstrates the same re-inscription of authority set forth by European colonizers of Columbus’s time, and as it was the gesture through which the United States’ Apollo 11 mission laid claim to the moon.

### *Creatio Ex Nihilo and Terra Nullius*

While biblical sources and papal bulls were used religiously and legally to justify European colonial action during the Age of Discovery, there were other, seemingly secular, doctrines at work that allowed the colonists to validate their claims over land. One that has been consistently invoked and employed is the principle of *terra nullius*. *Terra nullius* literally means “a land or earth that is null or void,” and stated that “lands that were not occupied by any person or nation, or which were occupied but not being used in a fashion that European legal systems approved” were considered empty and available for Discovery.<sup>25</sup> Thus, Europeans were able to deem land “empty” often when it was actually occupied, simply by claiming that it was not being used efficiently, and so was theirs for the taking. Religious studies scholar Whitney Bauman traces the historic

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<sup>24</sup> Ibid.

<sup>25</sup> Miller, *Native America, Discovered and Conquered*, 4; *ibid.*, 21.

utilization of *terra nullius* from the eighteenth century to the present, arguing that, while “the language of *terra nullius* is quite specific to the continent of Australia, its roots are in the European discussion of sovereignty *vis-à-vis* ‘discovered’ lands.”<sup>26</sup> Moreover, as we will see, the purportedly secular doctrine of *terra nullius*, which justified European colonial quests, is actually underwritten by the earlier church doctrine of *creatio ex nihilo*.

*Creatio ex nihilo* is the orthodox Christian doctrine that God created the universe out of nothing. It is important to note that neither Genesis 1 nor 2 describes God’s creation of the universe as coming from out of nothing; in Genesis 1, God speaks the universe out of the primordial and watery *tehom*, and in Genesis 2, God shapes creatures out of dirt and dust.<sup>27</sup> Once the unbiblical construct of *creatio ex nihilo* took hold, however, the story of an all-powerful monotheistic creator who creates out of nothing was used as an imperialist tool, supporting “a logic of domination in Christian-other, and human-other relations.”<sup>28</sup> If God created the universe out of nothing, then so could a colonizer, “a servant of God,” likewise mimic God’s power and create a new reality out of an “empty” land, a land he judged to be “void.”<sup>29</sup> Struggling against rival Christian sects, “orthodox” theologians in the second and third centuries created the myth of *creatio ex nihilo* as it made their God the *most* powerful: as distinct from a god who needs

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<sup>26</sup> Whitney A. Bauman, *Theology, Creation, and Environmental Ethics* (New York: Routledge, 2009), 10.

<sup>27</sup> On the theological disavowal of this materiality, see Catherine Keller, *Face of the Deep: A Theology of Becoming* (New York: Routledge, 2003).

<sup>28</sup> Bauman, *Theology, Creation, and Environmental Ethics*, 13.

<sup>29</sup> *Ibid.*, 41.

pre-existing material, a God capable of creating the whole world from nothing must surely have the greatest authority in the cosmos. Christian church fathers constructed this myth in order to stamp out the gnostic Christians of the time, because only then could they claim to be the one and only Christianity with the one and only omnipotent God.<sup>30</sup> This ex nihilic logic was then retrofitted to God's bequeathing of Canaan to Abram, and was projected forward to authenticate the power of the Christian church through the papal bulls. As the various popes continually granted European powers the legal power to "discover, acquire, conquer, subdue, and possess 'heathen lands'" during the fifteenth century, then, they evoked God's act in the story of Abram and in the story of creation.<sup>31</sup> Just as the church fathers looked at the *tehom* of Genesis 1 and the dust of Genesis 2 and called it "nothing," the pope could look at the New World and completely deny the presence of anybody or anything, thereby giving him the power of an all-mighty, overseeing God. Again, we see this intensification of Christian authority through the movement of the human elevating himself to the position of God. And we can see, then, how colonial ventures were thoroughly Christianized, not only because of the imperative to civilize, but *also* because the European colonizers acted just like their God by declaring the New World land "empty" in order to (re-)create all of reality.

Both ex nihilic logic and the logic that would become *terra nullius* were at work within Columbus's "discovery" of the New World. Columbus used these doctrines both

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<sup>30</sup> Keller, *Face of the Deep: A Theology of Becoming*, 45-46; Elaine Pagels, "'One God, One Bishop': The Politics of Monotheism," in *The Gnostic Gospels* (New York: Random House), 28-47.

<sup>31</sup> Newcomb, *Pagans in the Promised Land*, 46.

to Christianize his colonization enterprise *and* to elevate himself to the position of God. In this way, Columbus exemplified, and perhaps reified, the Euro-American paradigm of employing Christian-constructed doctrines to authenticate colonization. Bauman illuminates the importance of Columbus's conquest in the context of the Age of Discovery by articulating that Columbus's "voyage more than perhaps any other event in the history of the Christian West mark[ed] the beginning of external [European] Christianization efforts."<sup>32</sup> Columbus's own writings reveal his presumed connection to God, specifically his belief that his "discoveries" were a fulfillment of Divine Prophecy.<sup>33</sup> Columbus wrote, "It was the Lord who put into my mind (I could feel His hand upon me) the fact that it would be possible to sail from here to the Indies."<sup>34</sup> Like Abram in Genesis 12, Columbus positions and conceives of himself as having been selected by God to claim the previously "undiscovered" land of the New World. Moreover, Columbus elevated himself from a chosen human to God himself when he claimed the New World, renaming Guanahani as *San Salvador*, in the name of Jesus (the Holy Savior), and Cuba as *Isla Juana*, in the name of the son of King Ferdinand and Queen Isabella.<sup>35</sup> Taking possession of the Islands "for both Spain and God," Columbus imitated his creator-God, re-naming the land and thereby performatively enacting a *creatio ex nihilo* — calling reality into existence by word alone.<sup>36</sup> Not only colonizing the New

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<sup>32</sup> Bauman, *Theology, Creation, and Environmental Ethics*, 47.

<sup>33</sup> *Ibid.*, 53.

<sup>34</sup> Christopher Columbus, "The Book of Prophecies," (1502).

<sup>35</sup> Evelina Guzauskyte, *Christopher Columbus's Naming in the 'Diarios' of the Four Voyages (1492-1504)* (Toronto: University of Toronto Press, 2014), 10-12.

<sup>36</sup> Bauman, *Theology, Creation, and Environmental Ethics*, 57.

World *for* God, he was also colonizing it as God, using the power of language to claim and (re-)create the “empty” land.

## French Colonial Literature

As we will see, French writer Jules Verne extends this logic beyond the bounds of the earth in his nineteenth-century lunar novels, writing that “the Moon looks now as our Earth did endless ages ago, when 'she was void and empty and when darkness sat upon the face of the deep.’”<sup>37</sup> In this moment, as his proto-astronauts considers how they might colonize and inhabit the moon, Verne elevates them to the position of creators *ex nihilo*; for just as an ex nihilic God created the universe out of a “void and empty” space – which we know was not actually void or empty – Verne’s crew could create a world out of the *terra nullius* of the moon.

The French, who had been conquered by the Ancient Romans in the second and first centuries, BCE, considered their colonial expeditions to the New World as opportunities to claim authority as an imperial nation; as a previously colonized nation that could now itself colonize. As other European powers were flocking to and claiming different parts of the New World, the French saw that they too could assume the role of the colonizer and strive to create a “New France” in the Americas, so that France could become the impressively powerful “New Rome.”<sup>38</sup> The members of France’s cultured elite imagined themselves as the heirs to the Roman legacy of colonizing through

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<sup>37</sup> Jules Verne, *Around the Moon* (New York: Airmont Publishing Company, 1870), 108.

<sup>38</sup> Sara E. Melzer, *Colonizer or Colonized: The Hidden Stories of Early Modern French Culture* (Philadelphia: University of Pennsylvania, 2012), 3.

civilizing. In this manner, as Francophone scholar Sara E. Melzer illuminates, France “defined itself by playing the same role for the barbarians of their own world that the Ancients had played for them. In sum, the Ancients were for the French what the French were to be for the Native American barbarians.”<sup>39</sup> This reasoning (as X are to us, so we are to Y) places the French as the central position on both sides of the analogy, and clearly demonstrates France’s ever-present relationship to their past as a colonized people while carving out their future as colonizers.

As France endeavored to become a major colonial power during the Age of Discovery, French explorers published hundreds of accounts of their journeys, forming a genre known as *relations de voyage*, which kindled interest in the Americas among the French reading public back home. These *relations* “framed the nation’s colonization of the New World as a mirror of its relation to the Ancient World,” thereby “establishing parallels between the two stories” of then (antiquity) and now (fifteenth century).<sup>40</sup> In this way, the writings of these French travelers became instrumental in both harkening back to the time when France was colonized and creating intrigue for the present-day task of colonization. While many of France’s initial efforts to establish colonial settlements were unsuccessful, the *relations* managed to pique popular interest in these overseas attempts, thousands of miles away.<sup>41</sup> When they were published in the sixteenth and seventeenth centuries, these accounts became more popular than novels.<sup>42</sup>

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<sup>39</sup> Ibid., 18.

<sup>40</sup> Ibid., 3.

<sup>41</sup> Ibid., 11.

<sup>42</sup> Ibid., 76.

Moreover, the secular-seeming *relations de voyage* were “systematically and aggressively” circulated by the French church as part of its “public-relations machinery” to promote the missions of the Catholic (or Counter-) Reformation, which began shortly after Columbus’s encounter with the New World and which sought over and against England to bring the specifically *Catholic* faith to the world’s “barbarians.”<sup>43</sup> Upon hearing news of the previously unknown land that was full of not only non-Christians, but also non-Muslims and non-Buddhists, the church “focused on the New World because it saw the souls of the Amerindians [Native Americans] as more ripe for conversion than those of Africans and Asians because the Amerindians had not yet accumulated multiple layers of wrong opinion to be peeled away.”<sup>44</sup> In other words, the French saw the newly “discovered” land of the Americas as the prime location for their mission to civilize through Roman Catholicism, and thereby assert their ability to convert over and above Protestants. This mission, the Catholics believed, would “bring the light of reason and science to the dark regions of the planet, where primitiveness, obscurantism and barbarism held sway.”<sup>45</sup>

As Melzer illuminates, these *relations de voyage* presented two sides in thinking about France’s relationship to the Native Americans. On the one hand, France was portrayed as a colonizer much like the Greeks and Romans who had conquered the Gauls centuries before, and the Native Americans were depicted as the subdued and

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<sup>43</sup> Ibid., 78.

<sup>44</sup> Ibid., 79.

<sup>45</sup> Margaret A. Majumdar, *Postcoloniality: The French Dimension* (New York: Beghahn Books, 2007), 24.

colonized “other.” On the other hand, the *relations* sometimes “slipped” into “representing the Amerindians too as an ‘us,’ as kin resembling the Gauls in the most primitive stage of existence.”<sup>46</sup> This subtle identification expressed the French anxiety of relapsing into barbarism themselves, and of being overcome or colonized by the Native Americans. This “double relation,” as Melzer calls it, reveals the fear behind France’s ventures as it sought to be a major colonial power in the New World, as its analogical discourse located the French on a slippery boundary of “us” versus “them.”

As we can see even just in considering the *relations de voyage* genre, literature has great power on the colonial imagination. Pivoting on this point, in this thesis I am looking at several works of literature that redirect earthly fantasies and anxieties onto the moon. As we will see, these texts are French, and harken back to Columbus’s encounter with the New World as they consider what it would be like to travel to the moon. In that sense, colonialism and colonial history are running beneath the texts, even though they are all texts that were popular with the French reading public. What role do these texts play in the American imagination? Soon we will see how they eventually galvanized the twentieth-century United States to colonize the moon through the Apollo Program. Before we get there, we need to examine some of the Doctrine of Discovery’s effects on the New World.

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<sup>46</sup> Melzer, *Colonizer or Colonized: The Hidden Stories of Early Modern French Culture*, 22.

## Manifest Destiny in the United States

As European colonizers conquered the New World during the Age of Discovery, not only did they place themselves above and beyond the inferior, non-Christian, colonized people who had been living there for centuries, but they also transferred the seed of colonial longing, initially embedded in the Doctrine of Discovery, into the developing imagination of what would become the United States. In the several centuries that followed Europe's colonization of the New World, particularly during the nineteenth century, this seed grew into the purportedly secular concept of Manifest Destiny, which swept across the United States as Euro-American colonists moved West and claimed more and more Native American land. While it was first coined as a slogan of sorts in a newspaper article in 1845, Manifest Destiny had been taking hold of the Anglo-American people for decades, as explorers like Meriwether Lewis and William Clark had ventured westward on government-sponsored expeditions to explore "undiscovered" North American territory.<sup>47</sup>

The fundamental aspects of the American doctrine of Manifest Destiny arose from the very same elements that bolstered Europe's Doctrine of Discovery. Robert Miller identifies these aspects as 1) the assumption "that the United States had some unique moral virtues that other countries did not possess," 2) the idea that the United States "had a mission to redeem the world by spreading republican government and the American way of life," and 3) the doctrine's "messianic dimension," meaning the notion that America had a "divinely ordained destiny" to explore and claim the whole North

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<sup>47</sup> Miller, *Native America, Discovered and Conquered*, 99-100.

American continent.<sup>48</sup> Thus, just as the Doctrine of Discovery had elevated European colonizers above “inferior” Native Americans, Manifest Destiny elevated the (Anglo-) American colonists to a superior position of power over the “amoral” and “uncivilized” Native Americans. And, just like the Doctrine of Discovery, Manifest Destiny asserted that the Christian God had divinely sanctioned the act of whites’ claiming land from non-whites.

According to religious studies scholar Conrad Cherry, this “messianic dimension” stretches back to the early colonial period, when Anglo-American colonists maintained the notion that they were God’s chosen people as they claimed various parts of New England over the course of the seventeenth century. As Cherry has written, “throughout their history [white] Americans have been possessed by an acute sense of divine election. They have fancied themselves a New Israel, a people chosen for the awesome responsibility of serving as a light to the nations.”<sup>49</sup> As Abram and his descendants (the Israelites) had been chosen by God in Genesis 12, and again in Exodus 19, the Euro-American colonists considered themselves divinely selected by God to assert ownership over any and all American land. In this manner, the chosen people narrative became useful for the Euro-American explorers and colonists as they moved westward in the United States, and saw “the magnitude and rich natural resources of the western American wilderness.”<sup>50</sup> God *must* have intended for them to encounter such

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<sup>48</sup> Ibid., 3.

<sup>49</sup> Conrad Cherry, "Preface," in *God's New Israel* (Englewood Cliffs: Prentice-Hall, 1971), vii.

<sup>50</sup> "Westward the Course of Destiny," in *God's New Israel* (Englewood Cliffs: Prentice-Hall, 1971), 111.

territory so they could thrive and prosper in their new land, their Canaan. Why else would the land be so “rich,” and why else would the American colonists have “discovered” it? The movement westward was thus “relentless, predestined, and divinely inspired.”<sup>51</sup> Viewed in this light, Manifest Destiny is no more secular than the Doctrine of Discovery or *terra nullius*. While each concept appears to have social, political, and economic principles backing them up, each *also* relies upon the religious conception of chosenness that God bestowed upon Abram in Genesis.

## Structure

This thesis will trace the extension of this Euro-American colonial logic onto the body of the moon itself; first as a fantasy, and ultimately as a reality. It will focus on the French colonial lineage in particular, as French analogical reasoning has been historically useful in defining a *colonized* other who then strives to become *colonizer*. Rather than mapping out an exhaustive history of colonialism from the New World to the moon, I will explore this trajectory through three different nodes.

Chapter One will investigate France as an aspirational colonial power in the Americas by means of the abstract lunar fantasies within Bernard le Bovier de Fontenelle’s philosophical *Conversations on the Plurality of Worlds* (1686), written in the midst of French colonial escapades in the New World. For Fontenelle, talking about the moon and the potential existence of “Lunarians” allows him to express simultaneous curiosity for and anxiety about the encounters that were taking place between the

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<sup>51</sup> Miller, *Native America, Discovered and Conquered*, 2.

French and the Native Americans in the New World, as France struggled to assert itself over and against England's colonial dominance.

Chapter Two will examine the mid-nineteenth-century lunar novels of Jules Verne, which laid the technological groundwork for a voyage to the moon, and which were written after the French colonial drama had played itself out in the New World, after France had relinquished its power to the Anglo-American colonists who established the United States. For Verne, traveling to the moon signifies the highest technological achievement, which he attributes (somewhat facetiously) to the supremely masterful Americans. In this Vernian movement from France to the United States, we will see the historical transference of European colonial longing, and specifically French colonial reasoning.

Ultimately, in Chapter Three, the American inheritance of this French colonial legacy will play itself out in the twentieth century as the United States and the Soviet Union struggle for sovereignty over the *terra nullius* of the moon during the Cold War.

I argue that these lunar fantasies and realities are enacting an all-too terrestrial logic, and that the earthly anxiety being projected onto the celestial body of the moon is specifically *colonial*. As we will see, the moon is a strikingly apt reflector of these colonial desires. It is near enough to be considered for conquest, but far away enough to embody the "final frontier" of outer space. Often-feminized (think "moon cycles," the "lesser light," and the gender of the moon in most romance languages), the moon appears empty and desolate, ready simply to receive whatever the earth projects either materially or fantastically onto "her." Moreover, insofar as the moon has a "dark side"

that we can never view from earth, it becomes the perfect site for both racialized and gendered colonial discourse: the moon is there to be penetrated, and perhaps even lightened (by white people). We will immerse ourselves in dreams and realities of lunar conquest that each harken back to Columbus's "discovery" of the New World, and redirect terrestrial anxieties and ambitions onto the moon. We will discover, time and time again, that the thing about the moon is actually about the earth. Finally, we will see how Fontenelle and Verne have historically treated and prepared the global imaginary for the Apollo Program's twentieth-century colonization of the moon.

# CHAPTER ONE

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## 17TH-CENTURY LUNAR IMAGININGS: FONTENELLE AND FRENCH COLONIAL THOUGHT

France, 1686

In his 1686 *Entretiens sur la Pluralité des Mondes* (*Conversations on the Plurality of Worlds*), French writer and Philosopher Bernard le Bovier de Fontenelle picked up where clergyman John Wilkins, savant Pierre Borel, and author Cyrano de Bergerac had left off in decades past. As Nina Rattner Gelbart writes in her introduction to the *Conversations*, all of these seventeenth-century male writers had explored the concept of “hypothetical worlds on the Moon” in their respective works.<sup>52</sup> However, out of all the available texts on the subject, it was “*Entretiens* [that] became far better known than any other book for the layperson on the subject of the plurality of worlds.”<sup>53</sup> Twentieth-century American astrobiologist David Grinspoon has called *Conversations* “the first popular-science book devoted to the question of extraterrestrial life.”<sup>54</sup> In this work, Fontenelle describes the Copernican notion of a heliocentric universe (a sun-centered solar system), while asserting the existence of an infinite number of worlds populated by various forms of life, such as lunar “inhabitants...who are not like men in any way.”<sup>55</sup>

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<sup>52</sup> Nina Rattner Gelbart, "Introduction," in *Conversations on the Plurality of Worlds* (Los Angeles: University of California Press, 1990), xiii.

<sup>53</sup> *Ibid.*, xii.

<sup>54</sup> David Grinspoon, *Lonely Planets: The Natural Philosophy of Alien Life* (New York: Harper Perennial, 2004), xiv.

<sup>55</sup> Bernard le Bovier de Fontenelle, *Conversations on the Plurality of Worlds*, trans. H.A. Hargreaves (Los Angeles: University of California Press, 1990), 6.

At the time, publishing *Conversations* was “very risky business” for Fontenelle, as the cosmological ideas of plurality, infinity, and heliocentrism that he was putting forth were considered “bold, controversial, even forbidden.”<sup>56</sup> In the early 1600s, both Giordano Bruno and Galileo Galilei had faced criminal punishment by the Roman Inquisition for presenting their cosmological theories to the public — Bruno was executed in 1600, for (among other offenses) his doctrine of infinite inhabited worlds in an infinite universe, and Galileo was put under lifelong house arrest in 1633, following the 1632 publication of his markedly heliocentric *Dialogue Concerning the Two Chief World Systems*.<sup>57</sup> Thus, the intellectual and political world into which Fontenelle was plunging with this text was charged and even dangerous.

However, the structure of *Conversations* — a series of “flirtatious” dialogues between a philosopher-narrator and a noblewomen — allowed Fontenelle to “leave the reader uncertain” of what the writer actually believed, thereby “free[ing] [Fontenelle] to offer dangerous speculations,” such as the possibility of life and creatures on other planets and the infinite number of “worlds” out there.<sup>58</sup> “Nevertheless,” Grinspoon writes, “*Conversations* was placed on the Catholic index of banned books one year after

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<sup>56</sup> Gelbart, “Introduction,” vii.

<sup>57</sup> Mary-Jane Rubenstein, *Worlds without End: The Many Lives of the Multiverse* (New York: Columbia University Press, 2014), 107.

<sup>58</sup> Grinspoon, *Lonely Planets: The Natural Philosophy of Alien Life*, 22; “‘Worlds,’ in this period, often if not invariably referred to solar systems.” (H.A. Hargreaves, “Translator’s Preface,” in *Conversations on the Plurality of Worlds* (Los Angeles: University of California Press, 1990), 3n, 75.)

publication.” But this interdiction did not stop the “unserious” text from becoming “a hit with the public.”<sup>59</sup>

As the late seventeenth century marked the beginning of the French Enlightenment, and therefore a time of profound change and comparative intellectual freedom, there was slightly more room for Fontenelle to explore these “hypothetical worlds” than there had been for Bruno or Galileo. While Bruno’s “execution in 1600 encouraged a degree of caution for a number of decades...for the most part the seventeenth century witnessed a veritable explosion of treatises concerning the existence of other worlds.”<sup>60</sup> This “explosion” was largely due to Galileo’s 1610 publication of his telescopic discoveries and observations, all of which eventually dismantled the geocentric model of the universe, and forced European humankind to come to terms with the fact that it was *not* the center of everything.<sup>61</sup>

Writing in the wake of Galileo, Fontenelle was tackling these “bold,” “unorthodox” astronomical subjects at the “threshold of the modern era.”<sup>62</sup> As Gelbart highlights, Fontenelle “represents a transition, a link, between an age steeped in faith, tradition, and reverence to past authority, and an age characterized by a secular spirit, independence, and openness to the future.”<sup>63</sup> He was writing at a time when he could interweave philosophical thought with newly presented scientific understandings of the universe. As H.A. Hargreaves argues, Fontenelle’s *Conversations* was “an attempt to

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<sup>59</sup> de Fontenelle, *Conversations on the Plurality of Worlds*, 6; Grinspoon, *Lonely Planets: The Natural Philosophy of Alien Life*, 22.

<sup>60</sup> Rubenstein, *Worlds without End: The Many Lives of the Multiverse*, 106.

<sup>61</sup> Ibid.

<sup>62</sup> Gelbart, "Introduction," xvi; H.A. Hargreaves, "Translator's Preface," *ibid.*, xxxiv.

<sup>63</sup> Nina Rattner Gelbart, "Introduction," *ibid.*

bring together not only the relatively new information accumulating about man and his world, but to treat it with a new method.”<sup>64</sup> This “new method” refers to the *Conversations*’ dialogic structure, which is actually rooted in Plato’s ancient structure, and which, according to Hargreaves, allows us to consider the text “more a stylistic *tour de force* than a strictly documented organization of contemporary scientific thought.”<sup>65</sup>

At the time, European explorers were sailing across the seas, hoping to extend the authority of their countries by establishing colonial settlements in the New World. France was specifically striving to establish colonial dominance in the Americas in order to match and eventually surpassing its colonial “arch-rival,” England.<sup>66</sup> In the sixteenth century, however, France’s initial colonial efforts “were ill conceived and failed, especially since the nation was hampered by its internal religious wars.”<sup>67</sup> As France struggled to establish its colonial sovereignty with the colony of “New France” in present-day Canada, King Louis XIV even went so far as to send approximately 770 women to the colony in order to boost the French population between 1663 and 1673 (most of the French explorers who had traveled to the New World had been men).<sup>68</sup> Just one hundred years later, France would lose all of its “New France” territory to England in the Seven Years War (1756-1763).<sup>69</sup> Insofar as Fontenelle was writing in the middle of this colonial drama that was taking place overseas, as Native Americans were being “discovered” and compared to Europeans, he was still working within the realm of

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<sup>64</sup> H.A. Hargreaves, "Translator's Preface," *ibid.*

<sup>65</sup> *Ibid.*, xl.

<sup>66</sup> Majumdar, *Postcoloniality: The French Dimension*, 3.

<sup>67</sup> Melzer, *Colonizer or Colonized: The Hidden Stories of Early Modern French Culture*, 11.

<sup>68</sup> "King's Daughters," [www.fillesduroi.org/src/kings\\_daughters.htm](http://www.fillesduroi.org/src/kings_daughters.htm).

<sup>69</sup> Majumdar, *Postcoloniality: The French Dimension*, 4.

fantasy with respect to the New World. As we will see, in his *Conversations*, he projected earthly fantasies and anxieties about the New World, with its newly- “discovered” inhabitants, onto the body of the moon.

### Fontenelle, Himself

Starting at the age of thirteen, Bernard le Bovier de Fontenelle was a literary adventurer, prolifically dabbling in all genres of writing, from poetry to drama to journalism to treatises.<sup>70</sup> By the time he wrote the *Conversations*, his most-read and most-revised work, he had published at least thirty-seven pieces of writing. The 1680s were especially productive for Fontenelle and he published numerous works, including the *Conversations*, in which he wrote about “mythological figures, important thinkers, and political actors,” as well as religion, philosophy and science; in other words, he covered a lot of ground.<sup>71</sup> Hargreaves emphasizes that Fontenelle was considered “a man of letters” in Parisian literary and cultural circles, and as “an intelligent *galant*, a young man of learning, wit and charm.”<sup>72</sup> In this sense, Fontenelle was in many ways a celebrity, “mingl[ing] with the intellectual stars of the capital” in the context of “informal gatherings in private homes presided over by influential women who could make or break careers.”<sup>73</sup> People wanted to spend time with him and talk with him, and

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<sup>70</sup> Hargreaves, "Translator's Preface," xxxv.

<sup>71</sup> Nina Rattner Gelbart, "Introduction," *ibid.*, xv.

<sup>72</sup> H.A. Hargreaves, "Translator's Preface," *ibid.*, xxxv, xli; Nina Rattner Gelbart, "Introduction," *ibid.*, xiv.

<sup>73</sup> "Introduction," xiv.

it was through this setting of the conversational, intellectual, heavily female-populated salon that he was able to “glean a sense of what was intellectually *à la mode*.”<sup>74</sup>

The importance of the intellectual, female-populated salons that Fontenelle attended as a young man manifests itself in the many female characters that populate his literary works. In almost all of his writing, most of “the characters [are] women—poets, goddesses, queens.”<sup>75</sup> This is no exception for his *Conversations*, in which a nameless male Philosopher – functioning as the mouthpiece for Fontenelle – speaks with his hostess, the Marquise of G\*\*\*, on a number of questions related to the plurality of worlds.

Perhaps Fontenelle wrote women into his texts because he knew from his salon experience that intellectual women loved him and he wanted to appeal to a wide audience that included them. Additionally, it may be that Fontenelle was accustomed to discussing intellectual questions and subjects with women, having spent years doing so in the female-driven, female-populated salons. Finally, as Fontenelle himself explains to his reader in the preface to the text, he “placed a woman in these Conversations who is being instructed, one who has never heard a syllable about such things” so that “it’s merely required that one read and at the same time form a clear idea of what one is reading.”<sup>76</sup> The fact that Fontenelle included a woman interlocutor “to make the work more enticing” for readers of all kinds assumes that, if women could follow the text, then anyone could.<sup>77</sup>

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<sup>74</sup> Ibid., xv.

<sup>75</sup> Ibid., xvi.

<sup>76</sup> de Fontenelle, *Conversations on the Plurality of Worlds*, 4.

<sup>77</sup> Ibid.

## Fontenelle's Form and Structure

The *Conversations* takes the form of a series of informal dialogues between the Philosopher and the Marquise. Their discussions take place “only at night,” and “in the garden,” where they are surrounded by the natural beauty of the country.<sup>78</sup> Over the course of five evenings, the pair discusses the possibility of the plurality of worlds and of life on other worlds, including the moon. Through the structure of these nightly conversations, Fontenelle explains that he is “tr[ying] to treat Philosophy in a very unphilosophical manner” so that “it’s neither too dry for men and women of the world nor too playful for scholars.”<sup>79</sup> In other words, his text is intended for anyone who can read, and who is willing to absorb information, dream and imagine alongside his characters. The accessibility of the text was most likely the reason the *Conversations* was such a popular read and literary success.

Grinspoon interprets the inclusion of the female Marquise as illustrative of how “Fontenelle implicitly advocates the notion that women can handle physics and philosophy—a radical notion in seventeenth-century France.”<sup>80</sup> While this may be true, there is something less feminist, and perhaps even sinister, happening beneath the text.

As Fontenelle writes in his preface to the *Conversations*,

I only ask of the ladies, for this whole system of Philosophy, the same amount of concentration that must be given to *The Princess of Clèves* in order to follow the plot closely and understand all its beauty. It’s true that the ideas of this book are less familiar to most women than those of *The Princess of Clèves*, but they’re no more

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<sup>78</sup> Ibid., 8; *ibid.*, 9.

<sup>79</sup> Ibid., 3.

<sup>80</sup> Grinspoon, *Lonely Planets: The Natural Philosophy of Alien Life*, 22.

obscure; one cannot read them more than twice at the very most without grasping them very accurately.<sup>81</sup>

*La Princesse de Clèves* was a controversial-but-popular psychological, romance novel published anonymously a decade before *Conversations*, and has been described as “a landmark in the history of the novel” as it was the first European work of prose fiction.<sup>82</sup> More importantly for Fontenelle, it “had been an instant success” with French readers, and so it was an apt example of popular literature, something that everyone – even women – had already read and enjoyed.<sup>83</sup>

In comparing the accessibility of his *Conversations* to that of the controversial but highly popular *La Princesse de Clèves*, Fontenelle establishes that his book was intended for the then-wide audience of both men *and* women. As he specifies in his reading instructions for “the ladies,” when he asks them to give the “same amount of concentration” to his book that they give to *La Princesse*, he is working from the assumption that he needs to make women feel like his “whole system of Philosophy” is within their literary capacity, meaning that he would normally consider the subject matter as something “obscure” to women. But he also wants to highlight that his text is not as complicated as most other philosophical texts, and so can be “grasp[ed]” by women without much effort.

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<sup>81</sup> de Fontenelle, *Conversations on the Plurality of Worlds*, 4-5. Subsequent references to this text will be cited internally.

<sup>82</sup> Madame de La Fayette, *La Princesse De Clèves*, trans. Terence Cave (New York: Oxford University Press, 1999), viii.

<sup>83</sup> *Ibid.*, ix.

Therefore, while Grinspoon argues that it was a “radical,” proto-feminist move of Fontenelle to write the female character of the Marquise in his *Conversations*, there are also apparent traces of sexism running beneath the text. Fontenelle’s need to specify that his book is one that can be read by both men and “the ladies” reveals his assumption that a) most women usually find philosophy beyond their bounds of comprehension, and b) that they can only understand and absorb something when it is presented in the manner of a romance or psychological novel. While the Marquise is *certainly* a woman, she is written as the one receiving the knowledge, and thus in a more passive position than that of the male Philosopher, who is actively educating her during their nightly discussions. This notion of man as educating and improving woman will be important moving forward in our consideration of lunar conquest across centuries.

Over the five evenings of the *Conversations*, the Philosopher enlightens the Marquise about a variety of subjects concerning the solar systems of the universe and all that they contain. On the first evening, when discussing the structure of the universe, the Philosopher describes the Copernican model to the Marquise as the theory “most likely to be correct.”<sup>84</sup> The second and third evenings are spent thinking about the moon as a world, and the possibility of travel to it and life upon it. After discussing the moon, the pair spends the fourth evening discussing the possibility of life on other planets, as well as the physics of planetary motion. Finally, on the fifth night, the Philosopher “takes the radical plunge” by positing that the fixed stars of the universe are suns, around

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<sup>84</sup> Gelbart, "Introduction," xxi.

which an infinite number of worlds revolve.<sup>85</sup> Through this progression from the controversial Copernican model of the universe to the “radical” notion of the universe as infinite, the move that Bruno made decades before, Fontenelle “lures his reader into a frame of mind ready to brave the new world he is presenting” and “succeed[s] in putting forth astonishing ideas as if they were entirely natural.”<sup>86</sup>

While the cosmological subjects covered across these five nights may seem abstract and speculative, Fontenelle wanted his readers to understand them as practical and useful. He was not interested in metaphysics; he was interested in observable Nature, believing that “though folly and vanity might persist through all ages, the worthy study of nature would only enhance the human experience.”<sup>87</sup> Moreover, as Hargreaves explains, Fontenelle sought “knowledge contained in Nature that was useful in the everyday affairs of men,” which is to say Nature’s “observable laws,” rather than metaphysical or conjectural knowledge.<sup>88</sup> As the conversations between the Philosopher and the Marquise take place in a garden at night, and involve merely looking up at the night sky, Fontenelle is setting forth a way to consider these “observable laws” to be “useful in...everyday affairs” and thus of earthly importance. To Fontenelle, of all the celestial matters he considers to be of earthly importance, the body he discusses most in this text is the moon.

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<sup>85</sup> Ibid.

<sup>86</sup> Ibid., xxii; *ibid.*, xxi.

<sup>87</sup> Ibid., xvi.

<sup>88</sup> H.A. Hargreaves, "Translator's Preface," *ibid.*, xxxviii.

## Fontenelle's Lunar Imagery

### Sameness/Difference

The *Conversations* is full of imaginings of traveling to the moon, the possibility of life on the moon, and the likely traits of lunarians (hypothetical lunar inhabitants) — all well before venturing into outer space was a tangible reality. As Hargreaves writes, “it is not the quaintness of Fontenelle’s expression which strikes us, but the modernity of his ideas. The narrator [of the *Conversations*] sounds almost like an astronaut reminiscing.”<sup>89</sup> In the same line of thought, Grinspoon emphasizes how, with the *Conversations*, “Fontenelle predicts spaceflight...and offers vivid descriptions, centuries before the Apollo project, of the Earth as seen from space.”<sup>90</sup>

As Fontenelle’s pair focuses their lunar-lit dialogue on the moon itself, the Philosopher repeatedly argues that “the Moon is a world like the Earth” (Fontenelle, 23). During his second evening with the Marquise, the Philosopher strengthens his analogy, asserting “the *complete similarity* of the Earth and the Moon” (26; emphasis added) to draw conclusions about the moon itself, and to ground some of his imaginings of the possibility of lunar life.

The Philosopher bases this analogy on his observations that the moon is “a great mass like the Earth” (25), and these two “great balls hanging in the skies” (26) exist in a triangular relationship with the sun. As he says to the Marquise, “[the Sun] sends his light to the Moon which it reflects to us, and of necessity the Earth reflects the Sun’s

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<sup>89</sup> Ibid., xxxiii.

<sup>90</sup> Grinspoon, *Lonely Planets: The Natural Philosophy of Alien Life*, 21-22.

light to the Moon” (24-25). Moreover, the Philosopher emphasizes, “what makes the Moon shed light on us is that it’s a firm, solid body,” and that “the Earth has this same firmness and solidity” (25). The similarity between the moon and the earth, then, is based on their hard compositions and their capacity to receive and reflect sunlight. Through this analogy, Fontenelle illustrates how our human understanding of the “firmness and solidity” of the terrestrial gives us the space and impetus to imagine and grasp that of the lunar. In setting up the analogy between the earth and the moon at the beginning of the second evening, Fontenelle entices us to focus on the moon as another earth more than the other planets in our solar system, and this preference holds for the rest of the *Conversations*.

When the pair meets the very next evening, however, the earth-moon analogy is both reaffirmed and undermined, as the Philosopher oscillates between supporting and repudiating the similarity he established the night before. It seems “the Moon doesn’t resemble the Earth” (37) as much as he initially thought, because the moon is “a body infinitely *more* solid than our Earth” and “there’s no evaporation” on the moon (38; emphasis added). As we shall shortly see, the Philosopher is about to insist upon the stark differences between lunar creatures and humans, and thus emphasize dissimilarity between the moon and the earth. Why is he both asserting and denying the resemblance between the earth and the moon?

Turning back to the conversation that introduced the earth-moon analogy in the first place, we can see the Philosopher establishing his position to the Marquise in the following manner: “I don’t take sides in these matters except as one does in civil wars,

when the uncertainty of what might happen makes one maintain contacts on the opposite side, and make arrangements even with the enemy” (23-24). Thus, the text itself acknowledges the Philosopher’s occasional double-speak — in this case, the dance between sameness and difference when it comes to the relationship between the earth and the moon. Yet this is not the only place we see Fontenelle defending both sides of a position. In his preface, Fontenelle explains that a “bizarre mixture” of “the true and the false” (5) permeates the text. He thereby acknowledges the text’s back-and-forth movement on various matters, an oscillation that will include the Philosopher’s analogy between the earth and the moon. I would suggest that this oscillation allows Fontenelle to address vexed and even dangerous cosmic possibilities while letting us decide what we think for ourselves. Moreover, as we are about to see, it gives him the space to imagine what the newly-“discovered” New World and inhabitants might be like.

### Lunarians vs. Humans

The Philosopher’s initial emphasis on the similarity between the earth and the moon necessitates the existence of lunar inhabitants. He convinces the Marquise that if “the Moon should completely resemble the Earth, you’ll find yourself to believe the Moon inhabited” (24), the logic being that if the earth is like the moon (by virtue of its mass and relationship to the sun), and the earth has people on it, then the moon must have inhabitants, as well. While the Philosopher uses this analogy between the earth and the moon to support the idea that there are lunar inhabitants, however, he also departs from the analogy to insist that they are nothing like humans:

I don't believe at all that there are men on the Moon. Look at how much the face of nature changes between here and China: other features, other shapes, other customs, and nearly other principles of reasoning. Between here and the Moon the change must be even more considerable...He who would press on to the Moon assuredly would not find men there. (32)

In short, *distance* determines the extent to which lunar beings are similar and dissimilar to humans on earth. The lunar beings cannot be “men,” the Philosopher reasons, because of the way he thinks “the face of nature changes” across vast distances. These changes are already (purportedly) formidable across the distance from France to China, so they must only increase in number and intensity when we consider the distance from the earth to the moon. Having first insisted upon the absolute similarity of the earth and the moon, then, the Philosopher now asserts their considerable difference. That having been said, he qualifies this difference, as well, calling the lunarians “gentlemen” (29) and referring to “our neighbors, the *people* on the Moon” (35; emphasis added). In other words, he is still using human-language to describe these purportedly non-human, lunar beings. They are both like us and nothing like us, both unimaginably far away and “our neighbors.”

The Philosopher considers the lunar creatures “our neighbors” because, if they exist, they inhabit the cosmic body that is closer to us than any other:

We can suppose the differences increase according to the distance one travels, and whoever saw an inhabitant of the Moon and an inhabitant of the Earth would note clearly that they were from closer-together worlds than an inhabitant of Earth and an inhabitant of Saturn. (46)

Again, the Philosopher is using the earth's distance from the moon to discuss the (di)similarity between the lunarians and the humans, but here he uses it to support the sameness he initially spelled out when laying out the analogy between them, only to deny that sameness, only to assert it again. In sum, the Philosopher asks us to compare ourselves to the hypothetical creatures of the moon time and time again, but at the same time gives us reason to not get too attached to that comparison.

During his third evening under the starry sky, the Philosopher goes back to his emphasis on difference when he discusses the likely living conditions of the lunarians.

He says to the Marquise,

You believe that the inhabitants of the Moon must live on the surface of their planet because we live on the surface of ours. It's totally the opposite; since we live on the surface of our planet, they very well might not live on the surface of theirs. Between here and there everything must be quite different. (43)

This notion of lunar conditions as being "totally the opposite" from conditions on earth is yet another difference the Philosopher is noting between the earth and the moon.

However, this specific difference is one of opposition – we are on the surface, so they are probably below the surface – and as an opposition, it is based on the sameness he previously established. Why is Fontenelle repeatedly carving out this space of both sameness and difference in the *Conversations*? What is so crucial about simultaneously maintaining the similarity and dissimilarity between the earth and the moon?

It is important for Fontenelle to establish the difference between earth and moon creatures in order to distinguish lunarians from the "descendants of Adam," which is to say, humankind. If Fontenelle gives us both the similarity and dissimilarity between

lunarians and humans, as he does, then he can assert that the lunar creatures are “irrelevant to biblical concerns” as they do “not descend from Adam.”<sup>91</sup> Writing in the wake of the Copernican controversy, Fontenelle was careful not to revive matters of longstanding theological debate — in this case, a debate concerning the possibility of human beings on the “other” (non-European, non-Mediterranean, non-North African) side of the earth. This so-called “antipodean debate” started in the 400s with St. Augustine, who insisted that there could be no creatures on the far side of the earth because humanity began with Adam, a singular man, and “it would be too ridiculous to suggest that some men might have sailed from our side of the earth to the other.”<sup>92</sup> Thus, if descendants of Adam *were* found on the other side of the earth, how did they get there? And if they were not descendants of Adam — meaning not “human” — then who were they and what were they like? Had God created humanity more than once? Had this other humanity sinned like Adamic humans? If so, wouldn’t Christ need to redeem them, as well (considering that Christ’s sacrifice “only” redeems the descendants of Adam)? Would Christ, then, have to be incarnated more than once, rejected more than once, and then crucified and resurrected more than once? Facing these absurd theological possibilities of Christ experiencing violence over and over again, Augustine confidently asserted that there could be no such thing as “antipodeans.”

In the *Conversations*, we can see this same “antipodean” logic and fear of antipodeans being extended to the moon. Fontenelle avoids saying anything conclusive

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<sup>91</sup> Ibid., 22.

<sup>92</sup> Augustine of Hippo, *Concerning the City of God against Pagans*, trans. Henry Bettenson (New York: Penguin, 2003), 16.19.

about the analogy between lunarians and humans because any direct relationship between lunar inhabitants and Adam, which is to say between any descendent of Adam that would have to be redeemed by Christ, encroaches on perilous territory. Were Fontenelle saying that a plurality of worlds were out there, inhabited by a plurality of human-like beings, then insofar as humans have a tendency to sin, their very existence would necessitate a plurality of redeemer-Christ. In 1686, this plurality of Christs was absolutely unthinkable as Church doctrine upheld and insisted upon the singularity of Christ. For example, the pseudo-Pauline *Letter to the Hebrews* tells us that Christ did not “suffer many times since the creation of the world. But he...appeared once for all” (9:24-28); the *Letter to the Romans* says, “Christ, being raised from the dead, will never die again” (6:9); and the Nicene Creed refers to Christ as “the only-begotten Son of God.”<sup>93</sup> As both scripture and tradition maintain Christ’s singular incarnation, suffering, and death, Fontenelle needs to stress that the lunar “inhabitants...are not like men in any way” (6), even if he has “no idea” (32) what they are actually like.

By the time of the *Conversations*, however, “antipodeans” had in fact been discovered on earth: by Columbus in the New World. As Fontenelle’s Philosopher says, in ancient times “it was judged that the ocean covered all the Earth except what of it was known” and “there were no Antipodes” (35). Nonetheless, he emphasizes to the Marquise, eventually “the Antipodes were discovered all the same” (35). While insisting upon *both* the sameness and difference between humans and lunarians allows Fontenelle

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<sup>93</sup> "Holy Bible, New Revised Standard Version,"  
([www.biblegateway.com/passage/?search=Hebrews%209:24-282011](http://www.biblegateway.com/passage/?search=Hebrews%209:24-282011)).

to dodge facing finger pointing or exile by the Church, then, it also allowed him to consider the possible existence of lunarians. Moreover, it gave him the space to contemplate the potential similarities and differences between the French and the Native Americans of the New World. As Sara Melzer reminds us, “this fear of being akin to the Amerindians as the colonized *other* tapped into the French elite’s nascent doubts about themselves due to their own more archaic drama when their ancestors were the colonized *other* in relation to the Romans and Greeks.”<sup>94</sup> This fear of “backsliding into barbarism,” into the position of the colonized *other*, manifests itself in Fontenelle’s text, as the Philosopher oscillates between sameness and difference when comparing the lunarians (who may not even exist) to European humans.

While the Philosopher says that we cannot know anything specific about lunar inhabitants, he also postulates that the “people of the Moon” probably already “know how to make little trips through the air” (35), and thus are technologically more advanced than humans. This conjecture of the Philosopher’s suggests that lunarians are more capable and more intelligent than human beings. It also reinforces Bernd Brunner’s description of the *Conversations* as a text in which Fontenelle “portray[s] the moon as a sort of utopian alter ego to the Earth,” as its inhabitants are already excelling at something that humans are only just learning about.<sup>95</sup> However, as the Philosopher has claimed not to know what the lunar people are like, he does not dwell on this possibility of lunarian “utopian” capabilities. Rather, he uses this brief speculation as a

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<sup>94</sup> Melzer, *Colonizer or Colonized: The Hidden Stories of Early Modern French Culture*, 22.

<sup>95</sup> Bernd Brunner, *Moon: A Brief History* (New Haven: Yale University Press, 2010), 94.

way into discussing whether or not it is possible for *humans* to learn how to fly and perhaps even use this ability to journey to the moon.

### Travel to the Moon?

True to form, the double-speaking Philosopher wants to argue that it is both possible and impossible for humans to get to the moon. Before delving into the subject, he reveals his interest in contemplating travel to the moon when he mentions the “learned men who travel there every day with their telescopes” (29), thereby reinforcing the significance of the seventeenth-century invention of the telescope. The Philosopher then tells the Marquise he is “going to make [her] admit, against all reason, that some day there might be communication between the Earth and the Moon” (33). This “communication” between the two planets would be based on humanity’s ability to “cross the great expanse of air and sky between the Earth and the Moon,” something the Philosopher thinks will happen in the future as the newly-born “art of flying... will be perfected” so that “someday we’ll go to the Moon” (34).

While he is convinced that we could accomplish such a task *technologically*, the Philosopher is worried that, *physically*, we would not be able to make a “voyage to the Moon” (30). He thinks humans will not get to the moon because of the “two different airs” (39) of the moon and the earth. Each lunarian and human is, he explains, “imprisoned by the air it breathes” (40). These “natural barriers,” he says, will “forbid us to leave our world and to enter that of the moon” (40). Here the Philosopher is engaging in his back-and-forth movement again, simultaneously telling the Marquise and

the reader that getting to the moon is both possible and unthinkable, leaving any kind of final conclusion up to the discretion of his audience. Why is Fontenelle so fascinated by the impossible-possibility of humans getting to the moon, and by the human-inhumanity of the beings who might live there?

Thus far, we have discovered that Fontenelle's varied fantasies about the moon are playing out specific, earthly relations. First, there is the *romantic*, or courtly, relationship between the Philosopher and the Marquise, which manifests itself in the "flirtatious atmosphere" of their nightly discussions that occur beneath a starry sky.<sup>96</sup> It is within this atmosphere that the pair discusses *scientific* concerns: our chances of traveling to the moon are calculated based upon our current technological capacities for travel and adjustment to different environments. It is within this same conversation that the Philosopher reveals his *religious*, or theological, concerns about the descendants of Adam and the lurking anxiety over the singularity of Christ. In addition to all of these earthly anxieties, however, I would like to suggest there are also *colonial* concerns pervading the text; anxieties over European terrestrial sovereignty with which we will concern ourselves for the rest of this chapter.

### Colonial Encounters in Fontenelle

As we have already seen, Sara Melzer has explained that seventeenth-century French colonial literature and discursive logic revolved around an analogy between the Ancient Roman colonization of the Gauls (the ancestors of the French people) and

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<sup>96</sup> Gelbart, "Introduction," xxi.

France's colonization of the New World. As Melzer writes, "the Ancients were to the French what the French were to be for the Native Americans."<sup>97</sup> Thus, according to Melzer, and as we will continue to see in Fontenelle, French colonial discourse works by analogy: as X are to us, so we are to Y.

The Philosopher echoes this colonial analogical logic during his second evening with the Marquise. After discussing the potential existence of lunarians, the Philosopher challenges the Marquise to consider why she is "disturbed" (32) about the existence of lunarians rather than, for example, "the inhabitants of that great land of Australia, which is still completely unknown to us" (32-33). The Philosopher points to Australia because, like the moon, it is far away from France, and had yet to be explored (by Europeans, at least). In order to illustrate what is possible to know about lunarians, then, the Philosopher makes an analogy between the "completely unknown" land of Australia and the even *more* unknown land of the moon.

In this and similar analogies, the Philosopher is working from the earthly to get to the lunar, and so it might seem that his primary concern is making well-grounded inferences about the nature and inhabitants of the moon. Indeed, we have discovered this particular cosmic satellite to be a recurring focus throughout the five nights composing the *Conversations*. However, I would like to suggest that Fontenelle's primary concern is not the moon, but rather the earth.

The Philosopher uses comparison between the Australians and the lunarians to steer the conversation toward his big hypothesis concerning humanity's ability to

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<sup>97</sup> Melzer, *Colonizer or Colonized: The Hidden Stories of Early Modern French Culture*, 18.

interact with the moon. The Marquise refutes this comparison between the aboriginal Australians and lunarians by saying that she can “count the inhabitants of Australia as known” because, insofar as they occupy the same earth as “we” do, they “must resemble us closely” (33).<sup>98</sup> The lunarians, by contrast, remain unknown and unknowable. The Philosopher responds to her by saying lunarians might not be as unknowable as the Marquise thinks, since “some day there might be communication between the Earth and the Moon” (33). While he admits that the idea sounds “quite ridiculous,” he also says that it “has an air of reasonableness that captivates” (33) him. Again, the Philosopher is engaging in his back-and-forth movement: his dream of communication between the earth and the moon is both “ridiculous” and “reasonabl[e].”

After setting up this comparison between two lesser-known places, Australia and the moon, the Philosopher moves to the more familiar terrain of the already-explored and better-known New World in order to emphasize Europe’s advanced technological capabilities. Immediately after making the comparison between Australia and the moon, the Philosopher tells the Marquise to “take [her] mind back to the state America was in before it was discovered by Christopher Columbus” (33). He proceeds to describe the state of “extreme ignorance” in which Native Americans lived, and the difference between their imperfect vessels of navigation (handmade boats), and the “more perfect” vessels used by Columbus and his men (“great enormous bodies [sailboats] which seem to have white wings and fly on water”) (33-34). The Philosopher

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<sup>98</sup> Here Fontenelle is again working with the idea of closeness leading to greater sameness between different kinds of beings.

evokes Columbus's discovery to emphasize that, while the Native Americans could not even have conceived of it beforehand, and despite the vast ocean between Europe and the New World, the "sea...was no obstacle to the communication of people" (34). In other words, because of the technological prowess of the Europeans, the "infinite expanse of water" (33) could be crossed and conquered.

This technical ability of Europeans to travel across great distances is the basis on which the Philosopher goes on to argue that "the great expanse of air and sky between the Earth and the Moon" (34) might be crossable, as well. As the crossing of the sea led to the discovery of the New World and communication between Europeans and the inhabitants of this "discovered" land, the Philosopher wants to say that humans will be able to "cross the great expanse of air" and thus that "communication between the Earth and the Moon" (34) cannot be deemed impossible. It happened before, on the earth; why could it not happen again, in the sky?

While the Philosopher is European (specifically French), we have to remind ourselves that in this classic French colonial analogy he is aligning himself with both the Europeans who "discovered" the New World *and* the Native Americans. This double relation recalls Sara Melzer's discussion of France's colonial identity as existing on a blurry boundary of "us" versus "them."<sup>99</sup> The Philosopher explicitly asserts the alignment with the Native Americans when he briefly touches on the idea of lunar creatures descending to earth: when the lunarians arrive, he imagines, "we'll be just like the Americans who couldn't imagine such a thing as sailing when people were sailing so

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<sup>99</sup> Melzer, *Colonizer or Colonized: The Hidden Stories of Early Modern French Culture*, 22.

well at the other end of the world” (34). Following the Philosopher’s analogical logic, we might think that Fontenelle is opening up the possibility for the lunarians to come and colonize the Europeans, as the Europeans colonized the Native Americans in the New World. However, the Philosopher never explores this option at any length, returning instead to his speculations on the chances of Europeans getting to – and presumably learning to occupy – the moon. In this way, the Philosopher ends up positioning himself alongside Columbus and his fellow-European colonists. Despite the Philosopher’s initial analogy (lunar inhabitants : Europeans :: Europeans : New World), we are never left to consider the Europeans in an inferior position of power, which is to say the position of the colonized. While this moment in the text hints at the fear of “backsliding into barbarism” that Melzer discusses, we never see that potential reality play itself out.<sup>100</sup> The Europeans remain the most technologically advanced, the supreme authority in Fontenelle’s earth-moon analogy.

This supremacy can be seen above all in the Philosopher’s illustration of the Native Americans’ surprise as they encountered the “unknown people” of Europe. He describes the Native Americans before Columbus as living “naked” in a state of “extreme ignorance,” with “no weapons” and no idea “that men could be carried by animals” (33). In this manner, the Philosopher depicts the Native Americans as both uncivilized and unaware of the human power to master animals — that is, he presents them as being on the same ontological level as animals, a subhuman level. He also describes how they “went from one shore to another carried by wind and waves” (33) without any active

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<sup>100</sup> Ibid.

ability to control their handmade vessels. After positioning the Native Americans as being not only technologically inferior and passive compared to the advanced Europeans, but also as being subhuman, the Philosopher imagines the Native Americans encountering the Europeans with their advanced technology and ability to cross the vast ocean and wondering, “Are they gods?” (34). In this manner, the Philosopher projects overwhelming sovereignty onto the European conquerors of Columbus’s time, imagining that in relation to the Native Americans’ sub-human animality, the Europeans must have seemed like gods.

Indeed, the *Conversations* is full of moments in which Fontenelle explicitly uses language that simultaneously proclaims indigenous subservience and inferiority while asserting European supremacy. For instance, when discussing far-away places on the earth, the Philosopher goes so far as to tell the Marquise that “when one travels to certain newly discovered lands the inhabitants one finds are scarcely men; they’re animals in human form, still sometimes rather imperfect, with hardly a trace of human reason” (32). Again, then, we can see that, according to the Philosopher, the Europeans are gods with respect to Native American as both humans *and* as “animals in human form.” In this manner, the Philosopher repeatedly establishes and reasserts the ontological hierarchy between the elevated and “god[-like]” Europeans and the subhuman, bestial, and “ignorant” Native Americans.

These allusions to non-Europeans as “savage” and less than human appear earlier on in Fontenelle, as his pair discusses the rotating earth of the Copernican system. In his first evening with the Marquise, the Philosopher describes floating over earth, looking

down at “all the different faces” of the world, which represent “the infinite variety that exists on the surface of the Earth” (20). He imagines that, after the English pass beneath him, “the Iroquois will appear, [and] will eat alive some prisoner of war” (21). In naming the Iroquois, a specific Native American tribe, and in labeling them as cannibals, the Philosopher is asserting the bestial and barbaric nature of the non-Europeans. Although it is one of many in the Philosopher’s description of these “different faces,” (he goes on to mention the English, the Turks, and the Persians), the Iroquois tribe is the only group that the Philosopher portrays as violent or subhuman. Thus, his reference to them in the context of an orbital fantasy suggests and reinforces the terrestrial anxiety of the other, the non-European. These allusions to animal-like, non-European beings illustrate the kinds of racialized terrestrial fears and concerns that are being played out on the surface of the moon throughout Fontenelle’s text.

As we can see, while all of Fontenelle’s speculations make it seem like the moon is his primary concern, these speculations can be read as projections of terrestrial colonial fantasies: again, the thing about the moon is about the earth. The Philosopher’s analogical reasoning in describing the colonial encounter between the Europeans and the Native Americans allows us to consider the possibility of traveling to the moon. That is, the narrative emphasizes European technological ability and supremacy, which, in turn, manifests itself in European dominion and conquest on earth. Thus, through the Philosopher, Fontenelle moves from the earth to the moon and then back to the earth. In fact, every time the Philosopher goes to talk about the moon, he ends up talking about the earth. For example, when the Marquise asks him “what sort of persons would

[the lunarians] be,” the Philosopher uses it as an opportunity to discuss “the bizarre creatures” of “the human race” (32). He repeatedly steers the conversation about the celestial toward the terrestrial, refusing to tell us anything of substance about the moon, and constantly redirecting our focus back to earth and its racial and political hierarchies.

The Philosopher once again demonstrates this redirection back to earth when he posits that only “when the world has finished growing for us, we’ll begin to know the moon” (35). When he says “finished growing,” the Philosopher means when the earth has finished being “discovered” (35) and colonized. He mentions how “in the Romans’ time the overall map of the world hardly extended beyond their empire,” but that since then there has been “a new revision of the map” that includes an entire “new half of the world” (35). Here Fontenelle reveals the tension that Melzer examines as she writes about France’s attempts to become the *colonizer*, the “New Rome” that once had colonial authority over France.<sup>101</sup> According to his Philosopher, Fontenelle conceives of his France as being able to “exten[d] beyond [its] empire” into the cosmos. As the Philosopher says “this [knowing or discovering] must be done in order” (35), meaning that humans must travel to and discover (colonize) and consolidate (in an “empire”) all earthly land before getting to and doing the same on the moon. Again, we see that not only does the text refuse to give us any clear information about the moon, but that it refocuses on European humans back on the earth, who need to get on with the task of “discovering” the rest of the globe.

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<sup>101</sup> Ibid., 3.

Again, while the Philosopher's analogy (lunarians : Europeans :: Europeans : Native Americans) would make one think that he was going to reinforce the lunarian superiority to humans, he only very briefly touches on the possibility of the lunarians coming to the earth as the Europeans had traveled to the "New World." We never see the analogy play itself out. The Philosopher uses his narrative of the Native Americans' encounter with the Europeans as a way to illustrate how "discovering" land can open up the possible existence of other lands on earth and even worlds in the universe. That is, he focuses on what he wants to get out of the story (the European technological supremacy), and leaves the rest untouched; thus, his analogy re-articulates European supremacy on earth. In this manner, the Europeans get to control both sides of the analogy: they hold a central, dominant position that manages to be superior in both directions: Europeans gain supremacy over Native Americans *and* lunarians. But wait: we do not even know if lunarians exist! While Fontenelle sets us up to think that Europeans have the power and technological ability to the moon, he never actually takes us there in his text; he never gives us any details about what the might look like, or how he knows they exist.

At this point it might be helpful to recall Melzer's emphasis on the analogical logic at work in French colonial thought. Melzer connects this logic to the *relations de voyage*, the seventeenth-century genre of French travel literature whose texts were "pivotal texts in bringing the New World *sauvage* into the French reading public's

imagination.”<sup>102</sup> As his Philosopher and Marquise wonder about the possible plurality of worlds and the possible existence of lunar inhabitants by means of their fantasies about Australians and Native Americans, Fontenelle therefore plugs into the *relations de voyage* genre. However, as we have seen, his characters remain bound to the earth. Never do they magically elevate themselves and soar into the sky to “see” what the moon is like or whether it is even inhabited. Never do they move from the earth to the moon. In the nineteenth century, however, Jules Verne picks up where Fontenelle leaves us: his characters not only dream about the moon; they actually travel there.

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<sup>102</sup> Ibid., 75.

## CHAPTER TWO

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### 19TH-CENTURY LUNAR IMAGININGS: VERNE AND FRENCH COLONIAL ACTION

France, 1865

In two of his mid-nineteenth-century novels, *De la terre à la lune* (1865; *From the Earth to the Moon*) and *Autour de la lune* (1870; *Around the Moon*), French writer Jules Verne continues and advances the historical and ongoing fascination with the moon enacted in Fontenelle's seventeenth-century *Conversations*. As we have seen, although Fontenelle spends a great deal of time preparing to talk in detail about the moon, his imagination remains stubbornly bound to the earth. Verne, by contrast, makes the possibility of travel to the moon into a tangible reality as his two lunar novels respectively illustrate the preparation for and the actual voyaging around the moon. As American author Ray Bradbury has written, "Verne is the verb that moves us to Space."<sup>103</sup>

Not only do Verne's lunar novels show both European and American men traveling into outer space, but they do so in a seemingly "more realistic" manner than in lunar imaginings of the past; as Bernd Brunner describes, these books take "contemporary scientific knowledge into account – particularly ballistics, the scientific basis for understanding projectiles in flight."<sup>104</sup> However, despite the "more realistic" aspects of both *From the Earth to the Moon* and *Around the Moon*, Verne was still very much

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<sup>103</sup> Cited in William Butcher, *Verne's Journey to the Centre of the Self* (London: Macmillan Press, 1990), xiii.

<sup>104</sup> Brunner, *Moon: A Brief History*, 118.

working within the realm of the imaginary, as “the development of a mechanically powered aircraft and the drama of a real trip to the moon were a long way off.”<sup>105</sup> It would be another hundred years before man would go to the moon.

In their form and content alike, Verne’s two lunar novels reflect the European intellectual and imperialist developments of the late nineteenth century. As French literary scholar Timothy Unwin reminds us, Verne was writing at a “moment of a major transition,” when science was starting “to be considered a legitimate new territory for the novelist.”<sup>106</sup> Verne wove scientific facts into his fictive novels, thereby “blur[ring] the traditional boundaries between ‘fiction’ and ‘reality,’” and even pushing beyond such limits.<sup>107</sup> More importantly for us, as he was writing and publishing these books, European expansionism was taking off across the globe. Living and writing at the threshold of the “‘age of imperialism,’ the period of European expansionism between about 1870 and the Great War,” Verne reinscribed and reflected a European imperialist mentality; indeed, the main action of his lunar novels revolves around a group of American men who are aiming to be the “bold conquerors” of the moon.<sup>108</sup> As we will see, this objective is reinforced and instilled by the urging of a Frenchman, who bequeaths Europe’s colonial legacy onto Verne’s Americans over the course of both novels.

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<sup>105</sup> Ibid.

<sup>106</sup> Timothy Unwin, *Jules Verne: Journeys in Writing* (Liverpool: Liverpool University Press, 2005), 13.

<sup>107</sup> Ibid., 10.

<sup>108</sup> Philip Dine, "The French Colonial Empire in Juvenile Fiction: From Jules Verne to Tintin," *Historical Reflections/Réflexions Historiques* 23, no. 2 (1997): 179; Jules Verne, *From the Earth to the Moon* (New York: Bantam Books, 1865), 18.

*From the Earth to the Moon* takes place after the end of the American Civil War, even though the actual war was not yet over by the time of the book's publication in 1865. Facing a spell of peacetime boredom, a number of American Gun Club members (all male) decide they will shoot a projectile to the moon with a cannon, hoping to "take possession of that new continent in space."<sup>109</sup> A few months into the planning, an ardent Frenchman arrives and convinces the Gun Club to send him to the moon in their projectile. In *Around the Moon*, this Frenchman, joined by two Americans, travels to and orbits the moon before splashing down to earth in the Pacific Ocean. Through the inclusion of both European and American men aboard the projectile, Verne is able to comment on and demonstrate American *and* French fantasies of power and conquest in the nineteenth century.

As American author and editor of fantasy literature David Sandner notes, there are salient parallels between "the nineteenth-century imperial project and the generic trip to the moon," which he argues was focused on "the exploration of the 'dark continent' or the dark side of the moon."<sup>110</sup> This racialized language of "dark[ness]" will be important moving forward, as we investigate how Verne's space crew speaks about the topography of the moon and the possibility of lunar life. Verne's characters are, in effect, "plan[ning] to establish 'the empire of the Moon'" while France was trying to establish empires overseas in North Africa and China.<sup>111</sup> It was only a decade after the

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<sup>109</sup> *From the Earth to the Moon*, 40.

<sup>110</sup> David Sandner, "Shooting for the Moon: Méliès, Verne, Wells, and the Imperial Satire," *Extrapolation* 39, no. 1 (1998): 6.

<sup>111</sup> Andrew Martin, *The Mask of the Prophet* (Oxford: Clarendon Press, 1990), 20.

publication of *From the Earth to the Moon* when, at the Berlin Conference of 1885, “Britain and France practically carved up Africa between them in a division of spoils.”<sup>112</sup> Verne writes specifically about the French colonization and “civilization” of Africa in his *Cinq semaines en ballon* (*Five Weeks in a Balloon*), and then goes on to extend this colonial logic extraterrestrially in his two lunar novels, positioning Europeans and their American heirs as undertaking “the conquest of the moon.”<sup>113</sup>

### Verne, Himself

Jules Verne began profusely writing poems and lyrics at the age of twelve or thirteen, and added plays to his repertoire after moving from Nantes to Paris as a young adult to study law.<sup>114</sup> There, he managed to continue his literary activities and participate in literary salons while preparing for his exams, which he passed in 1851.<sup>115</sup> However, even after all that time and work, Verne chose to dedicate himself to the theater and literary scene of Paris rather than to the profession and work of law. He kept writing plays, and in the same year as finishing school, began publishing all kinds of short historical adventure stories in the literary magazine, *Musée des familles*.<sup>116</sup>

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<sup>112</sup> Majumdar, *Postcoloniality: The French Dimension*, 6.

<sup>113</sup> Verne, *From the Earth to the Moon*, 146.

<sup>114</sup> "Biography and Bibliography," Musée Jules Verne, <http://www.en.julesverne.nantesmetropole.fr/en/sites/en.julesverne/home/learn/biography--bibliography.html>.

<sup>115</sup> Arthur B. Evans, *Jules Verne Rediscovered: Didacticism and the Scientific Novel* (New York: Greenwood Publishing Group, 1988), 17.

<sup>116</sup> "Jules Verne," <http://www.britannica.com/biography/Jules-Verne>.

Verne spent a great deal of time conducting scientific research at the Bibliothèque nationale for these stories about exploration and discovery. He wanted to ground his stories in the real, in facts. As Arthur B. Evans emphasizes, it was during the writing of these stories “that Verne first conceived of the possibility of writing a new type of novel, what he called a *Roman de la Science*, a kind of narrative that would fully incorporate the large amounts of factual material he was accumulating through his continuing library research.”<sup>117</sup> After marrying the widow Honorine de Viane in 1857, Verne started working as a broker in the Paris stock market but never stopped writing or publishing his short narratives.

In 1862, Verne’s ceaseless writing and researching proved lucrative when he met editor and publisher Pierre-Jules Hetzel. Hetzel read the manuscript of a novel Verne was developing that was based on a story he had written for *Musée des familles*, entitled *Un voyage en ballon* (1851). The story revolved around the journey of two men traveling and exploring the globe by balloon. As Hetzel was hoping to launch a magazine that combined fact with fiction, he saw Verne as an ideal contributor.<sup>118</sup> Then, after serializing Verne’s finished manuscript in his new publication, *Le Magasin d’éducation et de recreation*, Hetzel published it just one year later as the book, *Five Weeks in a Balloon* (1863).<sup>119</sup>

*Five Weeks in a Balloon* became an international bestseller, which led Hetzel to offer Verne a twenty-year contract to produce many more science-adventure works for

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<sup>117</sup> *Jules Verne Rediscovered: Didacticism and the Scientific Novel*, 18.

<sup>118</sup> *Ibid.*, 23-24.

<sup>119</sup> "Jules Verne".

him.<sup>120</sup> Verne signed the contract, and set about prolifically producing novels – usually two or three a year – in which he strove to “teach *science through fiction*,” as mandated by Hetzel.<sup>121</sup> The fifty-four books Verne wrote for Hetzel (and continued to write, even after Hetzel’s death) form Verne’s largest body of literary work, and make up his life-long project of the *Voyages extraordinaires dans les mondes connus et inconnus* (Extraordinary Journeys into the Known and Unknown Worlds).<sup>122</sup> Included in this extensive corpus are the following popular “science-adventure novels:” *Voyage au centre de la terre* (1863; *Journey to the Center of the Earth*), *De la terre à la lune* (1865; *From the Earth to the Moon*), *Autour de la lune* (1870; *Around the Moon*), *Vingt mille lieues sous les mers* (1870; *Twenty Thousand Leagues Under the Sea*), and *Le Tour du monde en quatre-vingts jours* (1873; *Around the World in Eighty Days*).<sup>123</sup>

As one can see from the numerous titles listed above, Verne did not limit himself to writing about just one time or place in his *Voyages extraordinaires*. Rather, he wrote a variety of technologically driven narratives of exploration that took him across the globe (*Around the World in Eighty Days*), into the earth (*Journey to the Center of the*

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<sup>120</sup> “Following that initial contract...Hetzel and Verne signed five other agreements,” and thus began the publisher and author’s complex, often fraught relationship. While Verne did continue to write for Hetzel until Hetzel’s death in 1886, there has been much debate as to the nature of their literary partnership. For further reading see Arthur B. Evans’ “Hetzel and Verne: Collaboration and Conflict.” [Review of Olivier Dumas, Piero Gondolo della Riva, Volker Dehs, eds. *Correspondance inédite de Jules Verne et de Pierre-Jules Hetzel* (1863-1886)] *Science Fiction Studies* 28(1) (2001): 97-106. (William Butcher, *Jules Verne: The Definitive Biography* (New York: Thunder’s Mouth Press, 2006), 194.)

<sup>121</sup> Arthur B. Evans, “Jules Verne’s Dream Machines: Technology and Transcendence,” *Extrapolation* 54, no. 2 (2013): 130.

<sup>122</sup> This full phrase appears on each of the Hetzel editions of Verne’s *Extraordinary Voyages*. (Unwin, *Jules Verne: Journeys in Writing*, 22).

<sup>123</sup> Evans, “Jules Verne”.

Earth), under the sea (*20,000 Leagues Under the Sea*), and even to the moon (*From the Earth to the Moon* and *Around the Moon*). As he wove factual scientific advancements into fictional stories of adventure and conquest, Verne imagined a number of worlds in which humans utilized modern technological vehicles such as hydrogen balloons, submarines, and projectile missiles to explore, discover, and achieve a greater understanding of the unknown. For Verne, knowledge was inextricably bound up with power and the possession of new information and territory.

### *Les Voyages Extraordinaires*

At this point it might be helpful to recall Sara Melzer's discussion of the *relations de voyage* genre. In *Colonizer or Colonized*, Melzer argues that the popular *relations de voyage* raised the French public's awareness of France's seventeenth-century exploration and colonization of the New World.<sup>124</sup> In this manner, Melzer emphasizes how a literary genre or corpus can both reflect and reinscribe a colonizing mentality and reality. We can extend Melzer's logic to Verne's *Voyages*, as the popular narratives revolve around "the exploration of the geographical 'margins' of...civilization," and, as French scholar Andrew Martin has claimed, this "exploration" paves the way for the central themes of the *Voyages*: "domination, conquest, [and] the transformation and control of nature."<sup>125</sup> In a similar vein, literary scholar John Rieder has asserted that

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<sup>124</sup> Melzer, *Colonizer or Colonized: The Hidden Stories of Early Modern French Culture*, 75.

<sup>125</sup> Unwin, *Jules Verne: Journeys in Writing*, 16; Martin, *The Mask of the Prophet*, 21.

“access to place” is another important theme of Verne’s *Voyages*.<sup>126</sup> Thus, while Verne exhibits a clear “fundamental respect for, and observance of, the laws of the natural world” in his *Voyages*, he also demonstrates a desire to push those laws to their limits — to “access [unexplored] place[s]” and subsequently to “brin[g] together...the ‘known’ and the ‘unknown’” by means of *conquest*.<sup>127</sup>

As Verne wrote of Europeans traveling to “known” and “unknown” lands and worlds in his *Voyages*, he moved into colonial territory. Through the depiction of numerous heroic protagonists who aim to “assert mastery over the natural order,” Verne highlights and reflects a European imperialistic desire to claim and tame a racialized and feminized nature in each of his *Voyages*.<sup>128</sup> Moreover, Verne does so by “emphasizing the technical magnificence of modern weaponry” and machinery, thereby linking modern technology with the conquest of “dark,” passive lands.<sup>129</sup> Therefore, while his “*Voyages* were styled *extraordinaires* on the grounds that they exceeded the bounds of the ordinary,” as they even ventured into outer space, they also enacted (disturbingly ordinary) nineteenth-century European imperialistic desires to colonize the globe.<sup>130</sup>

With the corpus of the *Voyages extraordinaires*, Verne established a “style [that] is in every sense a hybrid,” interlacing scientific fact with fiction, and creating the new

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<sup>126</sup> John Rieder, *Colonialism and the Emergence of Science Fiction* (Middletown: Wesleyan University Press, 2008), 32.

<sup>127</sup> Unwin, *Jules Verne: Journeys in Writing*, 9; *ibid.*, 21.

<sup>128</sup> *Ibid.*

<sup>129</sup> *Ibid.*

<sup>130</sup> Martin, *The Mask of the Prophet*, xi.

genre of what Evans has called “scientific fiction.”<sup>131</sup> Moreover, by setting his stories “in all regions of the globe...[he was] putting the colonial (soon postcolonial) world firmly within the purview of literature.”<sup>132</sup> Verne was simultaneously recording the history of the world around him and extending that history fantastically beyond terrestrial bounds. Unwin has gone so far as to say that, with his *Voyages*, Verne strove “to colonize the whole of reality in the written word, to cover not just the globe, but creation in its entirety, with words that rein it in and make sense of it.”<sup>133</sup> Through interweaving imagined possibilities with present-day actualities, Verne recapitulated the colonized reality of the world at a time of great European expansionism and imperialism. More importantly, Verne reinscribed that reality both within the content of each work, as different heroes undertook various colonizing quests, and within the *Voyages extraordinaires* oeuvre as a whole.

While several of Verne’s *Voyages extraordinaires* travel to unexplored places – including to the center of the earth, to the bottom of the sea, and around the moon – others describe journeys to more earthly lands such as China and, more often, Africa. For example, Verne’s *Cinq semaines en ballon* (1863; *Five Weeks in a Balloon*), *Aventures de trois Russes et de trois Anglais dans l’Afrique australe* (1872; *Adventures of Three Russians and Three Englishmen in Southern Africa*), *L’Étoile du sud* (1884; *The Star of the South*) and *L’Invasion de la mer* (1905; *Invasion of the Sea*) each focus on European conquests of “virgin

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<sup>131</sup> Unwin, *Jules Verne: Journeys in Writing*, 11; Arthur B. Evans, “Jules Verne: Exploring the Limits,” *Australian Journal of French Studies* 42, no. 3 (2005): 271.

<sup>132</sup> Unwin, *Jules Verne: Journeys in Writing*, 12.

<sup>133</sup> *Ibid.*, 26.

territor[ies]” in Africa.<sup>134</sup> As French scholar Philip Dine has written, for Verne, “Africa—i.e., the continent for which France would shortly join the European scramble—was as much *terra incognita* [unknown or unexplored territory], to be peopled with Europeans and European fantasies, as the Earth’s core or the moon.”<sup>135</sup> In this manner, Verne’s many narratives of the *Voyages extraordinaires* were prime sites for examining and enacting European fantasies of imperialist conquest. In each *Voyage*, as Verne’s characters travel to all kinds of places in various modern modes of transportation, Verne creates and inhabits a variety of colonized realities of *terra incognita*. Just as the European colonizers of Columbus’s time used the logic of *terra nullius* to justify the conquest of the New World, Verne specifically makes use of this concept of *terra incognita* or *terra nullius* in regards to the moon, a celestial body that would remain physically unexplored for another hundred years.

### *From the Earth to the Moon*

In *From the Earth to the Moon* (1865), the first of his two lunar novels, Verne establishes the moon as a territory to be claimed and colonized by the postbellum United States. Many of his *Voyages* feature a European cast of characters who set off to discover parts of the world, but *From the Earth to the Moon* and *Around the Moon* focus primarily on Americans. The setting of the United States is significant for several reasons. Throughout the novels, in description and dialogue, Verne emphasizes the

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<sup>134</sup> Butcher, *Verne's Journey to the Centre of the Self*, 1.

<sup>135</sup> Dine, "The French Colonial Empire in Juvenile Fiction: From Jules Verne to Tintin," 184.

“thoroughly American[-ness]” of the plan to launch a projectile to the moon.<sup>136</sup> In *From the Earth to the Moon*, the many publications of the American press write about the intended voyage as “they all hoped that America would some day penetrate the last secrets of the mysterious lunar world” (20). In this manner, the world constructed by Verne reinforces the idea of a lunar voyage as a “national undertaking” (18), one that entails the support and sponsorship of its nation as a whole. Verne’s phrasing reveals the masculine and sexual nature of the plan to send a projectile to “penetrate” the passive, inert, and thus feminized moon. Men on earth – American men – want to effectively dominate and claim the celestial body of the moon. Moreover, characters repeatedly emphasize that “the feat of creating such a link [between the earth and the moon had] been reserved for the practical genius of the American people” (14). In this manner, Verne establishes a world in which “the Yankees,” being “the world’s best mechanics,” are capable of achieving such an impossible goal, and suggests that these Americans have been designated (by fate? by God?) to “create such a link” by traveling to and claiming the moon.<sup>137</sup>

Verne’s emphasis on American supremacy throughout the lunar novels traces back to the American “ideal” of Manifest Destiny, which has been used to legitimate imperialistic conquests since the early nineteenth century.<sup>138</sup> As Robert Miller explains, the original notion of Manifest Destiny “assumed that the United States had some unique

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<sup>136</sup> Verne, *From the Earth to the Moon*, 75. Subsequent references to this text will be cited internally.

<sup>137</sup> Gregory Benford, "Introduction," in *From the Earth to the Moon* (New York: Bantam Books, 1993), viii.

<sup>138</sup> Robert Bellah, "Civil Religion in America," in *The Robert Bellah Reader* (Durham: Duke University Press, 2006), 241.

moral virtues that other countries did not possess” and “had a messianic dimension because it assumed a faith in America’s divinely ordained destiny.”<sup>139</sup> The United States’ obsession with Manifest Destiny and its own “unique”-ness lends itself to Verne’s narrative, in which men believe they can claim anything, even the moon, as theirs. Moreover, by referencing Christopher Columbus and his “discovery” of the New World throughout the book, Verne suggests that there are tinges of European imperialism behind this American destiny to travel to and claim the moon.

As did Fontenelle’s *Conversations*, Verne’s *From the Earth to the Moon* explicitly mentions Columbus and his “discovery” of the New World multiple times, even comparing the American Gun Club members to Columbus himself. The moon is described as a “new world” to be explored throughout the book (152), and the project is referred to as a “conquest” numerous times (20, 146).<sup>140</sup> As the Gun Club’s president, Impey Barbicane, presents his idea of using a rocket to launch a projectile to the moon, he rousingly declares that the Gun Club must do so because it is “reserved for [them] to be the Columbuses of that unknown world” (12). In this manner, Barbicane employs the idea of Manifest Destiny to make his members feel unique and destined to accomplish the task, and to present this journey as one that is as meaningful as Columbus’s encounter with the New World. Here we can recall the analogical logic in both Melzer and Fontenelle and see it at work *again* in our investigation of lunar

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<sup>139</sup> Miller, *Native America, Discovered and Conquered*, 3.

<sup>140</sup> Verne uses a capitalized “New World” when describing America, and a lowercase “new world” when talking about the moon. This connection between the United States and the moon works to highlight Verne’s analogy of Columbus : New World :: New World : moon.

imaginings. For Melzer, the Romans were to France as France was to the New World. For Fontenelle, the Europeans were to the New World as the lunarians could be to the Earth. While Fontenelle's analogy wiggles around in Melzer's logic, Verne's analogy returns to the strictly European colonial logic explained by Melzer. For Verne, Europe (Columbus) was to the New World as the New World would be to the moon.

In setting up this analogy (Columbus : New World :: New World : moon) so early on in the novel, Verne simultaneously enacts a European (specifically French) fantasy of American colonial desire, and presents the United States as a nation that considers any territory to be theirs for the taking. He writes that the Gun Club members "treated [the moon] casually as if they owned it" (18). That Verne's Americans have such a "casual" relationship to territory, and even the far-off celestial body of the moon, reveals an American assurance of power and supremacy over land. More importantly, analyzed alongside Verne's Columbus analogy, one can interpret this casualness as both a commentary on and an enactment of American goals of colonization and domination.<sup>141</sup> In sending an American-sponsored projectile to the moon, Verne's characters see themselves as venturing into the unknown of outer space and claiming the untouched moon as theirs, as American. Verne recognizes the potential global effects of America's self-assurance in making the journey to the moon when he writes, "some of [the American publications] even seemed to fear that [the moon's] conquest might upset the balance of power in Europe" (20). Here Verne acknowledges the terrestrial

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<sup>141</sup> It is a "commentary on," as Verne was a Frenchman writing of Americans, as well as an "enactment of," as Verne inhabits the mentality of Americans in *From the Earth to the Moon* and *Around the Moon*.

consequences of this other-worldly endeavor: the United States' desire and plan to claim the moon might elevate America's status as a world power, thus altering the "balance of power" across the globe.

The language that Verne uses when describing the American effort to send a projectile to the moon reinscribes the fundamental colonizing intention of the journey. Recall Columbus's first act upon reaching the New World: planting a cross of Christ in the soil of Guanahani.<sup>142</sup> Verne evokes Columbus's deed when he asserts the Gun Club's "only ambition was...to take possession of that new continent in space, and plant the star-spangled banner of the United States on its highest peak" (40).<sup>143</sup> By referring to the moon as a "new continent" to be possessed, Verne reinforces that the Gun Club's project is grounded in earthly colonial rhetoric and logic. Moreover, these planting gestures refer to what Mircea Eliade would call the installation of "an *axis mundi*...as the meeting point of heaven, earth, and hell," an act that has been repeatedly used to legitimize "possession [being] taken of a territory."<sup>144</sup> This act also relies upon language of gods and "heaven," which we see at the end of Verne's novel as the men are on their way to the moon: the space-travelers "placed themselves outside of mankind by going beyond the limits which God had imposed on earthly creatures" (184). Verne positions the crew as both transgressing the limits established by God, *and* becoming God, as they

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<sup>142</sup> Wesseling, *The European Colonial Empires, 1815-1919*, 62.

<sup>143</sup> While we can only wonder *how* Verne's Americans planned to plant a flag on the moon without any men onboard to complete the task, the articulation of this goal reinforces the colonizing nature of the plan to send an American-sponsored projectile to the moon. It also foreshadows the decision made later to send men to the moon.

<sup>144</sup> Mircea Eliade, *The Myth of the Eternal Return*, trans. Willard R. Trask (Princeton: Princeton University Press, 1971), 12; *ibid.*, 9-10.

physically and spiritually travel “beyond” the rest of humanity. Thus, planting the American flag on the moon would not be a strictly secular project, as it would create a “meeting point” between the divine (the realm beyond), the lunar, and the terrestrial (the realm below). That is, the earthly symbol of the American flag would become sacred, connecting divine authority back to men on earth.

The possibility of Verne’s men claiming and colonizing the moon becomes more tangible with the arrival of the Michael Ardan, a Frenchman who comes to the United States determined to travel to the moon in the Gun Club’s projectile. Ardan argues that, as they have the technology and are already planning on sending the projectile, why not attempt the voyage with men onboard? He tries to persuade the wary Gun Club by declaring that “it simply follows the law of progress” (120) for men to travel to the moon. He passionately asserts, “We’re about to go to the moon, and someday we’ll go to the planets or the stars as easily and quickly as we now go from New York to Liverpool! The oceans of space will soon be crossed as the oceans of the earth are crossed today!” (121). Ardan’s confidence and assurance in the possibility of men traveling into outer space contrasts with the Gun Club’s uncertainty. Furthermore, as Ardan is French, one could interpret his relationship to physical space as a reflection of a European imperialist mentality: he is sure that they *will* go to the moon, they *will* cross the oceans of space as they have crossed the oceans of earth (to travel to and colonize previously unexplored territory). As Ardan exclaims, “distance does not exist!” (122) he suggests that (outer) space can be conquered as easily as any earthly region that has been colonized by his fellow Europeans. Moreover, in persuading them to send men to the

moon, Ardan genealogically bequeaths European colonial longing and the Doctrine of Discovery to Verne's Americans, who need encouragement in order to "cross the oceans of space."<sup>145</sup>

Ardan's fervent urging leads the Gun Club to consider and eventually accept his proposal. While Ardan is not all that knowledgeable about technology, he encourages the Gun Club to investigate all possibilities so that he can safely travel to the moon, declaring, "within twenty years, half the people on earth will have visited the moon" (123). Initially shocked, the Gun Club members soon grow excited about Ardan's idea, and pick Barbicane, Ardan, and Captain McNicholl, Barbicane's former rival, to make the journey. Thus, the project to travel to the moon becomes Euro-American; as Verne writes, "France and America were going to be united in the conquest of the moon" (146). At this point in the book, with the three men set to travel to the moon, the plan to "plant the star-spangled banner... on its highest peak" becomes more of a possibility than it was before. In this way, as the novel progresses, Verne increasingly suggests that lunar conquest is an attainable reality.

After much planning and nation-wide nervous excitement, the three men are launched in the projectile from an aptly named rocket, the *Columbiad*, in Florida. There Verne ends the novel, leaving it unclear as to whether or not the men will make it to the moon. Thus, *From the Earth to the Moon* is actually not about a journey to the moon. (One might even say a more accurate title would be *From the Earth to the Earth*.) For

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<sup>145</sup> Miller, *Native America, Discovered and Conquered*, 1-2.

even after the launch, we find ourselves back *on earth* with the rest of the Gun Club, wondering what will happen to the men in space.

### *Around the Moon*

*Around the Moon* (1870) picks up where *From the Earth to the Moon* left off, taking us inside the projectile to follow the journey of Ardan, Barbicane, and McNicholl as they pray (“And now, great God, our creator, protect us!”), converse, and consider what they might find on the moon.<sup>146</sup> It is important to note that, while Verne first mentions God as the men leave earth, the first time the men themselves address God is when they are soaring through the dark cosmos away from Earth. While imagining what they might encounter, they regularly return to the topic of “Selenites” (another way of saying lunar inhabitants) and their potential existence. Barbicane postulates that the hypothetical Selenites must have greater intelligence than humans, claiming, “if the moon is inhabited at all, her inhabitants must have appeared several thousand years before the advent of Man on our Earth,” and therefore that “Selenites, if their brain is organized like our own, must have by this time invented all that we are possessed of” (57). He maintains “the probability...that, instead of their learning from us, we shall have much to learn from them” (57). This notion of lunar inhabitants being similar to but more intelligent than humans connects back to Fontenelle’s *Conversations*, in which the Philosopher and Marquise discuss the same possibility. Indeed, one could see the men’s conversation about the Selenites’ possible existence as similar to the dance of

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<sup>146</sup> Verne, *Around the Moon*, 18. Subsequent references to this text will be cited internally.

sameness/difference that we saw with Fontenelle's Philosopher, who asserted the lunarians were both similar to and nothing like humans.<sup>147</sup> There seems to be a need, across centuries, to simultaneously identify with and distinguish from potential lunar inhabitants, the "others" in both of these imaginings. As we will see, this anxiety over *lunar* others reduplicates and thus reinscribes *earthly* racialized others.

Verne's three-man crew does not linger on any particular conjecture, instead talking over each other to imagine the feasibility of each possibility. Only Ardan remains insistent upon the existence of Selenites until Barbicane asks, "Ardan, why do you insist on Lunarians? Are we so shiftless that we can't do without them when we get to the Moon?" (82). To which Ardan responds explosively: "I don't insist on them!...Hang the Lunarians!...We shall take possession of the moon ourselves!...Lunarians or no Lunarians!" (82). For Ardan, then, it seems that "possession of the moon" is a stand-alone objective, whether or not anyone already lives on the moon. While Ardan maintains this initial indifference to lunarians' existence, he later imagines humans becoming lunarians, as Europeans became "Americans," and suddenly the metaphors of race slip into his speech. Comparing the "visible" or "light" and invisible or "dark" side (196) of the moon, he insists, "if we ever become Selenites we must inhabit the visible side" (143). In favoring the "light" side to the "dark" side, Ardan plugs into a category that Frantz Fanon would call the "white and civilized," which sees itself as absolutely

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<sup>147</sup> See Chapter One, 34-39.

diametric to the “black and savage.”<sup>148</sup> For, as Fanon writes, “In Europe, whether concretely or symbolically, the black man stands for the bad side of the character.”<sup>149</sup> Therefore, even the language that Ardan, a European, uses to talk about the two sides of the moon is racialized, racist, and redolent of a European colonizer perspective. Just as Europeans had become light-skinned Americans after colonizing the New World, these Euro-Americans aboard the projectile hope to inhabit the light side of the moon.

Ultimately, after getting close enough to the moon to see what it actually looks like, the men decide that it is neither inhabited nor habitable for any kind of life, which leads them to wonder if there ever had been life on the moon. As they near the surface, and glimpse its dusty, unwelcoming terrain, they start referring to it as the “image” of death or the “abode of death” (176, 192), implying that while life might have existed there previously, it cannot do so now. Nonetheless, they are still determined to reach the lunar surface. They react to the extreme “savage[ry]” (231) of the lunar surface (when compared to that of the earth’s) by grasping for a similarity between the two celestial bodies: they try to connect *their* history to lunar history. The men discuss the likelihood that, while perhaps there was *once* life on the moon, the moon had grown “old more rapidly than the Earth” (189), suggesting that “what took place on the Moon is only what is to take place some day or other on the Earth” (192). This active avoidance of difference recalls the *Conversations* and the Philosopher’s oscillation between sameness and difference when considering the potential similarity between

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<sup>148</sup> Frantz Fanon, *Black Skin, White Masks*, trans. Charles Lam Markmann (New York: Grove Press, 1967), 149.

<sup>149</sup> *Ibid.*, 189.

humans and lunar inhabitants. The crew's need to simultaneously distinguish themselves from the "savage" and thus "barbaric" lunar landscape below while maintaining some kind of earthly connection to the moon reveals what one might call a geocentric anthropocentrism, which is an extension of Eurocentric anthropocentrism.<sup>150</sup> Both are mindsets that allow the men to consider the earth and themselves as the "civilized" center(s) of the universe, and thus of supreme importance and authority.<sup>151</sup>

Throughout the novel, Verne links this geocentric anthropocentrism with the crew's desire to colonize the moon and claim it as theirs. Ardan, Barbicane, and McNicholl see themselves as "Representatives of the Earth, and of all humanity past and present" (103) as they undertake this journey to the moon. Their self-perception of acting on behalf of "all of humanity" reinforces a Euro-American-centric mentality, as it insinuates that they think Europeans and Americans make up "all of humanity." Moreover, Verne writes that the crew "felt that it was with their eyes that the race of man contemplated the lunar regions and penetrated the secrets of our satellite!" (103). By "race of man," does Verne mean "all of humanity?" It seems unlikely. For, in consolidating all of humankind into a singular race, Verne erases the recognition of the many kinds of humans on earth *and* the racialized language used in his own imagining. This erasure also suggests that, by "race of man" Verne means Euro-American men, much like the ones onboard his phallic projectile, which is to "penetrate" the empty, feminized moon. Furthermore, it is important to note that in both of Verne's lunar

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<sup>150</sup> Majumdar, *Postcoloniality: The French Dimension*, 23.

<sup>151</sup> Fanon, *Black Skin, White Masks*, 189.

novels, the only characters that speak are male. As feminist writer Anne McClintock has argued, “the myth of the virgin land [to be penetrated] is also the myth of the empty land, involving both a gender and a racial dispossession.”<sup>152</sup> Thus, Verne presents the Euro-American crew as claiming to possess the masculine, white authority to act on behalf of the purportedly universal “race of man,” and to treat the feminine, savage, empty body of the moon as they please.

The crew’s assertion and self-conception of Euro-American authority is further intensified when we recall why the men want to travel to the moon in the first place. As Ardan reminds the two other men time and time again, they cannot “disappoint...the great American nation” (57) in their quest to claim the moon *for* the United States. As the European Ardan avidly explains and urges in the following speech by using a great deal of colonial rhetoric, the three men

have undertaken a journey to *annex* another World to the New One!...to *take possession* of the Moon in the name of the United States of America!...to add a thirty-ninth state to the glorious Union!...to *colonize* the lunar regions, to *cultivate* them, to people them, to transport to them some of our wonders of art, science, and industry!...to *civilize* the Selenites, unless they are more civilized already than we are ourselves! (81-82, emphasis added)

Ardan’s lengthy oration lays out for us the colonial logic at work in Verne’s two lunar novels while recalling Newcomb’s etymological tracing of colonization.<sup>153</sup> It also recalls the possibility put forth in the *Conversations* that we have seen multiple times in Verne’s text, which is that lunar inhabitants (if they even exist) may be “more civilized” and

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<sup>152</sup> Anne McClintock, *Imperial Leather: Race, Gender and Sexuality in the Colonial Contest* (New York: Routledge, 1995), 30.

<sup>153</sup> See Introduction, 3.

intelligent than humans. While Verne's men only orbit and never land on the moon, Ardan's impassioned speech here clearly demonstrates the Euro-American fantasy of claiming land, then "colonizing [its] regions," and eventually "transporting to [its people] some of *our* wonders of art, science, and industry" (emphasis added). Their plan to "cultivate" and civilize the hypothetical inhabitants of the moon is a clear enactment and reflection of Europe's colonial power and project, which was engulfing the globe at the same time that Verne was writing. One could even consider the crew's sense of manifest destiny as an American hiccup of Europe's Doctrine of Discovery.

Though the men never reach the moon's surface, they are extolled for making such a daring trip once they return safely to earth. The final chapters of *Around the Moon* focus on and reflect a widespread sense of triumph felt around the world in response to the successful return of the "Moon-Men" (218). Especially at the beginning of the last chapter, the narrator highlights this uncontested quasi-godly praise of the three

Sons of Earth, who had fearlessly quitted this terrestrial globe and who had succeeded in returning after accomplishing a journey inconceivably wonderful, well deserved to be received with every extremity of pride, pomp and glorious circumstance that the world is capable of displaying! (248)

Almost the whole world ("innumerable Europeans, Africans, and Asiatics") comes to the United States "simply to have a look at McNicholl, Ardan, and Barbicane" (248), who were "well deserved to be received with every extremity of pride, pomp and glorious circumstance" for making the trip to the moon and back — even though they never actually landed *on* the moon. By claiming the presence of the whole globe, Verne proclaims total unity by erasing racial difference, thereby simultaneously deploying and

blotting out colonial logic. Everyone desperately wants “to catch a glimpse of these demi-gods, to hear the sound of their voices, perhaps even to touch their hands” (248). In referring to them as “demi-gods,” Verne projects a great deal of sovereignty onto the men who dared to transgress the limits God had set for them. Here he also connects back to Fontenelle, whose *Philosopher* imagined Native Americans thinking of the European colonizers as gods.<sup>154</sup> This elevation of mankind to a divine status suggests that, in venturing out into the unknown, these moon-travelers entered and absorbed something godly, validating and enhancing the Euro-American sense of supremacy we witnessed as they confidently planned to “colonize the lunar regions.”

Verne emphasizes the extreme American pride in the men’s U.S.-sponsored trip by highlighting how Americans, not just “foreigners” (248), wanted to see the “moon-men” for themselves. He writes, “the desire of the American people...[was to behold] the three heroes who had reflected such indelible glory on the American name” (248). Moreover, he calls this desire a “natural yearning of humanity” (248). In this manner, Verne reaffirms that this journey around the moon was heroic, that it was made in the “American name,” and that the “yearning” to look at and be near these “heroes,” these “demi-gods,” was both widespread and “natural.” Then he adds, as if to explain the intensity of this “natural yearning” to see the men: “to desire a thing, and to have it, are synonymous terms with the great people of the American Republic” (248). Here Verne is presenting the Americans as thinking of themselves as powerful enough to want something (such as the moon) into their possession. It is clear from his tone that Verne

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<sup>154</sup> See Chapter One, 46.

is commenting on the American assumption of ownership. However, it was the Frenchman Ardan who used colonial logic and rhetoric to persuade the Americans of their destiny with respect to the moon. In focusing so much on the American people, Verne bequeaths a European imperialist mentality and then erases this very transferring of French colonial longing, leaving us to think about the power-hungry Americans.

## CHAPTER THREE

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### 20TH-CENTURY LUNAR CONQUEST: APOLLO AND AMERICAN COLONIAL ACTION

#### From *Columbiad* to *Columbia*

Although his characters never actually land on the moon in his lunar novels, Jules Verne nonetheless developed and advanced the ongoing colonial fascination with the moon by tracing the transference of colonial desire from Europe to the United States. Furthermore, the redirection back to earth at the end of both *From the Earth to the Moon* and *Around the Moon* echoes and thus reinforces the overarching argument of this thesis as a whole; that is, the historical obsession over traveling to and claiming the moon is in fact a reflection and projection of terrestrial anxieties. As Timothy Unwin has written, “the outward journey – as so often in Verne’s stories – is nothing other than the journey home:” the thing about the moon is actually about the earth.<sup>155</sup>

It may therefore seem counterintuitive, to move again from the earth to the moon, but we will do so here in order to highlight a more recent terrestrial drama that has played out over and on the celestial body of the moon: the Space Race between the United States and the Soviet Union. Bernd Brunner has drawn a parallel between Verne’s imaginary voyage to the moon and the twentieth-century Apollo missions by noting that just as the cannon used to launch Verne’s spacecraft was called the *Columbiad*, the command module of *Apollo 11* was called the *Columbia*.<sup>156</sup> Moreover, as

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<sup>155</sup> Unwin, *Jules Verne: Journeys in Writing*, 41.

<sup>156</sup> Brunner, *Moon: A Brief History*, 120.

Brunner illustrates, both names connect Verne and the Apollo Program back to Christopher Columbus and his “discovery” of the “New World,” thereby embodying the colonial connection in which we have been immersed throughout this thesis. While there are several salient similarities between Verne’s imaginings and the Apollo missions (Apollo 8 in particular, with its three astronauts, its mission of orbiting the moon, and its using Florida as a launch site), we are going to concern ourselves with the distinctive colonial work that the Apollo 8 and Apollo 11 missions undertook, as they carried out Verne’s genealogical bequest.<sup>157</sup>

### United States, 1968

On December 24<sup>th</sup> of 1968, the three astronauts of NASA’s Apollo 8 mission read aloud the opening verses of Genesis 1 as they traveled in orbit around the moon (see Appendix). Their recitation of this biblical text was transmitted back to the Earth through worldwide telecasts, allowing the entire globe to glimpse and hear what was proving to be a successful lunar voyage. Moreover, coming at the end of what was otherwise a violent and tumultuous year, these words acted as a shining beam of hope, a much-needed light at the end of the tunnel. 1968 had been the year of the assassinations of both Martin Luther King, Jr. and Robert F. Kennedy, the Chicago riots, and the Tet Offensive of the Vietnam War. As it prepared for the voyage in the months leading up

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<sup>157</sup> An extensive New York Times article made the connection between Verne’s novels and Apollo 8. See: Walter Sullivan, "Triumph! A Voyage for the Ages," *The New York Times* December 29, 1968.

to the Apollo 8 mission, NASA knew full well that, if all went as planned, Apollo 8 could provide a positive, triumphant end to what had been a terrible year worldwide.<sup>158</sup>

Challenging and turbulent in itself, 1968 also marked the very middle of the space race, a competition between the United States and the Soviet Union that used outer space as a battleground for the Cold War. This race for extra-terrestrial territory began in 1957 with the Soviet Union's launch of Sputnik 1, and ended in 1975 with the joint Apollo-Soyuz mission, in which the American and Soviet astronauts "shook hands in space."<sup>159</sup> During the Cold War, the race to the moon in particular "became a defining part of the struggle for global supremacy" between the two world powers, according to science history writer Deborah Cadbury.<sup>160</sup> Just as we have witnessed in previous chapters, this mid-century lunar fantasy enacted and extended thoroughly *earthly* territorial contests; specifically, the race to the moon "became an open contest between capitalism and Communism."<sup>161</sup> Both countries were determined to reach this cosmic *terra nullius* first, as conquering it first, as it "promised to the pioneers a total control over the world and all its activities."<sup>162</sup> Just as the Americans had been the frontier for European conquerors in the seventeenth century and the West had been the frontier for Euro-Americans in the nineteenth, outer space therefore became "the last frontier" for the United States and the Soviet Union during the Cold War, as both world powers strove to attain "total control over the world" by claiming authority in

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<sup>158</sup> Robert Zimmerman, *Genesis: The Story of Apollo 8* (New York: Random House, 2000), xiii.

<sup>159</sup> "The Space Race," (2010), <http://www.history.com/topics/space-race>.

<sup>160</sup> Deborah Cadbury, *Space Race* (New York: Harper Perennial, 2005), ix.

<sup>161</sup> *Ibid.*

<sup>162</sup> Edmund H. Harvey, Jr. and Erland A. Kennan, *Mission to the Moon* (New York: William Morrow, 1969), 61.

space. Earth's closest celestial body, the moon, became the physical representation of this "last frontier," the clear end-goal for the competing colonial enterprises of the United States and the Soviet Union.

It was President John F. Kennedy who first explicitly articulated the United States' Cold War goal of reaching the moon before the Soviet Union. On May 25<sup>th</sup> of 1961, in Section IX of a "Special Message to the Congress on Urgent National Needs," Kennedy stated,

If we are to win the battle that is now going on around the world between freedom and tyranny, the dramatic achievements in space which occurred in recent weeks should have made clear to us all, as did the Sputnik in 1957, the impact of this adventure on the minds of men everywhere.<sup>163</sup>

The "dramatic achievements in space" refer to American astronaut Alan Shepard's suborbital travel into space earlier that month. In this speech, Kennedy specifically aligns the United States with "freedom" and the Soviet Union with "tyranny," thereby illustrating Cadbury's notion that this space race was an "open contest between capitalism and Communism." He then goes on to call upon "the nation" to "commit itself to achieving this goal, before this decade is out, of landing a man on the Moon and returning him safely to Earth."<sup>164</sup> There is a strong sense of urgency in his language, and, by calling "the nation" to action, Kennedy makes the space race a public, "nation[al]" project, almost identical to the one set forth by Impey Barbicane in Verne's *From the*

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<sup>163</sup> John F. Kennedy, "Excerpt from the 'Special Message to the Congress on Urgent National Needs'," (May 21, 1961),

[www.nasa.gov/vision/space/features/jfk\\_speech\\_text.html#.VVJARmA-\\_BE](http://www.nasa.gov/vision/space/features/jfk_speech_text.html#.VVJARmA-_BE).

<sup>164</sup> Ibid.

*Earth to the Moon*.<sup>165</sup> Kennedy emphasizes the American nationalist project of this “new course of action” when he says that “it w[ould] not just be one man going to the Moon...it w[ould] be an entire nation.”<sup>166</sup> Through this speech, Kennedy presents the United States as intent on “win[ning] the battle” of getting to space before the Soviet Union, and thereby reinscribes the imperial nature of the “race for the moon.” Not only would the United States “win” (claim, colonize) the moon, but it would “win” (beat, triumph over) the Soviet Union in doing so.

In his writing, Kennedy slips into an imperialistic mindset and vocabulary when talking about the United States’ need to get to the moon before the Soviets. A year before his Special Message to Congress, in his 1960 *Missiles and Rockets* proposal, the then-Senator Kennedy had asserted the following:

If the Soviets control space they can control earth, as in past centuries the nation that controlled the seas dominated the continents. This does not mean that the United States desires more rights in space than any other nation. But we cannot run second in this vital race. To insure peace and freedom, we must be first.<sup>167</sup>

Kennedy’s declaration that if one “can control space...[one] can control earth” is an explicit statement of the rationale behind the space race as it functioned in the competition between the United States and the Soviet Union for world supremacy during the Cold War. Although he tries to mitigate his imperialism by disclaiming that “this does not mean that the United States desires more rights in space than any other

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<sup>165</sup> See Chapter Two, 62. “It is perhaps reserved for us to be the Columbuses of that unknown world!” (Verne, *From the Earth to the Moon*, 12.)

<sup>166</sup> Kennedy, “Excerpt from the ‘Special Message to the Congress on Urgent National Needs’”.

<sup>167</sup> “Missiles and Rockets,” Speech (October 10, 1960),

[http://www.jfklink.com/speeches/joint/app17\\_missilesandrocks.html](http://www.jfklink.com/speeches/joint/app17_missilesandrocks.html).

nation,” ultimately Kennedy still insists upon the need for the United States to get to the moon *first*, “dominating” outer space “to insure peace and freedom.”

In this proposal, Kennedy clearly demonstrates that traveling into space before the Soviet Union would allow the United States to claim power back on earth; that is, establishing *extraterrestrial* authority would lead to greater *terrestrial* authority. He harkens back to the Age of Discovery as he talks of “past centuries” when “the nation that controlled the seas dominated the continents.” Evoking the colonial era, Kennedy also draws a parallel between controlling the oceans of Earth and controlling the oceans of space, the same parallel that Frenchman Michael Ardan made in Verne’s *From the Earth to the Moon* when he declared “The oceans of space will soon be crossed as the oceans of the earth are crossed today!”<sup>168</sup> Thus, not only does Kennedy conjure up the era of intense colonization when the Europeans conquered and claimed the New World, but he also identifies the United States as the inheritors of that colonial power, which needs to “be first” in claiming authority over the “oceans of space.”

NASA’s Gemini, Mercury, and Apollo Programs were an essential part of President Kennedy’s “new course of action,” and helped make “space the new battle ground of the Cold War.”<sup>169</sup> As the Cold War escalated throughout the 1960s, so did the race to space.<sup>170</sup> Since the beginning of the space race in 1957, the Soviet Union had one-upped the United States in firsts in cosmic achievement: “the first satellite, first robotic spacecraft to the Moon, first man in space, first woman in space, and first

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<sup>168</sup> See Chapter Two, 65. (Verne, *From the Earth to the Moon*, 121.)

<sup>169</sup> Andrew Chaikin, *A Man on the Moon* (New York: Penguin, 1994), 1.

<sup>170</sup> Cadbury, *Space Race*, xi.

spacewalk” were all achieved by the Soviet Union before the United States.<sup>171</sup>

Kennedy’s emphasis on the need to “be first,” then, reveals his concern about the fact that the United States had already failed to be first in all of the aforementioned ways. In order to maintain global prestige and dominance, the United States needed to “matc[h] and ultimately surpas[s] the Soviet Union’s space successes.”<sup>172</sup> Americans had to get their act together and follow through with Kennedy’s plan to get to the moon, or else their nation would be beaten, yet again, by the Soviets. Meanwhile, back on earth, “tyranny” would “win” over “freedom,” and the United States would lose its global supremacy to the Soviet Union.

Then, in April of 1967, the Soviet cosmonaut Vladimir Komarov was dramatically killed during the USSR’s Soyuz 1 mission due to a parachute complication. Komarov’s death set the Soviet Union back in the race to the moon, which motivated the United States to act fast and, for the first time, actually “be first.” This greater sense of urgency was heightened in 1968 when “reports from the Central Intelligence Agency said the Soviet Union was about to resume flying its new Soyuz spacecraft...around the moon.”<sup>173</sup> NASA had been working on getting American astronauts up to the moon in the near future, but there had been “one technical problem after another” and it seemed like “Apollo 8, the LM’s [lunar module’s] first manned flight, would almost certainly be delayed beyond the end of year, throwing the whole sequence of Apollo missions into

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<sup>171</sup> "Humans in Space," Smithsonian National Air and Space Museum, <https://airandspace.si.edu/exhibitions/apollo-to-the-moon/online/early-steps/humans-in-space.cfm>.

<sup>172</sup> Yuri Karash, *The Superpower Odyssey: A Russian Perspective on Space Cooperation* (New York: AIAA, 1999), 29.

<sup>173</sup> Chaikin, *A Man on the Moon*, 57.

jeopardy.”<sup>174</sup> Had this happened, the United States would have run the risk of being “second in this vital race,” and of losing the colonial battle over the moon.

Upon hearing this CIA report about the potential Soyuz mission to the moon, however, NASA realized it could send Apollo 8 into space that December, much earlier than initially scheduled. Moreover, while NASA had originally planned for the astronauts to stay in the Earth’s orbit, as in all of its previous missions, the CIA report drove NASA to decide on sending the American astronauts into lunar orbit.<sup>175</sup> As Verne had predicted in his lunar novels about the post-bellum United States, Americans would be the ones to get to the moon — and before the Soviets! While Apollo 7, NASA’s first manned-mission into outer space, had not even launched yet, NASA had decided that, if the mission went according to plan, there was no reason not to send Apollo 8 to the moon at the end of 1968.<sup>176</sup>

## The Men of Apollo 8

The three astronauts selected to fly Apollo 8 to and around the moon were William (Bill) Anders, Frank Borman, and James (Jim) Lovell: Anders as Lunar Module Pilot, Borman as Commander, and Lovell as Command Module Pilot.<sup>177</sup> If the voyage were a success, these three men “would become the first human beings to not only

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<sup>174</sup> Ibid., 56-57.

<sup>175</sup> Nell Greenfieldboyce, "40 Years Later, Apollo 8 Moon Mission Still Awes," (2008), <http://www.npr.org/templates/story/story.php?storyId=98469063>.

<sup>176</sup> Ibid.

<sup>177</sup> "The Apollo 8 Christmas Eve Broadcast," [http://nssdc.gsfc.nasa.gov/planetary/lunar/apollo8\\_xmas.html](http://nssdc.gsfc.nasa.gov/planetary/lunar/apollo8_xmas.html).

escape the gravitation pull of the earth, but to join the environment of another world” as they entered into lunar orbit.<sup>178</sup> As the flight plan called for two television transmissions from lunar orbit, the astronauts were told to choose something to say from the moon to everyone watching back on Earth. The only instruction they received from NASA was to “say something appropriate.”<sup>179</sup>

Ultimately, it was Commander Frank Borman who decided what the men would say. NASA had put some pressure on Borman by telling him that “more people w[ould] be listening to his voice than that of any other man in history.”<sup>180</sup> Weeks before the three-man crew lifted off, reporters asked them if they were going to “mak[e] a Christmas-type gesture from space.”<sup>181</sup> As all three astronauts were religious and attended church regularly, and since the event was taking place on Christmas Eve, Anders proposed that they “make a Christian statement” during the TV transmission.<sup>182</sup> Borman, however, recognized that “more than a billion people would be watching the telecast, many of them [who were] not Christians,” and he wanted to make “a statement...[that would] include them all.”<sup>183</sup> He understood the power the astronauts’ words would have as they were transmitted back from the moon to the earth.

At a loss, Borman turned to friend and science policy advisor Simon Bourgin who turned to *his* friend, writer Joe Laitin, for advice on the matter. It was Laitin who

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<sup>178</sup> Zimmerman, *Genesis: The Story of Apollo 8*, 129.

<sup>179</sup> Chaikin, *A Man on the Moon*, 120.

<sup>180</sup> Zimmerman, *Genesis: The Story of Apollo 8*, 196.

<sup>181</sup> *Ibid.*

<sup>182</sup> Zimmerman, *Genesis: The Story of Apollo 8*, 198.

<sup>183</sup> *Ibid.*

suggested (at his wife's recommendation) that the astronauts read the opening of Genesis during the telecasting. The Apollo 8 astronauts thought it "was the perfect choice" because, in their eyes, it was "the foundation of most of the world's religions" and was "non-denominational."<sup>184</sup> At the time of Apollo 8, however, Anders, Borman, and Lovell were all "deeply religious," specifically *Christian*, men: Borman and Lovell were Protestants, and Anders was Catholic.<sup>185</sup> They prayed a significant amount before and during their journey to the moon (as Verne's characters had prayed in *Around the Moon*), and their families back home organized multiple community prayer times as well.<sup>186</sup> Therefore, despite their conception of Genesis as "non-denominational," given the astronauts' personal connections to Christianity, the decision to read Genesis cannot be completely devoid of its original Jewish and Christian context and meaning — nor, it should be said, does this text serve as "foundational" for any "world religions" other than these two.

And so on Christmas Eve, after having been in space for three days, Anders, Lovell, and Borman took turns reciting the first ten verses of Genesis 1, "the perfect choice" for the millions of people listening in their homes back on Earth.

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<sup>184</sup> Zimmerman, *Genesis: The Story of Apollo 8*, 202.

<sup>185</sup> Robin McKie, "The Mission That Changed Everything," *The Guardian* (2008), [www.theguardian.com/science/2008/nov/30/apollo-8-mission](http://www.theguardian.com/science/2008/nov/30/apollo-8-mission).

<sup>186</sup> Zimmerman, *Genesis: The Story of Apollo 8*, 7; *ibid.*, 94.

## Genesis in Space

As science and space writer Robert Zimmerman illuminates, the Apollo 8 Genesis reading can be interpreted as an assertion of American freedom and dominion over the Soviets in the context of the Cold War. Zimmerman frames the Apollo 8 mission as having

delineated the differences between the Soviet vision of society and the freely religious American system...[insofar as] the decision to read from the Bible was...not a governmental choice, but one that the astronauts...made entirely on their own, under the leadership of Commander Frank Borman.<sup>187</sup>

While those in the Soviet Union had to live according to “governmental choice[s],” the American men aboard Apollo 8 could choose the text they would read for themselves: their “freedom to speak contrasted starkly with the Soviet Union and its state-run press and secret police.”<sup>188</sup> Thus, according to Zimmerman, the decision to read aloud from the Bible was not only indicative of a “freely religious American system” and Americans’ “freedom to speak,” but it also heightened the contrast between this “American system” and the “state-run press and secret police” of the Soviet Union. In this way, we can again interpret the Apollo 8 act of reciting Genesis as an articulation of Cold War competition playing out in the vast cosmos.

In *The Myth of the Eternal Return*, historian of religion Mircea Eliade emphasizes several ways humans take control of and colonize land, resonating with Patricia Seed’s

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<sup>187</sup> Ibid., xii.

<sup>188</sup> Ibid.

list of “ceremonial practices.”<sup>189</sup> As Eliade writes, “when possession is taken of a territory...rites are performed that symbolically repeat the act of Creation: the uncultivated zone is first ‘cosmicized,’ then inhabited.”<sup>190</sup> While they said the Genesis reading was “not so much a religious reading, but more of a significant statement,” in deciding to read their creation story aloud during their second live television broadcast on Christmas Eve of 1968, the Apollo 8 astronauts made what Eliade would call a “cosmogonic act” or effort, meaning they “cop[ied]...[their God’s] primordial act of the Creation of the World,” claiming the previously untouched moon as theirs, as an *American* creation.<sup>191</sup> As they orbited the moon and looked back at Earth, the Apollo 8 astronauts were “cosmiciz[ing]” the moon as an American “territory.” Therefore, far from simply sounding weighty or “significant,” the reading of Genesis in space established the United States’ terrestrial domination of the Soviet Union, and extended this dominion to the universe itself.

In its specific socio-historical and political context of the Cold War, the 1968 Apollo 8 Genesis reading elevated the astronauts to a “divine,” godlike level, far above the Soviet astronauts who were still bound to the Earth.<sup>192</sup> While they read Genesis, the

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<sup>189</sup> See Introduction, 8. “...colonial rule over the New World was initiated through largely ceremonial practices [such as] planting crosses...marching in processions, picking up dirt, measuring the stars, drawing maps, speaking certain words.” (Seed, *Ceremonies of Possession in Europe’s Conquest of the New World, 1492-1640*, 2.)

<sup>190</sup> Eliade, *The Myth of the Eternal Return*, 9-10.

<sup>191</sup> “Telecasts from Apollo 8,” (2005), [www.pbs.org/wgbh/amex/moon/peoplevents/e\\_telecasts.html](http://www.pbs.org/wgbh/amex/moon/peoplevents/e_telecasts.html); *The Myth of the Eternal Return*, 18.

<sup>192</sup> Whitney A. Bauman, “Creatio Ex Nihilo, Terra Nullius, and the Erasure of Presence,” in *Ecospirit: Religions and Philosophies for the Earth*, ed. Laurel Kearns and Catherine Keller (New York: Fordham University, 2007), 356.

men of Apollo 8 were also able to cosmicize the moon.<sup>193</sup> Furthermore, through this cosmogonic act and recitation, these men enacted the power bequeathed upon mankind in Genesis: to “subdue the earth [in this case: *the moon*], and exercise dominion over all living things” (Genesis 1:18). This power to dominate encoded in the ancient text of Genesis and in the act of speaking allowed the Apollo 8 astronauts to emphasize their supremacy as Americans in space during the Cold War.

### *Creatio Ex Nihilo* in Apollo 8

As we know, the logic of *creatio ex nihilo* bestows a great deal of authority upon those who invoke it, as it situates them as the *most* powerful, just as the God who creates a whole universe out of nothing is omnipotent.<sup>194</sup> We also know that this logic was entirely unbiblical, as both creation stories suggest that God created out of *something*. Far from being “in the Bible,” the *ex nihilo* was devised by second and third century church theologians in order to stamp out rival Christian sects. This logic went on to validate Christian European domination in the centuries that followed; as Whitney Bauman has asserted, “justified by a transcendent and omnipotent Creator *ex nihilo*, imperial Christianity has been re-creating the world—as if *ex nihilo*—for the past 1500 years.”<sup>195</sup> As the Euro-Christian colonizers “re-creat[ed]” the New World by deeming it *terra nullius* (empty, lacking prior presence) in order to then claim it for themselves, they mimicked a Creator *ex nihilo*. Through this lens, as theologian Catherine Keller has

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<sup>193</sup> Rubenstein, 15.

<sup>194</sup> See Introduction, 10-11.

<sup>195</sup> Bauman, “Creatio Ex Nihilo, Terra Nullius, and the Erasure of Presence,” 353.

suggested, “theologies of *creatio ex nihilo* might support...a colonial epistemology and colonial anthropology.”<sup>196</sup> Since *its* creation, then, the *creatio ex nihilo* mythos has worked to locate and reinstate supreme authority, one that looks a lot like *colonial* authority.

In certain circumstances, Bauman illuminates, “*ex nihilo* thinking...becomes a justification for judging all life based upon the center (read: most powerful).”<sup>197</sup> This notion of theologies of *creatio ex nihilo* justifying human endeavors works in the context of the Apollo 8 mission, as the three-man crew colonized the uninhibited moon in the name of the United States through their circumlunar mission and Genesis reading. Moreover, in this moment of orbiting the moon, the Apollo 8 astronauts simultaneously harkened back to a transcendent and omnipotent Creator, reinscribed themselves and the United States as “the center (read: most powerful)” of the cosmos, *and* elevated themselves to a godlike position. The three men of Apollo 8 accomplished these three moments in time with a singular, specific text and circumlunar movement.

Using *ex nihilo* logic in the context of the Apollo 8 mission, “just as God, the Creator *ex nihilo*, is the sole source of value in creation, so humans” – the astronauts – “the imago of the *ex nihilo* God, bring value to valueless matter” — the moon.<sup>198</sup> Moreover, as we have seen, this logic was precisely the logic that the papal bulls invoked and capitalized on as they sanctified the European colonization of the New World. Encouraged by numerous fifteenth-century popes, the colonizers saw the land

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<sup>196</sup> Ibid., 354.

<sup>197</sup> Eliade, *The Myth of the Eternal Return*, 367.

<sup>198</sup> Ibid., 361.

of the New World as “valueless” and “empty.” Similarly, the astronauts considered the moon “valueless” and “empty” in itself — in other words, it was waiting to be “discovered” and colonized by the most powerful terrestrial agents. As the virgin, often-feminized moon had been previously untouched, unexplored, and un-orbited by humankind (remember the desolate, empty landscape described by Verne’s characters?), the American, male astronauts “br[ought] value” to it when they traveled around it and sent their “appropriate” message back to Earth. As the Apollo 8 astronauts colonized the moon through their circumlunar movement, thereby imbuing the moon with socio-political “value” (beating the Soviet Union by colonizing it first), they mimicked the power of the creator *ex nihilo*.<sup>199</sup>

As we saw in Verne’s novels and with Kennedy’s call to action, “individuals need the collective power of the state-nation” as they go about bringing value to, in this case colonizing, “valueless matter” such as the moon.<sup>200</sup> As Apollo 8 was a national project — recall that Kennedy had stated years earlier that “it w[ould] not just be one man going to the Moon...it w[ould] be an entire nation” — Anders, Borman, and Lovell had the “collective power of the state-nation” behind them in their flight.<sup>201</sup> In fact, the National Aeronautics and Space Administration has been described as “a child of the Cold War,” having been created in 1958 by the United States government *in order to* surpass the efforts of the Soviet Union.<sup>202</sup> Therefore, while people watching the

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<sup>199</sup> Ibid.

<sup>200</sup> Ibid., 363.

<sup>201</sup> Kennedy, "Excerpt from the 'Special Message to the Congress on Urgent National Needs'".

<sup>202</sup> Karash, *The Superpower Odyssey: A Russian Perspective on Space Cooperation*, 29.

Christmas Eve telecast heard the voices of the three astronauts, these men in space both represented and had the support of the United States government and “state-nation:” the words recited from the Old Testament were specifically American words. One might even say they were U.S.-government-sponsored words, even though the astronauts were the ones to decide upon the text of Genesis. In this manner, the men of Apollo 8 created the reality of a U.S.-supported mission and U.S.-centric world. Through their Genesis reading, the Apollo 8 astronauts reasserted the supremacy of the United States over the Soviet Union, its colonial enterprise in the vast cosmos, and *also* suggested that the United States, which Kennedy had said symbolized “freedom,” remained a Judeo-Christian nation.

Bauman illuminates how “pretending to transcend space and time, objective, foundational knowledge claims ignore the ecological, social, and historical context of a situation or place and project the claimant’s own system of thought onto it.”<sup>203</sup> Reading the “foundational” text of Genesis allowed the Apollo 8 astronauts to think of themselves as “transcend[ing] space and time” and to “project” their American (and Judeo-Christian) “system of thought” onto the celestial body of the moon. Furthermore, their “power over nature mimics god’s power” as they brought “value to valueless matter” the same way the God of the Old Testament did “In the beginning [when] God created the heaven and the earth.”<sup>204</sup> This mentality of humans’ “power over nature” is both biblically-based, as God commanded Adam to “exercise dominion over all living

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<sup>203</sup> Bauman, "Creatio Ex Nihilo, Terra Nullius, and the Erasure of Presence," 355.

<sup>204</sup> Ibid., 361.

things” (Genesis 1:18), and reflective of “an anthropocentric view of the rest of the natural world.”<sup>205</sup> As Apollo 8 was aiming to “bring [American] value” to the most extensive part “of the natural world,” the cosmos, it “anthropocentric[ally]” recast focus on the astronauts onboard, thereby emphasizing humankind’s “power over nature,” and their authority back on Earth.

Thinking within a colonial context, we have seen how humankind’s “God-given duty of transforming nature toward human ends” has historically motivated “the colonizer . . . to use [the newly colonized] lan[d] toward fulfilling the Christian God’s will.”<sup>206</sup> Just as Columbus considered himself divinely inspired and selected to “discover” and conquer the New World, the NASA astronauts considered their lunar mission as fulfilling the American destiny put forth by Kennedy years before.<sup>207</sup> Though they were not “transforming” the moon physically (that would happen one year later with the flag planting of the Apollo 11 mission, a gesture that recapitulates Columbus’s planting of the cross), the astronauts were demonstrating the United States’ “power over nature” in the cosmos as they circled the moon in an American spacecraft. The three men did so “towards [the] human ends” of beating the Soviet Union to the moon in the space race, in order to showcase the United States’ technological abilities and achievements, thereby reinforcing its global supremacy.

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<sup>205</sup> Ibid., 356.

<sup>206</sup> Ibid.

<sup>207</sup> See Introduction, 12.

## The Response to Apollo 8

Overall, the response to Apollo 8 was overwhelmingly positive. TV newsman Walter Cronkite said the following about watching the Apollo 8 second live telecasting and Genesis reading:

My first reaction was, “Oh, this is a little too much, this is a little too dramatic.” Even, I might even have thought “this is a little corny.” But by the time Borman had finished reading that excerpt from the Bible, I admit that I had tears in my eyes. It was really impressive and just the right thing to do at the moment. Just the right thing.<sup>208</sup>

Cronkite was not the only one who thought the recitation of Genesis was “just the right thing,” especially since 1968 had been such a violent year. In achieving the cosmic goal of reaching the moon, as Erland A. Kennan and Edmund H. Harvey write, “Apollo 8...gave a Christmas-miracle-like finish to the sorry year.”<sup>209</sup> On January 3<sup>rd</sup> of 1969, *Time Magazine* named Anders, Borman, and Lovell “Men of the Year,” and the astronauts were featured as the cover story of 1969’s first issue.<sup>210</sup> This honor was given to “individuals who had wielded the most influence on human history in the preceding year.”<sup>211</sup> It seems that most thought of Apollo 8 as an “unblemished success:” the astronauts had proven NASA’s technological mastery and the United States’ ability to “be first” in at least one contest in the space race.<sup>212</sup>

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<sup>208</sup> "Telecasts from Apollo 8".

<sup>209</sup> *Mission to the Moon*, 306.

<sup>210</sup> "Men of the Year," *Time Magazine* (Jan. 3, 1969), <http://content.time.com/time/covers/0,16641,19690103,00.html>.

<sup>211</sup> Zimmerman, *Genesis: The Story of Apollo 8*, 235.

<sup>212</sup> "Men of the Year".

In an essay entitled, “American Heavens: Apollo and the Civil Religion,” Charles Reagan Wilson discusses how “the dramatic religious aspect of Apollo 8 provoked strong responses.”<sup>213</sup> Under this umbrella of “strong responses,” Wilson explains that while “religious leaders hailed the flight,” head of American Atheists Madalyn Murray O’Hair “protested...the reading from space of blatantly Christian statements by representatives of the United States.”<sup>214</sup> Indeed, the next November, during National Bible Week, “citations were awarded to the crew of Apollo 8 for reading from the Book of Genesis.”<sup>215</sup> According to Wilson, O’Hair insisted that the astronauts’ “actions had violated the separation of church and state principle and had unconstitutionally tied the nation directly to Christianity.”<sup>216</sup> When O’Hair sued the U.S. Government, alleging violations of the First Amendment, the Supreme Court dismissed her case for “want of jurisdiction,” meaning the case lay beyond the power of the court.<sup>217</sup> That the U.S. Supreme Court did not make a decision in the *O’Hair v. Paine* case suggests that the Court opted out of engaging in a greater conversation about the role of religion and the freedom of speech in the United States, perhaps because the case revolved around an event that happened in outer space — physically above and beyond the dominion of a U.S. court of law. Although it made NASA uneasy, O’Hair’s critique of the Genesis reading was in this sense silenced, and so the “great human outpouring of pride and

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<sup>213</sup> Charles Reagan Wilson, "American Heavens: Apollo and the Civil Religion," *Journal of Church and State* 26, no. 2 (1984): 221.

<sup>214</sup> *Ibid.*

<sup>215</sup> "Astronauts Cited as Bible Week Opens," *The New York Times* November 22, 1969.

<sup>216</sup> "American Heavens: Apollo and the Civil Religion."

<sup>217</sup> *O'hair V. Paine*, 397 U.S. 531,(1970); Alvin F. Slaight, Jr, "The Effect of Lack of Jurisdiction," *Montana Law Review* 16, no. 1 (1955).

gratitude, awe and hero worship” of the three astronauts outweighed any critical or negative responses.<sup>218</sup> The American public was eager for a “miracle,” especially one that would restore the global and cosmic sovereignty of the United States during the tense, bleak years of the Cold War.

While the Apollo 8 astronauts never landed on the moon, much like Verne’s space-travelers, they reinscribed the moon as an object of colonial desire through orbiting the moon, documenting it in their famous *Earthrise* photograph (see Appendix), and reciting the opening of Genesis. As he reflected on the Apollo 8 mission after returning to earth, Bill Anders asserted that,

To me, and I think to many Americans, there has always been a sense of exploration and a sense of the frontier. The Appalachian Trail, the wide Missouri, Antarctica—they were there, and men came to conquer them and to benefit from them. Now space was our frontier...<sup>219</sup>

This idea of “space [as] our frontier” to “conquer...and to benefit from” would stay with NASA up to and through Apollo 11, which would finally land men on the moon.

### Apollo 11’s Colonial Conquest of the Moon

Whereas the men of Apollo 8 colonized the moon by making a cosmogonic effort through their recitation of Genesis, the men of Apollo 11 physically marked the moon with an American flag, thereby fully enacting its colonization as an American territory. Remembering Kennedy’s 1961 call to the United States “to commit itself to

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<sup>218</sup> *Mission to the Moon*, 300.

<sup>219</sup> Gene and Dora Jane Hamblin Farmer, *First on the Moon: A Voyage with Neil Armstrong, Michael Collins, and Edwin E. Aldrin, Jr.* (Boston: Little, Brown and Company, 1970), 202.

achieving this goal, before this decade is out, of landing a man on the Moon and returning him safely to Earth,” NASA launched Apollo 11 in July of 1969, hoping to successfully achieve Kennedy’s goal. Edwin (“Buzz”) E. Aldrin, Neil Armstrong, and Michael Collins were the Apollo 11 astronauts who traveled in the *Columbia* spacecraft to the moon. They would be the first to ever reach the lunar surface.

Having successfully landed on the moon in their module, the *Eagle*, Aldrin and Armstrong prepared to venture out onto the lunar soil, while Collins remained in lunar orbit in the *Columbia*. After declaring the first, very famous, words on the moon (“That’s one small step for man, one giant leap for mankind”), Armstrong was joined by Aldrin to collect moon dust and to describe the lunar terrain back to mission control in Houston.<sup>220</sup> Armstrong mounted a video camera on a stand in preparation for their live televised broadcasting, when he and Aldrin would show six-hundred million people back on Earth what the moon actually looked like.

Part of the plan for Apollo 11 involved the planting of an American flag in the moon.<sup>221</sup> Before the broadcasting, the Armstrong and Aldrin had to have the flag planted firmly in the lunar dust. They had stiffened the cloth with wire, so that it would fly on the airless world of the moon, and demonstrate the power of the United States over the vast cosmos.<sup>222</sup> However, the planting proved more challenging than the men had anticipated, as the lunar surface “was a very thin sweep of dust covering hard,

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<sup>220</sup> Chaikin, *A Man on the Moon*, 206.

<sup>221</sup> Though NASA did not want to disclose where the flag came from, the press soon found out that it had been purchased at a Sears. (Craig Nelson, *Rocket Men: The Epic Story of the First Men on the Moon* (New York: Viking, 2009), 280.)

<sup>222</sup> Chaikin, *A Man on the Moon*, 212.

dense, impenetrable rock.”<sup>223</sup> They even tried patting lunar soil around the flag’s base to stabilize it, but eventually they just had to hope that it would continue to stand precariously on its own, and not topple over as millions of people watched. It seems the moon was not thrilled by the implantation of the phallic flagpole into its virgin, untouched, and feminized surface. However, the men won, and the flag remained upright as the broadcast showed the men on the moon to “the largest audience for any single event in history.”<sup>224</sup> There were “moonwalk parties” all over the world, and thousands gathered in public places like Central Park to witness the historic event. As Verne’s space-travelers had hoped to do in *Around the Moon*, the astronauts of Apollo 11 had planted “the star-spangled banner of the United States” in the moon, thereby “taking possession of [the] new continent in space.”<sup>225</sup>

Though the image of Aldrin next to the American flag on the moon would awe and inspire people to no end, before Apollo 11 launched there had been controversy over the plan to mount the flag on the moon. The “1967 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies of the United Nations” declared that “outer space, including the moon and other celestial bodies, is not subject to national appropriation by claim of sovereignty, by means of occupation, or by any other means.”<sup>226</sup> Therefore,

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<sup>223</sup> Nelson, *Rocket Men: The Epic Story of the First Men on the Moon*, 279.

<sup>224</sup> Chaikin, *A Man on the Moon*, 213.

<sup>225</sup> Verne, *Around the Moon*, 40.

<sup>226</sup> "Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies of 27 January 1967," in *Space Law: Views of the Future: A Compilation of Articles by a New Generation of Space Law Scholars*, ed. Tanja L. Zwaan (Deventer, the Netherlands: Kluwer Law and Taxation Publishers, 1988).

even if a nation traveled to a planet, there was no way for that nation to legally claim or colonize it. It seems, then, like it would be impossible for a nation to enact terrestrial conquest in outer space. Congress had even gotten involved on the matter, and had debated whether or not the men should plant a “United States flag or a United Nations flag, with some insisting that a Christian flag be included.”<sup>227</sup> The insistence on the United States being a Judeo-Christian nation had clearly persisted since Apollo 8 — though NASA was still concerned about “broadcasting any religious observance over the air, as it was still dealing with the “controversy” stirred by the Apollo 8 Genesis reading.<sup>228</sup> Eventually, Congress passed a bill, decreeing

the flag of the United States, and no other flag, shall be implanted or otherwise placed on the surface of the moon, or on the surface of any other planet, by members of the crew of any spacecraft...as part of any mission...the funds of which are provided entirely by the Government of the United States...this act is intended as a symbolic gesture of national pride in achievement and is not construed as a declaration of national appropriation by claim of sovereignty.<sup>229</sup>

Although Congress’ bill stated that the act is to be interpreted “as a symbolic gesture of national pride in achievement” and not “as a declaration of national appropriation,” the parallels between the Apollo 11 flag planting and Christopher Columbus’s planting of the cross in the New World are undeniable. Just as sixteenth- and seventeenth-century European colonizers had reinforced their “right to rule” over the New World by

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<sup>227</sup> Nelson, *Rocket Men: The Epic Story of the First Men on the Moon*, 280.

<sup>228</sup> Chaikin, *A Man on the Moon*, 204.

<sup>229</sup> "National Aeronautics and Space Administration Authorization Act, 1970" quoted in Nelson, *Rocket Men: The Epic Story of the First Men on the Moon*, 280.

“planting crosses, standards, [and] banners,” the astronauts of Apollo 11 reinforced their “right to rule” the moon, as they penetrated it with the star-spangled banner.<sup>230</sup>

With Apollo 11, NASA made the dream of lunar conquest a reality. In their final message from outer space, recorded during their flight back to earth, Armstrong mentioned Jules Verne’s lunar novels, directly comparing the Apollo 11 mission with that of Verne’s *Gun Club*.<sup>231</sup> In this sense, Armstrong illustrated science fiction writer Arthur C. Clarke’s idea that “fantasies—if they have a plausible scientific basis—can serve as a useful purpose for preparing us for the strangeness we will encounter as we venture out into the universe.”<sup>232</sup> Clarke has gone so far as to say that, with Apollo 11, the “once mythical world [of the moon] had become real estate...its exploration, and perhaps its colonization, was only a matter of time.”<sup>233</sup> For Clarke, the planting of the American flag on the moon was only the first step to be taken in the colonization of outer space. He locates the Apollo 11 lunar landing mission within the historical colonial paradigm when he writes “whenever new territory has become available to mankind, it has sooner or later been developed, colonized, or otherwise exploited;

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<sup>230</sup> Seed, *Ceremonies of Possession in Europe's Conquest of the New World, 1492-1640*, 2.

<sup>231</sup> "Good evening. This is the commander of Apollo 11. A hundred years ago, Jules Verne wrote a book about a voyage to the Moon. His spaceship, *Columbia*, took off from Florida and landed in the Pacific Ocean, after completing a trip to the Moon. It seems appropriate to us to share with you some of the reflections of the crew as modern-day *Columbia* completes its rendezvous with the planet Earth and the same Pacific Ocean tomorrow..." (David Meerman and Richard Jurek Scott, *Marketing the Moon: The Selling of the Apollo Lunar Program* (Cambridge, Massachusetts: MIT Press, 2014), 1.)

<sup>232</sup> Arthur C. Clarke, "Epilogue," in *First on the Moon: A Voyage with Neil Armstrong, Michael Collins, and Edwin E. Aldrin, Jr* (Boston: Little, Brown and Company, 1970), 468.

<sup>233</sup> *Ibid.*, 472-473.

there are no exceptions.”<sup>234</sup> In describing Apollo 11 as a twentieth-century Age of Discovery (he calls Columbus’s the “first Age of Discovery”), Clarke illustrates how the human fascination with terrestrial conquest on earth mirrored and galvanized a celestial obsession with the moon as an object of colonial desire.<sup>235</sup> What Clarke fails to mention, however, is that, with Apollo 11, “before the eyes of the world, NASA met Kennedy’s goal and left little doubt which country had won the space race.”<sup>236</sup> Therefore, both Apollo 8 and Apollo 11 were essential in allowing the United States to beat the Soviet Union in the race to space, and thus to “win” part of the Cold War: these lunar missions were more about the earth than about the moon.

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<sup>234</sup> Ibid., 455.

<sup>235</sup> Ibid., 488.

<sup>236</sup> Scott, *Marketing the Moon: The Selling of the Apollo Lunar Program*, 112.

## CONCLUSION

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“*In the beginning, God created the heavens and the earth...*” read Bill Anders on Christmas Eve, 1968. Earlier that same day, using a Hasselblad camera, Anders had taken a full-color photograph of the earth from the moon. This particular view was unexpected and the photograph was unplanned, as NASA had been focusing on the *moon* rather than on the *earth*. At one point, it seemed like the men were going to miss the chance to document the view, as their spacecraft turned them away from the earth almost as fast as it had turned them towards it. Thanks to a smaller hatch window on the other side of the spacecraft, Anders was able to take the photo now known as *Earthrise*.<sup>237</sup> The three men of Apollo 8 were the first humans to ever see this view of earth.<sup>238</sup> When the images were published in the American Press five days later, they shook the world. As historian of religion Benjamin Lazier has written, “the experience of seeing the Earth from afar provided something that prior knowledge could not.”<sup>239</sup> For the first time, humans on earth had a visual sense of their small, blue planet in the scope of the vast cosmos.

Historian Robert Poole has gone so far as to call *Earthrise* “an epiphany in space” as it, on the one hand, allowed humanity to consider its smallness in the vast universe, and, on the other hand, gave humans the chance to see earth as the only visibly colorful

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<sup>237</sup> NASA, "Nasa | Earthrise: The 45th Anniversary," [www.youtube.com/watch?v=dE-vOscpiNc](http://www.youtube.com/watch?v=dE-vOscpiNc).

<sup>238</sup> Robert Poole, *Earthrise* (New Haven: Yale University Press, 2008), 10.

<sup>239</sup> Benjamin Lazier, "Earthrise; or, the Globalization of the World Picture," *The American Historical Review* 116, no. 3 (2011): 624.

celestial body in the entire cosmos, and therefore special.<sup>240</sup> This photograph catalyzed the ecological movement, as humans were able to recognize the fragility of our earth; indeed, just fifteen months later would be the first Earth Day.<sup>241</sup> This dual-perspective of earth as, first, alone and tiny, and, secondly, singular and prominent, exemplifies what philosopher Kelly Oliver calls “our ambivalent relationship to the earth.”<sup>242</sup> In line with this existential ambivalence, Oliver illuminates the politically contradictory nature of the American media’s perception of Apollo 8 as an event that was “paradoxically both for ‘all of mankind’ and as an American victory in the cold war.”<sup>243</sup> It seems the Apollo 8 astronauts and most people on earth focused on the “all of mankind” notion more than the particular context of the cold war, thereby eclipsing the socio-political significance of the mission by reframing it as a broadly “human” event. For days after the Genesis reading, newspaper editors and writers wrote about “the brotherhood of man and the spiritual unity of mankind.”<sup>244</sup> One year later, in a telephone call with Apollo 11’s Armstrong and Aldrin as they planted a flag and then walked on the moon, President Nixon declared that, “In the whole history of man, all of the people on this earth are truly one.”<sup>245</sup> Therefore, both Apollo 8 and Apollo 11 presented the earth as one unified world, and also helped to galvanize the ecological movement and its focus around the earth’s fragility and uniqueness.

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<sup>240</sup> Poole, *Earthrise*, 14.

<sup>241</sup> *Ibid.*, 142.

<sup>242</sup> Kelly Oliver, *Earth and World: Philosophy after the Apollo Missions* (New York: Columbia University Press, 2015), 14.

<sup>243</sup> *Ibid.*

<sup>244</sup> Poole, *Earthrise*, 7.

<sup>245</sup> Cited in Chaikin, *A Man on the Moon*, 214.

While this idea of the earth as one world may seem rid of any kind of discord, as it focuses on harmony and unity rather than on conflict and difference, it actually looks a lot like France's colonizing strategy during the Age of Discovery. As Sara Melzer emphasizes, as the French attempted to establish settlements in the New World, the French church and state "sought to assimilate" the "barbaric" Native Americans and have them form "one people" with the French.<sup>246</sup> Thus, the logic of a "one world" or "one people" at work in response to Apollo 8's *Earthrise* is the same logic that underwrites French colonial erasure of difference. In looking at the globe as a unified place of oneness and singularity, the men of Apollo 8, and the numerous others on earth who made the same move, reinscribed the colonial erasure of difference that had been enacted by French colonists in the sixteenth and seventeenth centuries. Poole illuminates the connection between the Age of Discovery and NASA's Apollo Program when he asserts that "the discovery of the New World was succeeded nearly five centuries later by the rediscovery of the Earth."<sup>247</sup> When partnered with Melzer's point, we can see how both "discoveries" relied upon and called forth colonial logic.

Just as the colonial project in the New World helped to define the European colonizers of the Age of Discovery, the ongoing colonial lunar fantasy we have been investigating has told us the most about man's terrestrial anxieties of sovereignty. We have explored this lunar fantasy through three different nodes of space-time: Bernard le Bovier de Fontenelle's seventeenth-century *Conversations on the Plurality of Worlds*, Jules

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<sup>246</sup> Melzer, *Colonizer or Colonized: The Hidden Stories of Early Modern French Culture*, 11.

<sup>247</sup> Poole, *Earthrise*, 199.

Verne's nineteenth-century *From the Earth to the Moon* and *Around the Moon*, and NASA's twentieth-century Apollo Program, specifically Apollo 8 and Apollo 11. Through these different examples, I have traced the colonial legacy from Europe to the United States, an inheritance rooted in the religious – or at least religiously authorized – objectives of European colonizers during the Age of Discovery, and maintained through the American ideal of Manifest Destiny.

In the middle of the space age, American astronomer Carl Sagan spoke to the apparent need of humankind to look to outer space as the next place to explore and colonize, a cross-temporal aspiration that we have been examining over the course of this thesis. Similar to the move Fontenelle made when his *Philosopher* said that only “when the world has finished growing for us, we’ll begin to know the moon,” Sagan wrote, “the Earth is almost fully explored...[and] space cities [or colonies] provide a kind of America in the skies.”<sup>248</sup> Both Fontenelle and Sagan recognized that the moment we feel the earth has been fully conquered, we will turn to outer space for *terra nullius*. In this way, Sagan seemed to understand humankind’s longing for continual exploration of land, and considered space as the next sensible destination for humankind to “explore” and discover, as Columbus had “discovered” America; colonizing the moon or another planet would allow humankind to find a new “America in the skies.”

About a month before Apollo 11, Buzz Aldrin asked his minister, the Reverend Dean Woodruff of Webster Presbyterian Church, to write something about the event that might put it in a specifically spiritual context. In response to this request, Reverend

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<sup>248</sup> de Fontenelle, *Conversations on the Plurality of Worlds*, 35; Cited in Poole, *Earthrise*, 163.

Woodruff wrote “The Myth of Apollo 11: The Effects of the Lunar Landing on the Mythic Dimension of Man.” In this paper, Woodruff discusses the ancient motif of “the magic flight,” what Eliade elaborates as man’s “longing to break the ties that hold him in bondage to the earth.”<sup>249</sup> Echoing much of Carl Sagan’s perspective on space as the next stop for exploration and colonization, Woodruff emphasizes that “such a desire to free himself from his limitation, which he feels to be a kind of degradation... must be ranked among the specific marks of man.”<sup>250</sup> But why, we might ask, does humankind want so badly to escape the earth? Even today, NASA is planning a Mars 2020 mission to start actualizing the goal of inhabiting Mars.<sup>251</sup> Why must we continue striving to “extend human presence,” to explore and colonize worlds beyond our own?<sup>252</sup>

While there is nothing evidently wrong with the excitement and urge to explore the vast and sprawling universe, it is important to note that modern astrophysical science is not tackling an entirely neutral or secular project, as it inherited this initially religious, colonial legacy and history that we have been investigating over the course of this thesis. As each of the three space-time nodes exemplify in their respective

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<sup>249</sup> Eliade cited in Woodruff cited in Farmer, *First on the Moon: A Voyage with Neil Armstrong, Michael Collins, and Edwin E. Aldrin, Jr.*, 267-268.

<sup>250</sup> Ibid.

<sup>251</sup> NASA’s Steps of Space Exploration:

1. Fly By
2. Orbit
3. Land
4. Rove
5. Collect Samples
6. Inhabit

(Professor Martha Gilmore, Lecture, Wesleyan University, March 21, 2016.)

<sup>252</sup> NASA, "Nasa's Journey to Mars: Pioneering Next Steps in Space Exploration," (October 2015), [http://www.nasa.gov/sites/default/files/atoms/files/journey-to-mars-next-steps-20151008\\_508.pdf](http://www.nasa.gov/sites/default/files/atoms/files/journey-to-mars-next-steps-20151008_508.pdf).

references to Christopher Columbus and his “discovery” of the “New World,” our European colonial heritage has time and time again been refocused through and displaced onto the celestial body of the moon. As we can look up at it almost every night, it is both near enough for us to imagine what it might be like to inhabit, and far enough for us to consider it a desirable destination away from the “bondage” of the earth. With NASA’s help, we have taken our centuries-old, colonial inheritance of exploring and conquering out into the cosmos.

Even just in considering my first experience with Apollo 8 in a history museum, it is clear how “most of the Apollo hardware...quickly became museum exhibits to remind us, soon after the fact, of what had been done” in regards to our national mission to land a man on the moon.<sup>253</sup> However, through the investigatory work of this thesis, my encounter with that particular museum exhibit has sent me back through time to Columbus’s colonial encounter with the New World. For that reason, I would say that the Apollo hardware and Program, itself, are reminders of our recent attempts to act as modern-day “Columbuses of that [once] unknown world,” the moon, by “extend[ing] human presence” into the cosmos.<sup>254</sup>

Arthur C. Clarke wrote at the dawn of the space age, “Interplanetary travel is now the only form of ‘conquest and empire’ compatible with civilization.”<sup>255</sup> As I stood and listened to the recitation of Genesis on that hot summer day in Austin two years

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<sup>253</sup> John M. Logsdon, *John F. Kennedy and the Race to the Moon* (New York: Palgrave Macmillan, 2010), 240.

<sup>254</sup> See Chapter Two, 62. “It is perhaps reserved for us to be the Columbuses of that unknown world!” (Verne, *From the Earth to the Moon*, 12.)

<sup>255</sup> Arthur C. Clarke, “Space Flight and the Spirit of Man,” in *Voices from the Sky: Previews of the Coming Space Age* (New York: Harper & Row, 1965), 4.

ago, I could not precisely pinpoint what it was I was feeling. I was definitely unsettled, but I could not identify the origin of my discomfort. Looking back, I think what I was hearing behind Apollo 8's Genesis reading was only a hint of the colonial story I have sought to tell in this thesis, a story that has crossed time and space, and embedded itself within our global imaginary.

## APPENDIX

### Genesis 1: 1-10 (King James Version)

William (Bill) Anders:

*"In the beginning God created the heaven and the earth.  
And the earth was without form, and void; and darkness was upon the face of the deep.  
And the Spirit of God moved upon the face of the waters.  
And God said, Let there be light: and there was light.  
And God saw the light, that it was good: and God divided the light from the darkness."*

James (Jim) Lovell:

*"And God called the light Day, and the darkness he called Night.  
And the evening and the morning were the first day.  
And God said, Let there be a firmament in the midst of the waters, and let it divide the waters from the waters.  
And God made the firmament, and divided the waters which were under the firmament from the waters which were above the firmament: and it was so.  
And God called the firmament Heaven.  
And the evening and the morning were the second day."*

Frank Borman:

*"And God said, Let the waters under the heavens be gathered together unto one place, and let the dry land appear: and it was so.  
And God called the dry land Earth; and the gathering together of the waters called he Seas: and God saw that it was good."*

*Earthrise* by William Anders

(Image Credit: NASA)



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