

The Day the Earth Stood Still: The Apollo 11 Moon Landing and American Civil Religion

By  
Allia Rae Calkins

Thesis  
Submitted to the Faculty of the  
Department of History of Vanderbilt University  
In partial fulfillment of the requirements  
For Honors in History

April 2016

On the basis of this thesis defended by the candidate on April 27, 2016  
we, the undersigned, recommend that the candidate be awarded HONORS  
in History.

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Director of Honors – Samira Sheikh

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The space geek in me would be bereft if I did not quote my favorite, and in my opinion under-appreciated, astronaut Mike Collins in saying, “This operation is somewhat like the periscope of a submarine. All you see [me], but beneath the surface are thousands and thousands of others.” First and foremost I must thank all of the professors who have helped and guided me on every stage of this project — Edward Wright-Rios and Thomas Schwartz for helping me zero-in on my topic and figure out what I actually was writing about, Samira Sheikh for dedicating a year to giving feedback and advice to her students, and Michael Bess and Vanessa Beasley for pushing me to explore new arenas and for giving invaluable comments.

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# The Day the Earth Stood Still

## The Apollo 11 Moon Landing and American Civil Religion

“Our values are not simply words written into parchment – they are a creed that calls us together and that has carried us through the darkest of storms as one nation, as one people.”

President Barack Obama at the memorial service of Neil Armstrong.<sup>1</sup>

“I measure my life by pre-1969 and post-1969...it was such a pivotal milestone in my life, that that’s usually the first thing I think about when a date comes up.”

Jerry Bostick, Chief of the Flight Dynamics Branch at NASA.<sup>2</sup>

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<sup>1</sup> “Memorial Service for Neil Armstrong,” *C-SPAN.org*, <http://www.c-span.org/video/?308141-1/memorial-service-neil-armstrong>.

<sup>2</sup> Jerry C. Bostick, interview by Carol Butler, 23 February 2000, 15, NASA Johnson Space Center Oral History Project.

# Introduction

ON 13 SEPTEMBER 2012, ONE month after the death of Neil A. Armstrong, a recording of President John F. Kennedy's voice rang out in the Washington National Cathedral:

The eyes of the world now look into space, to the Moon and to the planets beyond, and we have vowed that we shall not see it governed by a hostile flag of conquest, but by a banner of freedom and peace...We choose to go to the Moon. We choose to go to the Moon in this decade and do the other things, not because they are easy, but because they are hard, because that goal will serve to organize and measure the best of our energies and skills, because that challenge is one that we are willing to accept, one we are unwilling to postpone, and one which we intend to win.<sup>1</sup>

Hundreds of people had gathered to celebrate the life of Armstrong, who, on 20 July 1969, fulfilled Kennedy's goal of putting a man on the Moon when he took his first steps out of Apollo 11 and onto the lunar surface. With his one small step, Armstrong instantly became a national hero, and so it was appropriate that the nation would celebrate his life in the same manner it has honored past presidents, national celebrities, and military servicemen.

The National Cathedral was a fitting place to hold Armstrong's public memorial service. Since its incorporation in 1893, this national place of worship has seen the funerals of nearly every president since William McKinley, as well as several presidential inaugural prayer services.<sup>2</sup> As its name suggests, the Cathedral serves as a national house of worship, holding services under several different denominations, and bringing the country together in prayer. Its stained glass windows incorporate scenes from American history alongside stories from the Bible. Armstrong himself, along with crewmembers Edwin "Buzz" Aldrin and Michael Collins, dedicated one of these

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<sup>1</sup> "Memorial Service for Neil Armstrong," *C-SPAN.org*, <http://www.cspan.org/video/?308141-1/memorial-service-neil-armstrong>.

<sup>2</sup> David Hart Nelson, "Worshipping in the National House of Prayer: Washington National Cathedral, Washington, D.C., Sunday, 19 July 2009," *Anglican and Episcopal History* 79, no. 1 (2010): 71.

windows five years after landing on the Moon. The “Scientists and Technicians” window in the National Cathedral celebrates America’s exploration of space and her first steps onto the Moon. It depicts several orbiting planets and stars, as well as the mission trajectory of Apollo 11. In the middle of the window sits a 7.18 gram piece of Moon rock, brought to Earth from the Apollo 11 mission.<sup>3</sup>

The entire nation came together through television and social media in mourning Armstrong. Seating was limited, and invitations to the memorial were sent to a small group of people — people who had worked alongside Armstrong at the National Aeronautics and Space Administration (NASA) and in the Air Force, members of Congress, and private citizens who represented values that Armstrong treasured, such as the Boy Scout troop from his hometown.<sup>4</sup> Newspapers around the country eulogized Armstrong, serving as a reminder that the first man to walk on the Moon held a special place in the hearts and minds of many Americans. Anyone who was alive in July 1969 will most likely be able to describe where he was and what he was doing when Neil Armstrong set foot on the Moon. While these individuals do not need an academic interpretation of the Moon landing to tell them why it was important or what it said about America at the time, a historian cannot help but notice that scholars have left the Moon landing out of their literature, passing it over in favor of events that have had clearer implications and interpretations. Indeed, the question of what landing a man on the Moon actually *meant* — historically, philosophically, politically — continues to stump those who study the Space Age. As Armstrong’s memorial service indicates, however, the ultimate importance of the Moon landing lies with what it says about the ethos of the United States.

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<sup>3</sup> “NASA — The ‘Space Window’ at National Cathedral in Washington,” *NASA*, 10 September 2012, <http://www.nasa.gov/topics/history/features/spacewindowhistory.html>.

<sup>4</sup> “Local Scouts to Attend National Memorial Service,” *Wapakoneta Daily News*, n. d., 2012, <http://wapakdailynews.com/content/local-scouts-attend-national-memorial-service>.

## Civil Religion: One Nation Under God

Neil Armstrong's memorial service, as well as the Moon landing, perfectly encapsulates the sociological premise of *civil religion* — the idea that a nation's values can be expressed through symbols, text, and actions that come to represent the spirit of the nation, its culture, shared basic ideologies, and political beliefs. However, scholars studying civil religion have neglected to include the Moonshot in their literature. While philosophers since Rousseau have discussed ideas alluding to civil religion, it was not until 1967 that Harvard sociologist Robert Bellah gave a name and concrete definition to this subject.<sup>5</sup> In his first essay on civil religion, Bellah wrote of a “religious dimension for the whole fabric of American life...expressed in a set of beliefs, symbols, and rituals that I am calling the American civil religion.”<sup>6</sup> Civil religion is made up of actions, monuments, documents, speeches, individuals, and events that express the highest values of society and are considered sacred. The words, events, or symbols that represent civil religion can be thought of as “god terms,” a premise developed by rhetorician Richard Weaver, and will be discussed in Chapter III.<sup>7</sup>

Sociologist Michael Hughey completed a study of Bellah's writings to reveal several of the most important values held in American civil religion. He concluded that the morals of civil religion in America are “a commitment to liberty, justice, and charity, a spirit of self-sacrifice for the common good, civic-mindedness fused with an ethical obligation for individual participation, humility, respect for individual rights, a sense of common purpose (chosenness), and dedication to a higher goal.”<sup>8</sup> Another important theme in civil religion is “the obligation, both collective and individual, to carry out God's will on earth.”<sup>9</sup> The last theme Bellah included in his original definition of civil religion is that of death, sacrifice, and rebirth, specifically among those willing to

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<sup>5</sup> Robert N. Bellah, “Civil Religion in America,” Originally Published in 1967, *Daedalus*, no. Fall (2005): 40-55.

<sup>6</sup> *Ibid.*, 42.

<sup>7</sup> Richard M. Weaver, *The Ethics of Rhetoric* (Chicago, HRegnery Co, 1953).

<sup>8</sup> Michael W. Hughey, *Civil Religion and Moral Order: Theoretical and Historical Dimensions*, (Westport, Conn: Praeger, 1983), 159.

<sup>9</sup> Bellah, “Civil Religion in America,” 43.



give up everything to protect American values.<sup>10</sup> Finally, like other religions, civil religion also has its own deity. It is the above themes that this thesis will rely on in studying civil religion as it applies to the Moon landing.

Historian Raymond Haberski writes, “Civil religion is a strange beast; it can often appear to mean almost anything to anyone at anytime. As a hybrid of nationalism and traditional religion, civil religion has an ideological flexibility that is intoxicating because it is so evocative, elastic, and deceptively complex.”<sup>11</sup> Indeed, while the definition and acceptance of civil religion has not varied since Bellah initially published his findings, scholars have added and amended different symbols belonging to the civil religion. Recently, Peter Gardella, a Professor of World Religions, published a survey of “What Americans Hold Sacred,” that provides many examples of documents, monuments, and symbols that demonstrate civil religion.<sup>12</sup> Gardella notes that locations, such as Jamestown and Gettysburg, can hold value in civil religion as much as documents, like the Mayflower Compact, Declaration of Independence, and inaugural addresses can. Examples of symbols celebrating civil religion are the Liberty Bell, the Washington Monument, Arlington Cemetery, “The Star Spangled-Banner,” the Statue of Liberty, and the Vietnam Veterans Memorial. Importantly, Gardella lists the beginning of President Kennedy’s term of office as the beginning of a new era in American civil religion, in which “the values of personal freedom and political democracy [applied] to the entire world,” and in which it was up to Americans to spread these beliefs to the entire world.<sup>13</sup> This had important implications for the Cold War, which was fought over ideologies such as these. Because of the time he dedicates to the Kennedy administration and the spreading of American values, it is

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<sup>10</sup> Ibid., 47.

<sup>11</sup> Raymond Haberski, *God and War: American Civil Religion since 1945* (New Brunswick, N.J.: Rutgers University Press, 2012), 5.

<sup>12</sup> Peter Gardella, *American Civil Religion: What Americans Hold Sacred*, (New York: Oxford University Press, 2013).

<sup>13</sup> Ibid., 292.

notable that Gardella makes no mention of the American space program in his book, as it was a major aspect of Cold War civil religion.

In the context of the United States, civil religion is more than just extreme patriotism and a shared history; it is a concept that unites citizens in the same way a communal religion unites a congregation. Rhetorician Roderick P. Hart argues that, in forming his theory, Bellah chose to name the culture *civil religion* because, “the concept of ‘religion’ provides him with explanatory power not made available via alternative conceptualizations of the same phenomena.”<sup>14</sup> That is, *religion* has certain implicit connotations that match the definition and purpose of civil religion. Hart then compares the common purposes of a traditional religious organization with the purposes of civil religion and finds that “the American civil religion occasionally performs some of the functions of traditional religion.”<sup>15</sup> These include a single standard of judgment between right and wrong, the provision of an identity in which a follower is a member of a larger community, hope for mythical intervention in human affairs, and the means of expression for religious worship.<sup>16</sup> It is important to note that traditional religion and civil religion are not at odds with each other; a practicing Christian, Jew, or Muslim can hold fast to his or her beliefs while also subscribing to the values of civil religion.

The fickleness of this concept can be seen when discussing the difference between the *god(s)* of civil religion, and the *God* of traditional monotheistic religions. As Hart notes, the god of civil religion takes several forms and manifests himself differently in various types of rhetoric. For example, “God the Inscrutable Potentate” is, by definition, a mysterious ruler. People invoke him as the god that keeps America in his eye and directly intervenes in her affairs, while “God the Wise and

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<sup>14</sup> Roderick P. Hart, *The Political Pulpit* (West Lafayette, Ind: Purdue University Press, 1977), 36.

<sup>15</sup> *Ibid.*, 37.

<sup>16</sup> *Ibid.*, 36–37.

the Just” is the god whom presidents and senators thank for divine guidance in their leadership.<sup>17</sup> On the whole, the god of American civil religion is multi-faceted and centered around man. He is not vengeful and more immanent than transcendent; he “reinforces America’s political destiny and becomes our stalwart companion during our national trek.”<sup>18</sup> Lastly, and perhaps most importantly, “America’s God is, by and large, a passive God whose name is invoked *after* America has set its sights in a particular direction.”<sup>19</sup> Put simply, the distinction between this god and the God of Abraham, Christ, and Mohammed, is that the god of civil religion, as Bellah writes, “is not only rather ‘Unitarian [.]’ he is also on the austere side, much more related to order, law, and right than to salvation and love. Even though he is somewhat deist in cast, ...He is actively interested and involved in history, with a special concern for America.”<sup>20</sup>

Similarly to Gardella discussed previously, two other modern civil religion scholars leave out the space program and Apollo in their descriptions of the Cold War. According to T. Jeremy Gunn, a scholar of religion, the Cold War led Americans to place value in tools such as “governmental theism, military supremacy, and capitalism as freedom” in order to spread their civil religion to other countries.<sup>21</sup> Gunn cites governmental theism, which he describes as “less spiritually evocative and more politically insistent” than civil religion, as the first line of defense against atheistic communism. He credits this value for the increase in official days of prayer across the nation, as well as for the insertion of the words “under God” in the Pledge of Allegiance, and putting the phrase, “in God we trust,” on the dollar bill.<sup>22</sup> After World War II, Americans began using their military supremacy to protect their values. Gunn writes, “Freedom was increasingly described as ‘God’s gift to mankind,’

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<sup>17</sup> Ibid., 70. The other faces of Hart’s American god are “God the Witnessing Author,” “God the Genial Philanthropist,” and “God the Object of Affection.”

<sup>18</sup> Hart, *The Political Pulpit*, 74.

<sup>19</sup> Ibid.

<sup>20</sup> Bellah, “Civil Religion in America,” 45.

<sup>21</sup> T. Jeremy Gunn, *Spiritual Weapons: The Cold War and the Forging of an American National Religion* (Westport, Conn: Praeger, 2008), 8.

<sup>22</sup> Ibid., 9.

and the U.S. military was portrayed as the protector of that freedom.”<sup>23</sup> During the Cold War, capitalism became connected with freedom, and thus became a more cherished American value. Ultimately, Gunn cites military force as the dominant method by which the United States protected its values. However, in the late 1960s, the United States also relied on the space program and more peaceful means to communicate and spread its beliefs to the world.

Like previous scholars, Raymond Haberski also disregards Apollo’s relationship to the civil religion. In his 2012 study, Haberski criticizes historians who have defined the American national religion and American exceptionalism — the belief that Americans and their nation have been specially chosen by God to fulfill a specific destiny — as one and the same. He believes that these historians have failed to delve deeper into the faith that sustains the nation, and he builds off Bellah’s work in defining American civil religion as it has existed since the end of World War II.<sup>24</sup> Haberski writes, “During the postwar era, the American civil religion captured the faith Americans invested in the promise of their nation and the way that promise manifested itself in American power.”<sup>25</sup> In short, Cold War civil religion was made up of a union of God, war, and the nation. During this time, the United States used war as a method for redemption, and truly believed in the notion that “might makes right.” However, as this thesis will show, civil religion was also invoked in peaceful purposes, as demonstrated through the Apollo program.

The necessity of Haberski’s work differentiating civil religion from exceptionalism reveals how entangled the two ideas, along with nationalism, are. All three terms have played a role in American history from the founding of the first “city upon a hill,” to the idea of Manifest Destiny, through the modern era, and all have similar characteristics, especially when it comes to explicitly

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<sup>23</sup> Ibid., 10.

<sup>24</sup> Haberski, *God and War*.

<sup>25</sup> Ibid., 9.

expressing patriotism.<sup>26</sup> In fact, in his leading work on nationalism, historian Benedict Anderson uses a definition of nationalism that makes it virtually indistinguishable from Bellah's definition of civil religion. He writes, "It would, I think, make things easier if one treated [nationalism] as if it belonged with 'kinship' and 'religion,' rather than with 'liberalism' or 'fascism.'"<sup>27</sup> His nationalism is "an imagined political community," where "regardless of the actual inequality and exploitation that may prevail in each, the nation is always conceived as a deep, horizontal comradeship."<sup>28</sup> Nationalism is thus the force that unites a people in feeling a common creed, while the creed itself is civil religion.

It is important to note here that the purpose of this thesis is not to prove or disprove the existence of American civil religion. I take Bellah's original term and apply the work of scholars such as Hart to it in order to show that there is a *special something* about America that pushed her to go to the Moon. Evidently it is hard to encompass the ethos of a nation in a single term. Like Bellah, however, I find that civil religion is the best illustration of that *special something* that drives Americans to express patriotism. There is something inherently religious in the act of pledging allegiance to the flag or making a pilgrimage to Washington, DC to visit the nation's monuments. To be sure, civil religion and nationalism are not mutually exclusive; they each can describe certain aspects of the other.

I choose to use "civil religion" because of the spiritual connotations a "religion" carries. A religion is an embodied philosophy that unites a community around a common spirit, and civil religion is no different. While it may have rational aspects, religion is inherently irrational in that followers of a religion can mold it to their own spiritual and communal needs, and that no matter

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<sup>26</sup> John D. Wilsey, *American Exceptionalism and Civil Religion: Reassessing the History of an Idea* (Downers Grove: IVP Academic, 2015), 16.

<sup>27</sup> Benedict Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism*, (London ; New York: Verso, 2006), 5.

<sup>28</sup> *Ibid.*, 6–7.

how eloquent a definition, there is *something* about religion that cannot accurately be described in words. Additionally, the United States has always been a country with more religious tendencies than its secular European counterparts. This is because the values that went into the founding of the country were distinctly Protestant, and thus the nationalism that was born had an inherently religious dimension. At the very least, using civil religion allows me a more concrete approach than just instructing my reader, in the words of Supreme Court Justice Potter Stewart, “I know it when I see it.”

In his paper entitled “American Heavens: Apollo and the Civil Religion,” Historian Charles Reagan Wilson engages with Robert Bellah’s idea of civil religion, and argues that Apollo’s significance can be understood in the context of civil religion.<sup>29</sup> He writes that the Apollo program “embodied revealing themes about the American [civil] religion,”<sup>30</sup> and that it also provided insight into the importance of science and technology in civil religion.<sup>31</sup> Apollo was not just a result of American civil religion; it was also representative of civil religion itself. Wilson also discusses the tension between nationalism and universalism within the Apollo program — a conflict of interests that took place as Americans claimed they were landing on the Moon for all mankind while simultaneously planting an American flag on its surface.<sup>32</sup> Wilson shows how an adherence to civil religion spurred on individuals such as Presidents Kennedy and Nixon and John Glenn in the Space Race. Additionally, participants in the program drew upon civil religion in order to assign importance to what they were doing.<sup>33</sup> Wilson writes that the engineers, administrators, and astronauts of NASA, “consciously drew upon myth, symbol, and tradition in order to place their

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<sup>29</sup> Charles Reagan Wilson, “American Heavens: Apollo and the Civil Religion,” *Journal of Church and State* 26 (1984): 209–26.

<sup>30</sup> *Ibid.*, 210.

<sup>31</sup> *Ibid.*, 209.

<sup>32</sup> *Ibid.*, 212.

<sup>33</sup> *Ibid.*, 226.

experiences within a larger framework.”<sup>34</sup> This larger framework, I argue, is civil religion, and the myths, symbols, and traditions the workers invoked came from civil religion. This thesis directly expands upon Wilson’s work. It will show the impact that civil religion had on the Moon landing, as well as what the Moon landing reveals about civil religion, ultimately contributing to a broader understanding of American culture and values.

### **Apollo, A Peculiar History**

In expanding upon the scholarly work surrounding civil religion by using the Moon landing as a lens, this thesis will also add to the literature regarding the nation’s space program. Wilson’s interpretation of the Apollo program has flown under the radar of both civil religion literature and works surrounding the Space Race. Former NASA historian Roger Launius cited the article in a piece titled “Perceptions of Apollo,” but only to use a quote by Wernher von Braun, the German scientist who helped make the Moon landing possible, lauding a new beginning for mankind.<sup>35</sup> In a later paper, Launius exclaimed, “Would that historians would explore the myth and memory of Apollo!”<sup>36</sup> This is the charge that this thesis answers by exploring the Moon landing through civil religion.

In a paper examining the historiography of Apollo, Launius determines that historians focus on five major areas when studying the Apollo program.<sup>37</sup> These are: foreign and public policy, the evolution of space technology, astronauts and their flights, the history of science and discovery, and social and cultural investigations.<sup>38</sup> Additionally, Launius writes, “As the distance between the Moon landings and the present becomes greater, the opportunity for a reasoned analysis of their meaning

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<sup>34</sup> Ibid.

<sup>35</sup> Roger D. Launius, “Perceptions of Apollo: Myth, Nostalgia, Memory or All of the Above?,” *Space Policy* 21, no. 2 (2005): 136.

<sup>36</sup> Roger D. Launius, “Interpreting the Moon Landings: Project Apollo and the Historians,” *History and Technology: An International Journal* 22, no. 3 (20 August 2006): 241.

<sup>37</sup> Ibid., 226.

<sup>38</sup> Ibid.

has grown, opening a rich opportunity to explore and interpret, or perhaps reinterpret, the Apollo program in American history.”<sup>39</sup> While situating itself in the “social and cultural investigations” category, this thesis builds upon works covering several different topics in an attempt to answer Launius’ request in providing a new interpretation of the Moon landing.

In social and personal accounts of the Moon landing, civil religion appears clearer and clearer while never emerging in distinct form. Launius describes several works that place the space program within the narrative of American culture. For example, *Rocket Dreams* by journalist Marina Benjamin ruminates on the culture surrounding the space program and how it affected popular culture.<sup>40</sup> Benjamin concludes that, “Apollo cast a long shadow over American society for reasons that remain unclear to this moment.”<sup>41</sup> Essentially, this means that neither the author nor the American people can be sure of the importance of the Moon landing. A second work that questions Apollo’s cultural meaning is *Moondust* by Andrew Smith, another journalist.<sup>42</sup> For the author, “Apollo seems...to be the most perfect imaginable expression, embodiment, symbol, of the twentieth century’s central contradiction: namely, that the more we put our faith in reason and its declared representatives, that the more irrational our world became.”<sup>43</sup> Smith recognizes that Apollo was never about going to the Moon alone, yet rather than turn to its meaning for the American people, he chooses to focus on how mankind’s eyes turned back to the Earth after venturing into space.<sup>44</sup> This thesis expands on both of these works and contends that the “mysterious reason” Apollo remains important is its relationship with and induction into civil religion.

In his bibliographic essay, Launius writes that the “effort to situate the Apollo program in the larger rubric of modern society and to understand its relationship to humanity as it stands at the

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<sup>39</sup> Ibid.

<sup>40</sup> Marina Benjamin, *Rocket Dreams: How the Space Age Shaped Our Vision of a World Beyond* (New York: Free Press, 2004).

<sup>41</sup> Launius, “Interpreting the Moon Landings: Project Apollo and the Historians,” 244.

<sup>42</sup> Andrew Smith, *Moondust: In Search of the Men Who Fell to Earth*, (New York: Harper Perennial, 2006).

<sup>43</sup> Launius, “Interpreting the Moon Landings: Project Apollo and the Historians,” 244.

<sup>44</sup> Ibid., 245.



threshold of the twenty-first century is significant for future scholarship,” and indeed, recent examinations of the Apollo program have sought to understand this relationship.<sup>45</sup> For example, in his book *No Requiem for the Space Age*, historian Matthew Tribbe shows that the Apollo program, specifically Apollo 11, is often presented in a context removed from the instability of the 1960s.<sup>46</sup> Tribbe posits, “this book considers the moon landing to be much less historically important than most commentators at the time assumed it would (and should) be.”<sup>47</sup> He believes that its importance lies in its symbolism, specifically how it integrated itself into American culture. Tribbe cites Wilson, mentioning that the Apollo program was part of American civil religion. He writes that it represented everything that made America great,

its unlimited energy and curiosity, its itch — even its destiny — to explore to the limits of its ever-expanding capabilities, its constant and amazing advancements in science and technology, and its generosity in allowing the whole world to revel alongside it in the feat.<sup>48</sup>

While this is the only passage in the book discussing civil religion, the language throughout the entire work drips with rhetoric celebrating America and its civil religion.

The emergence of socio-cultural study of the space program is a relatively new phenomenon. The first studies on Apollo and the space program appear quite early in the historical context and cover the program’s political justifications and ramifications. In 1970, not even one year after the Apollo 11 flight, John M. Logsdon, the founder of the Space Policy Institute at The George Washington University, published his dissertation entitled *The Decision to go to the Moon: Project Apollo and the National Interest*, which discusses the political motivations for going to the Moon.<sup>49</sup> While he released an updated version in 2010, the original remains “the classic study” on the process by which

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<sup>45</sup> Ibid.

<sup>46</sup> Matthew D. Tribbe, *No Requiem for the Space Age: The Apollo Moon Landings and American Culture* (Oxford ; New York: Oxford University Press, 2014), 13.

<sup>47</sup> Ibid., 14.

<sup>48</sup> Ibid., 165–166.

<sup>49</sup> John M. Logsdon, *John F. Kennedy and the Race to the Moon* (Palgrave Macmillan, 2010), ix.

President Kennedy decided to send man to the Moon.<sup>50</sup> Using a series of personal interviews and internal memos, Logsdon concludes that Kennedy made a rational choice when he challenged the nation to set foot on the Moon. During the Cold War, the nation had three ways to compete with the Soviet Union — militarily, economically, and technologically — and, to Kennedy, competition through technology and the Apollo program seemed like the best option.<sup>51</sup> Logsdon’s book remains relevant because of the ways it encapsulates the democratic liberal politics that defined the 1960s and how he was the first to consider space policy and space history as their own fields rather than separate subsets of technology in general.<sup>52</sup>

While the reasons Logsdon describes for Kennedy sending man to the moon are full of civil religion, he never explicitly uses the term. For example, Logsdon writes,

The decision to go to the Moon was a choice that reflected particularly American characteristics, such as the assumption that the U.S. democratic system of government was superior to all alternatives, that the United States was rightfully the exemplar for other nations, and that meeting challenges to the U.S. position as the leading world power justified the use of extensive national resources to achieve success.<sup>53</sup>

These “particularly American characteristics” that Logsdon talks about are all distinct aspects of American civil religion, and as I will show in this thesis, were many of the motivating factors that took place behind the scenes in Apollo.

According to Launius, the second most important study in space history is historian Walter McDougall’s Pulitzer Prize-winning ... *The Heavens and the Earth*.<sup>54</sup> McDougall details the beginnings of the Space Race and argues that Apollo was a competition between the United States and Soviet

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<sup>50</sup> Launius, “Interpreting the Moon Landings: Project Apollo and the Historians,” 226.

<sup>51</sup> *Ibid.*, 227.

<sup>52</sup> *Ibid.*, 229.

<sup>53</sup> Logsdon, *John F. Kennedy and the Race to the Moon*, 225.

<sup>54</sup> Walter A. McDougall, ... *The Heavens and the Earth: A Political History of the Space Age* (Baltimore: Johns Hopkins University Press, 1997). The title for McDougall’s book comes from the first verse of Genesis in the Bible, which is also the verse the Apollo 8 astronauts chose to read on their orbit around the Moon (see Chapter II for more).

Union for supremacy in science and technology in which the winner became the leader in other fields, such as politics, by extension.<sup>55</sup> McDougall's belief that Apollo was about national prestige is overshadowed by his idea that the Space Race gave rise to a "perpetual technological revolution" that changed the relationship between government and technology permanently.<sup>56</sup> As such, McDougall dedicates most of his book to the period before this thesis' study. McDougall himself "missed the first Moon landing,"<sup>57</sup> and attributes only three lonely paragraphs to the event in his nearly 600-page tome. The passage in question strays from his discussion of technology and politics when he declares, "In the United States, hopes and fears were the heartbeats of the quest [for the Moon], and they surfaced in the shouts and tears of millions when Apollo 11 landed in July 1969."<sup>58</sup> The fact that the "heartbeats" of Americans drove the success of the Apollo Program shows it was not the push for new technology that drove hundreds of people to watch the launch of Apollo 11, but the sense that America was proving its superiority to the world by landing man on the Moon.

### **Moving Forward and A Note On Sources**

Examining the Moon landing through civil religion reveals several truths about the event itself, as well as about civil religion. Civil religion gave birth to the Moon landing and the Moon landing became an event monumental to civil religion. This thesis will demonstrate the capabilities of civil religion, and will show that it is not merely a descriptive force, as well as give importance to the Moon landing through its relationship with civil religion. Chapter I will show that the values of civil religion fueled the space program's success in putting a man on the Moon both implicitly and explicitly. The values that NASA workers implicitly held are a commitment to liberty and justice, civic-mindedness, perseverance in the face of adversity and tragedy, self-sacrifice for the common

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<sup>55</sup> Launius, "Interpreting the Moon Landings: Project Apollo and the Historians," 229.

<sup>56</sup> McDougall, ... *The Heavens and the Earth*, 4–6.

<sup>57</sup> *Ibid.*, xix.

<sup>58</sup> *Ibid.*, 412.

good, and work toward a common goal or higher purpose. Explicitly, NASA employees demonstrated their adherence to civil religion through their belief in American exceptionalism, their sense of making history, and their use of symbols in the Apollo program. Finally, I will demonstrate how the Apollo astronauts embodied civil religion themselves, in effect foreshadowing the arguments of Chapter III.

Chapter II will examine how the celebrations surrounding the Moon landing used civil religion to broadcast America's values to the world, as well as to its own people during a period of turmoil. In studying the nationalist and universalist themes of the Moon landing, this chapter will show that an event that was broadcast "for all mankind," was in fact an event meant to further American interests. Additionally, this chapter will show that a subset of the American population opted out of, and sometimes actively protested, the Moonshot. These citizens did not catch the space bug, and instead translated their feelings of civil religion into other endeavors. At the same time, however, a small foreign population was able to gain cultural citizenship through participation in NASA and American civil religion.

The final chapter of this thesis will investigate modern references to the Moon landing. It will show that the Moon landing itself entered into civil religion as a symbolic event, and that invocation of the event is enough to rouse feelings and values of civil religion. Tracing references to the Moon landing through its anniversaries, this chapter will show that politicians invoke Apollo 11 and the Moon landing in order to inspire Americans to complete new endeavors. Because of this, I contend that the Moon landing has become a monument to American civil religion in the same vein as the Declaration of Independence or a bald eagle.

The evidence for this thesis comes from a wealth of interviews conducted for the NASA Johnson Space Center (JSC) Oral History Project. Starting in 1997, over 500 managers, engineers, technicians, doctors, and astronauts were interviewed for this project. In these interviews, they

recount their time at NASA, speak about what motivated them, and reflect on what it all means. The fact that these interviews took place more than 30 years after the events mentioned is not an obstacle to overcome; rather, it adds to the thesis because of the role myth and memory have in creating monuments. Plenty secondary research exists to provide the factual information behind the Moon landing, thus forgotten or embellished events described in the interviews need not be used. Many of the NASA technicians speak of the Moon landing as the most important event of their lives, and they cite their time working at NASA as some of the greatest days they had. Part of the third chapter of this thesis will examine the rhetoric in the interviews themselves. How the subjects talk about the Moon landing, and how the interviewers talk about the event, holds important evidence regarding how the event has transformed over time.

Additional sources for this project come from NASA records, newspaper articles, and congressional reports. Visual evidence in the form of video and photographs is also invaluable for documenting the response to the Moon landing, as well as the frenzy leading up to it. Here, the online records of the NASA History Division have been instrumental, as have some of the JSC interviews that included photos in their transcripts. Indications of civil religion's influence on the Moon landing also lie scattered throughout the secondary literature, both in source quotes and the rhetoric used to discuss it.

As stated previously, witnesses of the Moon landing already understand its importance in the form of the magic they themselves felt while watching Apollo 11 descend onto the surface of Earth's satellite. When describing this project to those who inquired, I immediately received a personal account at the first mention of "the Moon landing" or "Apollo 11." Those who were too young to have seen the event for themselves told me of relatives who worked for NASA, or parents who sent postcards to astronauts. These interactions show firsthand the impact of the Moon landing on American citizens. While the nation's regard for outer space and NASA has disintegrated since

the days of Apollo, merely mentioning the Moon landing is enough to bring back the notion that *we landed on the Moon; we can do anything*, and it is here that the Moon landing finds its importance in history. Not as a technological achievement; not as a contained cultural event, but as a landmark to the American creed.

# Chapter I

## To Strive, To Seek, To Find, and Not To Yield

“There were people who were talking about the end of the decade. ‘Heck, we can do it. We can be on the Moon in two years less than that.’ I don’t know what these people were smoking.”

Richard Battin, the Director of Space Guidance and Analysis at the Instrumentation Lab at MIT, April 2000.<sup>1</sup>

“It was an all-encompassing time of making an impossible dream come true.”

Alan Bean, Apollo 12 astronaut, June 1998.<sup>2</sup>



THINGS WERE NOT GOING WELL for Jack Kennedy. It was May 1961, and he had called for a special joint session of Congress for an address on “Urgent National Needs,” but his calls for increased measures to ensure economic growth, build up military power abroad, and for more focus on disarmament negotiations were not impressing his audience. Looking out onto the crowd he saw several bored Republicans taking lackluster notes and inspecting their fingernails.<sup>3</sup> Reaching the end of his speech, Kennedy “looked strained” in his effort to win over his opponents. He realized he would have to pack more of a punch if he wanted to inspire his government, let alone his people, in dedicating themselves to the task he was about to set for them. For the first time in his career, Kennedy deviated from his prepared remarks in a formal address in order to elaborate on the importance of his statement:

Finally, if we are to win the battle for men’s minds, the dramatic achievements in space which occurred in recent weeks should have

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<sup>1</sup> Richard H. Battin, interview by Rebecca Wright, 18 April 2000, 20, NASA Johnson Space Center Oral History Project.

<sup>2</sup> Alan L. Bean, interview by Michelle Kelly, 23 June 1998, 23, NASA Johnson Space Center Oral History Project.

<sup>3</sup> Logsdon, *John F. Kennedy and the Race to the Moon*, 115.

made clear to us all as did Sputnik in 1957, the impact of this adventure on the minds of men everywhere who are attempting to make a determination of which road they should take.<sup>4</sup>

Kennedy knew what was coming up, and he wanted to appeal to Congress' patriotism and belief in democracy to ensure it would be possible.

I believe that this nation should commit itself to achieving the goal, before this decade is out, of landing a man on the Moon and returning him safely to Earth...in a very real sense, it will not be one man going to the Moon — it will be an entire nation. For all of us must work to put him there.<sup>5</sup>

While the applause for his proposal struck Kennedy as “less than enthusiastic,”<sup>6</sup> the declaration took hold in the minds of many Americans, and the ripple it stirred carried man to the Moon. While exciting, this announcement caught many off guard. As Eugene Cernan, an astronaut on Apollo 10, put it, “We didn't know beans about going to the Moon.”<sup>7</sup> In fact, before Kennedy's speech, Americans had only spent 16 minutes in space.

President Kennedy's declaration to send an American to the Moon was a long-time coming. On 4 October 1957, the Soviet Union successfully launched the first artificial satellite into orbit around the Earth. Originally brushed off by American leaders, politicians were caught off guard by the fearful response Americans had to Sputnik. The press published misleading stories, convincing the public that Sputnik, a 184-pound metal satellite the size of a beach ball, meant the Russians had advanced missile technology, while in reality it was simply an orbiting chunk of metal.<sup>8</sup> Not only were Americans scared; they were also angry — it was an American satellite that should have been orbiting the Earth, not a Russian one! Reflecting back on Sputnik, Neil Armstrong said, “I guess it

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<sup>4</sup> Ibid., 113–114. The excerpt of JFK's speech Logsdon used in his book comes from the copy Kennedy used when he read it aloud. It includes Kennedy's handwritten insertions and can be found at the John F. Kennedy Library.

<sup>5</sup> Ibid., 114.

<sup>6</sup> Ibid., 115.

<sup>7</sup> Eugene Andrew Cernan, interview by Rebecca Wright, 11 December 2007, 22, NASA Johnson Space Center Oral History Project.

<sup>8</sup> Gerard Degroot, *Dark Side of the Moon: The Magnificent Madness of the American Lunar Quest*, (New York: NYU Press, 2006), 62.



was disappointing that a country who was the ‘evil empire’ in our minds at that time would be beating us in technology, where we thought we were preeminent. ...It did change our world. It absolutely changed our country’s view of what was happening, [and] the potential of space.”<sup>9</sup> Citizens started questioning why a communist country had launched a satellite before the United States had, setting off a domino effect of consequences. These consequences included President Dwight Eisenhower signing the National Aeronautics and Space Act in 1958, giving birth to NASA, and, ending with Kennedy announcing his goal of putting an American on the Moon.

After Sputnik, it was clear that the United States was behind on the Space Race, if only ever by a couple of steps. This became evident with Sputnik, and again on 12 April 1961 when Yuri Gagarin, a Russian, became the first man in space. For the second time in less than five years, the United States had come in second to the Soviet Union. Kennedy was not overwhelmed by this feat. In a news conference, he told reporters, “We are, I hope, going to go in other areas where we can be first and which will bring more long-range benefits to mankind.”<sup>10</sup> Kennedy’s casual attitude did not match that of the American people, who were “chagrined.”<sup>11</sup> Many shared the beliefs of *New York Times* correspondent Hanson Baldwin, who wrote, “the world — impressed by the spectacular Soviet firsts — believes that we lag militarily and technologically. The dangers of such false images to our military power and diplomacy are obvious. The neutral nations may come to believe the wave of the future is Russian; even our friends and allies could slough away.”<sup>12</sup>

Kennedy and his administration observed the feelings of the American people and the rhetoric of the press, and by 14 April, he could be heard saying “there’s nothing more important”

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<sup>9</sup> Neil A. Armstrong, interview by Stephen E. Ambrose and Douglas Brinkley, 19 September 2001, 38, NASA Johnson Space Center Oral History Project.

<sup>10</sup> Logsdon, *John F. Kennedy and the Race to the Moon*, 71.

<sup>11</sup> Owen G. Morris, interview by Summer Chick Bergen, 20 May 1999, 4, NASA Johnson Space Center Oral History Project.

<sup>12</sup> Quoted in Logsdon, *John F. Kennedy and the Race to the Moon*, 73.

than finding a way to overcome the Soviets in the Space Race.<sup>13</sup> Kennedy's change of heart took place because of a perfect storm that set the stage for him to take advantage of civil religion and propel himself and the country forward in history. Kennedy needed something to help his citizens and the world forget the Bay of Pigs debacle, as well as show that the United States maintained its superiority over the communist Soviet Union. The American people's reaction to Sputnik showed him that that something could be a Moonshot. Americans responded to Sputnik the way they did because civil religion dictated that a free and just society like the United States should triumph over a Communist society like the Soviet Union. Kennedy noticed this, and consequently he himself invoked civil religion in order to rally the people together.

Not all Americans bought into the necessity to send a man to the Moon. In June 1961 only forty-eight percent of Americans surveyed were in favor of the government funding human trips to the Moon.<sup>14</sup> Those that did support a Moonshot shared certain values part of civil religion, and these values spurred them on during the Space Race. In this chapter, I will show that civil religion and its values played both an implicit and an explicit role in contributing to the success of the space program.<sup>15</sup> First, I will detail the values that NASA employees remember inspired them to join the space program. These are their commitment to liberty and justice, as well as their civic-mindedness. Next, I will explain the work ethic that defined NASA during this time period. Values such as perseverance in the face of adversity and tragedy, self-sacrifice for the common good, and work toward a common purpose or higher goal routinely motivated NASA employees to do their best work, and resulted in a space program that moved at break-neck speed. During the Space Race, the values listed above elicited civil religion in an implicit way; the final portion of this chapter will highlight certain values that show civil religion also had an explicit presence throughout NASA.

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<sup>13</sup> Quoted in Logsdon, *John F. Kennedy and the Race to the Moon*, 71.

<sup>14</sup> Roger D. Launius, "Public Opinion Polls and Perceptions of US Human Spaceflight," *Space Policy* 19, no. 3 (2003): 167.

<sup>15</sup> See Introduction for a discussion on where these values came from and what the scholarly consensus is on them.

These values were the sense of exceptionalism and chosen-ness, which are closely related to the aura of history-in-the-making that surrounded NASA in the 1960s. Lastly, I will demonstrate how the symbols and presentation of Apollo embodied the civil religion in order to broadcast it to the world.

### **We Choose to Go To the Moon: Why Join NASA?**

During the Cold War, many Americans saw the world in black and white. Democracy and capitalism were good, communism — bad. The Soviet Union served as the antithesis to everything Americans believed in, chiefly liberty and justice, therefore many saw it as an enemy to be destroyed. One of the clearest battle platforms during the Cold War was the Space Race. If the United States beat Russia to the Moon, it would prove once and for all that America was superior to the Soviet Union. One of the strongest motivators for people to join NASA, then, was the opportunity to help defeat the communists. Anne Accola, a mission planning engineer in Houston, recalled being caught up in the Sputnik craze and listening to President Eisenhower tell school-aged children to “study math and science to catch up to the Russians.”<sup>16</sup> Additionally, Frank Borman, the commander of Apollo 8, joined the program specifically to beat the Russians to the Moon. He said, “My reason for joining NASA was to participate in the Apollo program, the lunar program, and hopefully beat the Russians,” adding, “I wanted to beat Kennedy’s goal — I wanted to meet Kennedy’s goal. But the more important thing to me was beating the Russians. There — this — I took very seriously this Cold War and the idea that we were somehow second-rate to a Communist country.”<sup>17</sup>

Once inside of NASA, the drive to beat the Russians continued to motivate workers. Henry Pohl, the chief of the Dynamic Systems Branch in Houston, said,

I am convinced that one reason that program was so successful was that 80 percent of the people that worked on it wanted to beat the Russians to the Moon. That was their main drive, was to beat the

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<sup>16</sup> Anne L. Accola, interview by Rebecca Wright, March 2005, 1, NASA Johnson Space Center Oral History Project.

<sup>17</sup> Frank Borman, interview by Catherine Harwood, 13 April 1999, 6, NASA Johnson Space Center Oral History Project.

Russians to the Moon. It was kind of a game between the engineers as to who was best and who could be first. We worked a lot of hours, long and hard, with that objective in mind of getting there before the Russians got there.<sup>18</sup>

For some, the race with the Russians was their primary motivator, but for others it was merely background noise. For example, Carl Shelley, the head of the Operations and Test Section in Houston, remembered, “We didn’t talk about it a lot per se, but everybody knew that we were in something of a competition. But I think all that did was made everyone more enthusiastic to get on with it.”<sup>19</sup> Others admitted to not wanting to have let the Soviets “be the first to plant the Red flag on the Moon.”<sup>20</sup> This commitment to beat the Russians, and therefore support liberty and justice, held throughout much of the space program.

Closely related to NASA employees’ commitment to liberty and justice was their value of civic-mindedness, or doing what is best for the country. During the Cold War, what was best for the country was to beat the Soviets to the Moon and accomplish President Kennedy’s goal, and many Americans took the opportunity to help by joining NASA. Frank Samonski, an engineer who worked in the Command Module Environmental Control System Office, divulged that he “was inspired by Kennedy’s speech in May of ’61 about the man on the Moon, and [he] was anxious to get to work on the Apollo Program. [He] really wanted to be a part of that, really deeply wanted to be a part of that.”<sup>21</sup> Similarly, Olav Smistad, the manager of the operations group in Earth Resources, described the “rah-rah patriotic background” of NASA, yet admitted, “it’s one of the significant reasons why I chose NASA, or perhaps NASA chose me.”<sup>22</sup> Kennedy’s goal gave

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<sup>18</sup> Henry Orien Pohl, interview by Summer Chick Bergen, 26 March 1999, 35, NASA Johnson Space Center Oral History Project.

<sup>19</sup> Carl B. Shelley, interview by Carol Butler, 14 April 2001, 19–20, NASA Johnson Space Center Oral History Project.

<sup>20</sup> Don Fuqua, interview by Catherine Harwood, 11 August 1999, 13, NASA Johnson Space Center Oral History Project.

<sup>21</sup> Frank H. Samonski, interview by Jennifer Ross-Nazzal, 30 December 2002, 22, NASA Johnson Space Center Oral History Project.

<sup>22</sup> Olav Smistad, interview by Carol Butler, 3 April 2002, 2, NASA Johnson Space Center Oral History Project.

Americans the opportunity to serve their country in a manner that best fit their talents, and, as shown above, many did so by joining the space program.

This desire to not let Kennedy down, as well as to not embarrass the country, drove many at NASA through the long hours and stressful times. J. Thomas Markley, a member of the Configuration Control Board in Houston, used to carry a small American flag, folded, in his suit pocket. Sitting in meetings filled with “gobbly-gook” and endless debate, he would get frustrated and pull the flag out of his pocket and say, “We’re here for a mission...We have a mission for the country and you either cooperate or don’t cooperate. I don’t care. But we’re going to make it happen with or without you.”<sup>23</sup> Others kept Kennedy in mind on a day-to-day basis without a physical object. For example, Elmer Barton, a contractor with NASA through the Air Force, thought of Kennedy’s original speech and said, “I know myself it inspired me that we have to do this job and it has to be done in such a manner that we don’t embarrass our country, we don’t embarrass ourselves. I think embarrassment just would have destroyed the United States.”<sup>24</sup> This civic-mindedness inspired NASA employees to put their best foot forward everyday. It shone through in the motivations of the workers, as well as the celebrations of their accomplishments.

### **All Work and No Play: Civil Religion and the Work Culture of NASA**

Before Kennedy’s proclamation, the Moon was not on the horizon as a target for one of NASA’s projects.<sup>25</sup> Nevertheless, the engineers and administrators at NASA quickly jumped on board, and several thousands of new workers were attracted to the program. That is not to say that there was no hesitation involved in the process. During Kennedy’s congressional address, Bob Gilruth, the director of the Manned Spacecraft Center at NASA, shook his head and said, “I just don’t know

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<sup>23</sup> J. Thomas Markley, interview by Carol Butler, 24 June 1999, 49, NASA Johnson Space Center Oral History Project.

<sup>24</sup> Elmer E. Barton, interview by Rebecca Wright, 12 April 2000, 20, NASA Johnson Space Center Oral History Project.

<sup>25</sup> J. Thomas Markley, 12.

how we're ever going to do it. I just didn't think we were ever going to be able to do that."<sup>26</sup> Others described Kennedy's challenge as, "Mind-boggling,"<sup>27</sup> "way out of sight,"<sup>28</sup> "frightening,"<sup>29</sup> as well as, "wild [and] unreachable."<sup>30</sup> Several NASA employees were "flabbergasted"<sup>31</sup> and "overwhelmed."<sup>32</sup> A few even expressed doubt in Kennedy himself. Max Faget, the director of Engineering and Development in Houston, reportedly said, "What in the hell is he talking about? We haven't even flown the first Mercury [the precursor to Apollo], and...we're supposed to land on the Moon?" in response to Kennedy's announcement.<sup>33</sup> These reactions within the organization tasked with fulfilling Kennedy's goal highlight how difficult the challenge was for NASA. However, the workers at NASA had a quality that allowed them to persevere in the face of adversity, like the challenge posed by Kennedy's goal. This quality appeared because of the civil religion value of continuing steadfast in the face of adversity or tragedy.

NASA workers' belief in themselves despite the evidence citing their disadvantage appeared most clearly when they addressed the gulf between themselves and the Russians at the beginning of the program. Bruce Jackson, a manager in the engineering office in Houston, recollected how they would simply have to "Catch up. Catch up. Do it. We were down because we didn't make it before they did. That didn't stop us. That didn't dishearten us. Full speed ahead. Go. Let's get there as fast

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<sup>26</sup> Donald Thomas Gregory, interview by Carol Butler, 20 October 2000, 36, NASA Johnson Space Center Oral History Project.

<sup>27</sup> Aleck C. Bond, interview by Summer Chick Bergen, 25 August 1998, 22, NASA Johnson Space Center Oral History Project.

<sup>28</sup> Carroll H. "Pete" Woodling, interview by Carol Butler, 19 January 2000, 8, NASA Johnson Space Center Oral History Project.

<sup>29</sup> Catherine T. Osgood, interview by Rebecca Wright, 15 November 1999, 25, NASA Johnson Space Center Oral History Project.

<sup>30</sup> Charles R. Haines, interview by Kevin M. Rusnak, 7 November 2000, 5, NASA Johnson Space Center Oral History Project.

<sup>31</sup> Charles Joseph Donlan, interview by Jim Slade, 27 April 1998, 29, NASA Johnson Space Center Oral History Project.

<sup>32</sup> Glynn S. Lunney, interview by Roy Neal, 9 March 1998, 24, NASA Johnson Space Center Oral History Project.

<sup>33</sup> Olav Smistad, 18.

as we can.”<sup>34</sup> When the news hit that Russian Yuri Gagarin had become the first human to travel into space, as well as the first to orbit the Earth, the chief of the Command Service Module Systems Branch, Arnold Aldrich’s first impression was, “‘Well, we’re going to catch right up. We’re going to get there.’ We didn’t feel put down, I don’t think. We just felt disappointed we didn’t get there first, but we were just about to be there too.”<sup>35</sup> When Charles Haines, a systems engineer, heard the news about Sputnik, his first thoughts were that he would have to start working harder.<sup>36</sup>

The boldness of the space program caused it to move very quickly. By February 1967, NASA was ready for its first manned Apollo mission. Whether this speed led to tragedy or if tragedy would have struck regardless is an open question. However, on 27 January 1967, roughly a month before its scheduled launch, the crew of Apollo 1 died in a command module fire during a practice simulation.<sup>37</sup> Commander Virgil “Gus” Grissom, Senior Pilot Edward White, and Pilot Roger Chaffee were practicing for the launch of what would be a two-week mission in low Earth orbit testing the equipment that would take man to the Moon when a fire broke out in their cockpit. Because of the pure oxygen in the craft, the fire quickly spread and reached a temperature of 2,000 degrees Fahrenheit within seconds. There were no safety mechanisms installed to help the astronauts open the hatch sealing them in or to vent the atmosphere to get rid of the excess oxygen. All three men died of asphyxiation within seconds of the fire spreading.<sup>38</sup>

The astronauts knew the risks associated with space flight. Grissom himself once said, “If we die, we want people to accept it. We are in a risky business, and we hope that if anything happens to

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<sup>34</sup> Bruce G. Jackson, interview by Sandra Johnson, 23 March 2009, 13, NASA Johnson Space Center Oral History Project.

<sup>35</sup> Arnold Deane Aldrich, interview by Kevin M. Rusnak, 24 June 2000, 23, NASA Johnson Space Center Oral History Project.

<sup>36</sup> Charles R. Haines, 4.

<sup>37</sup> “Apollo 1: The Fire, 27 January 1967,” *NASA History*, (17 April 2015), [http://history.nasa.gov/SP-4029/Apollo\\_01a\\_Summary.htm](http://history.nasa.gov/SP-4029/Apollo_01a_Summary.htm).

<sup>38</sup> Degroot, *Dark Side of the Moon*, 207–209.

us it will not delay the program. The conquest of space is worth the risk of life.”<sup>39</sup> Indeed, in behavior symbolic of their refusal to bow down to tragedy and hardship, NASA leadership and engineers pressed onwards. William Kelly, the chief of the Spacecraft Support Systems Contract Engineering Branch, said, “I would imagine that most of America did not believe we’d make it by the end of the decade once we had the fire problem, but the NASA people buckled down and said, ‘That’s just another challenge we’re going to overcome.’ And we did.”<sup>40</sup> After putting Grissom, White, and Chaffee to rest with full military honors, NASA workers got right to work diagnosing their failures and repairing them.

While the fire forced NASA to slow down slightly, many believed it was actually the reason they were able to make it to the Moon before the end of the ‘60s. For example, John Boynton, a contractor with NASA, said, “It was a horrible thing but again I look at it in two ways, that without the fire we would have not landed on the Moon. We wouldn’t have achieved that, so the culture did change because of the fire, because it was a horrible thing. Everybody was touched by that.”<sup>41</sup> The sacrifice by the crew of Apollo 1 reoriented everyone at NASA to what they were trying to accomplish. They proceeded more carefully, and because of what they had learned in the disaster, they were able to design and build the machinery that would, nearly two and a half years later, successfully put man on the Moon.

Tied closely to the value of working toward a common goal and a higher good is the value of self-sacrifice for the common good, and while the crew of Apollo 1 made the ultimate sacrifice, many workers at NASA made small sacrifices in their day-to-day lives. Civil religion holds that the country is ultimately higher than the self, therefore any sort of personal sacrifice for the betterment of the country is valued. NASA employees working on the Apollo program certainly exhibited self-

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<sup>39</sup> Quoted in “Space: ‘To Strive, To See, To Find, And Not To Yield...,’” *Time Magazine*, 3 February 1967, 13.

<sup>40</sup> William R. Kelly, interview by Sandra Johnson, 5 February 2002, 9, NASA Johnson Space Center Oral History Project.

<sup>41</sup> John H. Boynton, interview by Rebecca Wright, 6 March 2009, 59, NASA Johnson Space Center Oral History Project.



sacrifice. This is evident in the memories of day-to-day work life of several employees. Jack Warren, a geologist in Houston, remembered, “We worked a lot of hours, but we worked together. If there was a problem and we might not have money for overtime, people worked without being paid, on several different occasions.”<sup>42</sup> John Annexstad, another geologist, recalled, “it was so exciting that I think the average person was working fifty, sixty, seventy hours a week. We’d come into the lab and we would work extra hours. We would work in the evenings. We would come in on weekends. Nobody ever worried about time or anything like that. We were all mission-oriented.”<sup>43</sup> Several other employees remember spending days at work without ever going home. For nights like these, employees would make use of the staff bunkroom, which was equipped with bunk beds, showers, and even a kitchen. Additionally, there were easy chairs and television sets that employees could use to help unwind before returning to work.<sup>44</sup>

The individuals mentioned above were not the only ones sacrificing their lives for the Apollo program; their family members also faced sacrifices. Joseph Cuzzupoli, a contractor with NASA through the North American Rockwell Corporation, said confidently, “Our families, when our kids were growing up, and our wives are the ones that are the heroes during those days, because we really did not spend any time at home.”<sup>45</sup> Another worker, Hector Garcia, recalled that his wife did not like his long hours too much, however, he placated her by repeating over and over again that he had to accomplish his mandate from the President.<sup>46</sup> While the wives of regular NASA workers certainly had it bad, none had it worse than the wives of the astronauts themselves. The Apollo 1 tragedy was always in their minds as they waited for their husbands to come home, and on the day that Aldrin

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<sup>42</sup> Jack L. Warren, interview by Sandra Johnson, 12 August 2008, 23, NASA Johnson Space Center Oral History Project.

<sup>43</sup> John Owen Annexstad, interview by Carol Butler, 15 March 2001, 33, NASA Johnson Space Center Oral History Project.

<sup>44</sup> T. Rodney Loe, interview by Carol Butler, 7 November 2001, 40–41, NASA Johnson Space Center Oral History Project.

<sup>45</sup> Joseph W. Cuzzupoli, interview by Summer Chick Bergen, 19 January 1999, 16, NASA Johnson Space Center Oral History Project.

<sup>46</sup> Hector Garcia, Jr, interview by Rebecca Wright, 10 March 2010, 32, NASA Johnson Space Center Oral History Project.

and Armstrong walked on the Moon, it is unlikely that anyone in America was as anxious as their wives.<sup>47</sup>

An important tenet of civil religion is the importance placed in working toward a common purpose or higher goal. At NASA, this came across as teamwork and the knowledge that each individual was a small piece in a much larger picture. In his 2001 interview, Ernest Randall, an electrical engineer, said, “Let’s face it, landing a man on the Moon is the last decent goal NASA has had. We had a goal. You were working toward the goal. Guys worked themselves to death for that goal.”<sup>48</sup> Another NASA employee, Glynn Lunney, the chief of the Flight Director’s Office, was convinced that this goal was the strongest motivator for workers at NASA. He said, “the program had this energy that was pervasive, and everybody that worked on the program for all parts of it, you know, down to the janitor and the guards who were around...But there was a sense of electricity and intensity and excitement about the whole thing... [there was a] tremendous sense of adrenaline flowing, excitement in people, common goal pulling everybody toward it.”<sup>49</sup> Both men described how the goal Kennedy set for the country motivated NASA employees through the decade. Several others acknowledged how important the entire system working on the Apollo project was; it was truly a team effort.

It was not just the work toward a simple common purpose that motivated individuals at NASA. The fact that they were working toward a higher goal, or something larger than themselves, also sparked workers to work their hardest. As John Hirasaki, a systems engineer, recalled, “You were part of a program that the President [inspired, and his goal], it pressed everybody...And I think that’s why everybody who was involved in the program at that time [believed], ‘I’m doing something

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<sup>47</sup> See, for example, Gene Farmer and Dora Jane Hamblin, *First on the Moon: A Voyage with Neil Armstrong, Michael Collins, Edwin E. Aldrin Jr.* (Boston, MA: Little, Brown and Company Inc., 1970).

<sup>48</sup> Ernest L. “Ernie” Randall, interview by Kevin M. Rusnak, 2 August 2001, 29, NASA Johnson Space Center Oral History Project.

<sup>49</sup> Glynn S. Lunney, interview by Carol Butler, 8 February 1999, 26–27, NASA Johnson Space Center Oral History Project.

important. I'm part of something that's much bigger than myself.' It was just a great feeling."<sup>50</sup>

Everyone acknowledged that helping to put a man on the Moon was most likely the most important endeavor they would work on in their lives, and this fact motivated them to do their best work.

Referring to his colleagues, Robert Carlton, an engineer in mission control, said, "Every one of them, it don't matter what he did, probably even if he swept the floor in the plant up at McDonnell Douglas, there's a sense of 'I did my part in that.'"<sup>51</sup> The knowledge that the results of their work as a whole would be more important than what they individually could accomplish spurred workers to actually work together and let petty disputes slide.<sup>52</sup> The ultimate effect of this shared mindset was an atmosphere in which work was done at an unbelievable pace, and where, everyday, workers were able to revel in the fact that what they were doing had a larger purpose — to serve the country.

A side effect of this ever-present goal was the fact that several NASA employees recalled missing key events of the 1960s. As Alan Bean, an astronaut on Apollo 12, remembers, "You didn't give a damn there was a riot. You didn't care whether they were marching in Mississippi. You didn't have time."<sup>53</sup> Part of this insulation from the outside world was due to the tunnel vision produced by Kennedy's goal. Ronald Berry, the head of the Maneuver Analysis Section in Houston, remembered, "We were so totally focused and consumed by the mission, that we had very little time for anything else."<sup>54</sup> The cocoon effect also occurred because of the communities NASA employees lived in. After the space center was built, housing sprouted around the Manned Spacecraft Center in Houston for the engineers and their families. In these communities, it was rare to have a neighbor who was not involved in the space program. This made it so that, even during recreation times,

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<sup>50</sup> John K. Hirasaki, interview by Sandra Johnson, 6 March 2009, 5–6, NASA Johnson Space Center Oral History Project.

<sup>51</sup> Robert L. Carlton, interview by Kevin M. Rusnak, 10 April 2001, 20, NASA Johnson Space Center Oral History Project. The McDonnell Douglas plant was one of the largest aerospace manufacturing plants in the country at the time.

<sup>52</sup> Ronald L. Berry, interview by Carol Butler, 18 October 2000, 19, NASA Johnson Space Center Oral History Project.

<sup>53</sup> Alan L. Bean, 22.

<sup>54</sup> Ronald L. Berry, 12.

people talked to each other about Apollo and outer space.<sup>55</sup> For those who were aware of the outside world, Lunney remembered, “You got a sense that there was an impending just blowup of all these things going on, but we were on this little island with all this going on around us, and yet we were able to focus on the stuff that we had to do, and in that sense it gave us something that we could control personally and something that we could go do and contribute to, and we could do it every day.”<sup>56</sup> This tunnel vision, positive or negative, allowed workers to stay focused on the tasks at hand.

### **Explicit Manifestations of Civil Religion**

Another part of civil religion is the belief in a “distinctive God-given destiny of the American nation.”<sup>57</sup> This was very evident throughout NASA, not only in the confidence that the employees had, but also in their descriptions of the sense of importance they had. For example, Lunney said, “I always had the sense that we were involved in a significant activity of our time, significant for our country and for our country’s position in the world...I’ve always felt like we were, and I was a steward.”<sup>58</sup> Similarly, Hirasaki noticed that many people joined the program because it gave them the opportunity to do something that had never been done before, “something important...something that’s much bigger than [ourselves].”<sup>59</sup> For many, there was a “sense of history[,] of the history being made,”<sup>60</sup> working for NASA, and one worker even believed that they

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<sup>55</sup> Charles R. Haines, 5–6.

<sup>56</sup> Glynn S. Lunney, 8 February 1999, 45.

<sup>57</sup> Wilson, “American Heavens: Apollo and the Civil Religion,” 213.

<sup>58</sup> Glynn S. Lunney, 8 February 1999, 44.

<sup>59</sup> John K. Hirasaki, 5–6.

<sup>60</sup> Ronald L. Berry, 21.

“had a destiny to go to the Moon.”<sup>61</sup> This sense of history and destiny fueled the Apollo Program — especially when the challenges seemed to overcome the successes.

Several NASA workers felt almost invincible when it came to project Apollo [the astronauts] left. I think that’s a testimonial to what we can do if we really want to do something badly enough and do it well.”<sup>62</sup> While he was mostly speaking metaphorically, Cernan was accurate when he described the sense of destiny that all NASA employees had. Dorothy Lee, a nurse in the astronaut corps, said she always knew they would accomplish Kennedy’s goal.<sup>63</sup> Aldrich remembered that, “we always had this feeling of confidence, that we could do what we were going to do. That’s how we waded into it.”<sup>64</sup> Charles Berry, a doctor with the astronaut corps, added, “I don’t think I ever thought in my mind that we wouldn’t do it. And that’s strange. I’ve thought back about that several times and I’ve wondered why did I not think that there was a possibility that we weren’t going to be able to do that.”<sup>65</sup> The reason Berry and the others did not question the ability of the United States to put a man on the Moon was their deeply seeded belief in American exceptionalism. America was the greatest country on Earth, and since the greatest *people* on Earth were working at NASA, there was no reason their project would not succeed. Like any self-fulfilling prophecy, it was this confidence that allowed Americans to succeed, and for Armstrong to step foot on the Moon.

Throughout the nation’s history, exceptionalism, or the idea that America has a destiny to accomplish what other nations cannot, has pushed Americans to complete unbelievable tasks, and the work of putting a man on the Moon was no exception. Kenneth Kleinknecht’s memory that, “I never thought about the difficulties. I thought about how can we get it done. It certainly was a

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<sup>61</sup> Thomas P. Stafford, interview by William Vantine, 15 October 1997, 31, NASA Johnson Space Center Oral History Project.

<sup>62</sup> Eugene Andrew Cernan, 54.

<sup>63</sup> Dorothy B. Lee, interview by Rebecca Wright, 19 November 1999, 41, NASA Johnson Space Center Oral History Project.

<sup>64</sup> Arnold Deane Aldrich, 65.

<sup>65</sup> Charles A. Berry, interview by Carol Butler, 29 April 1999, 50, NASA Johnson Space Center Oral History Project.

challenge, but I think technologically this country can do everything it sets its mind to do,” reflects the sense of exceptionalism at NASA.<sup>66</sup> Similarly, Robert Smylie, an assistant chief in Apollo Support, recalled, “I guess I didn’t give a lot of thought as to whether we could or couldn’t. I just assumed we could, and went [to work].”<sup>67</sup> The fact that NASA workers were able to peer into their crystal ball and foresee the success of their mission is not indicative of any type of actual fortune telling; rather it shows how civil religion gave them confidence in their nation and their values, and ultimately it was these values that did allow them to succeed.

The effect of the explicit civil religion present in the space program created a world in which it seemed the United States had already accomplished its goal in putting a man on the Moon. NASA employees felt that they could not fail, so before they even completed their mission they were already lauding their place in history. Ronald Berry remembered, “Everybody had a very strong sense of the history being made. This added to the excitement. We were excited enough, trying to meet all the schedules, but the sense of history was extremely strong.” Ivy Hooks, an aerospace engineer, described the sense of history being so strong that, “I felt like...what a sail-maker might have felt like who worked on the ships for Columbus.”<sup>68</sup> In fact, Columbus shows up very frequently in the NASA oral histories. The reason for this goes all the way back to the discovery of America. Columbus’ desire to explore inspired Americans to do the same. Just as early Americans had a Manifest Destiny to push West and claim the entire North American continent as their own, Americans at NASA felt they had a destiny to push out of Earth’s atmosphere and explore the far reaches of space.

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<sup>66</sup> Kenneth “Kenny” Samuel Kleinknecht, interview by Carol Butler, 10 September 1998, 8, NASA Johnson Space Center Oral History Project.

<sup>67</sup> Robert E. “Ed” Smylie, interview by Carol Butler, 17 April 1999, 7, NASA Johnson Space Center Oral History Project.

<sup>68</sup> Ivy F. Hooks, interview by Rebecca Wright, 24 March 2009, 7–8, NASA Johnson Space Center Oral History Project.

Columbus' impact on history was actually minimal in his own time; it was not until 100 years after his discovery that he emerged as a symbol for exploration and accomplishment.<sup>69</sup> As historian John Noble explains, "Columbus came to epitomize the explorer and discoverer, the man of vision and audacity, the hero who overcame opposition and adversity to change history." In the revolutionary years, Americans adopted Columbus as their first national hero, and named their capitol for him. It is for these reasons that NASA workers compared themselves to Columbus; ironically, while he himself was Italian, he symbolized all that it meant to be American. By evoking Columbus, NASA engineers remembered the hardships that he faced on his journey West, but they also recalled how he surpassed these challenges to discover a new world. They brought up Columbus to remind themselves that they too could hurdle over the difficulties thrown their way, and that they too could explore the unknown. The final and most powerful homage to Columbus is perhaps the fact that the astronauts chose to name the command module of Apollo 11 Columbia. They "wanted the [name of the module] to reflect a degree of American pride," and they accomplished this with a name that "[reflects] the sense of adventure and exploration and seriousness with which Columbus undertook his assignment in 1492."<sup>70</sup>

## Symbolizing Apollo

I have explained how civil religion was a key motivator of the Apollo mission, and how civil religion influenced the working environment within the space program. What is left, then, is to describe how the symbols that came to represent Apollo also represented civil religion. In the same vein that the astronauts named part of the Apollo 11 spacecraft Columbia, the use of symbols invoking civil

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<sup>69</sup> John Noble Wilford, "Discovering Columbus," *The New York Times*, 11 August 1991, <http://www.nytimes.com/1991/08/11/magazine/discovering-columbus.html>.

<sup>70</sup> Farmer and Hamblin, *First on the Moon: A Voyage with Neil Armstrong, Michael Collins, Edwin E. Aldrin Jr.*, 248. Columbus also inspired Jules Verne to name his fictional spacecraft that went to the Moon Columbiad, which was another factor in the astronauts' choice of name.

religion was no accident. Rather, these symbols were deliberately chosen *to* represent American values. Earlier spacecraft that were part of the Apollo program had names such as The Spirit of '76, Liberty Bell, Faith, and Freedom.<sup>71</sup> Inspired by certain values of civil religion, the symbols of the Apollo program served as a reminder to what NASA was trying to accomplish and why it was so important. The original insignia of the first Apollo mission, before tragedy struck, was a depiction of the Earth against the background of the American flag. The three names of the crewmembers surrounded the Earth and a module is shown moving toward the Moon.<sup>72</sup> The patch invokes Kennedy's goal, as well as the fact that NASA was going to the Moon for its country. The fact that only a small portion of the Earth is shown, and that this portion is the southeastern corner of the United States, also serves to highlight this.



*Nasa.gov*

The insignias of Apollos 7-10 focused on technical aspects, such as their flight paths or testing of the lunar module. Once it was made clear, however, that Apollo 11 would be the flight to land on the Moon, NASA reverted back to symbolism steeped in civil religion. The patch for Apollo 11 immediately brings to mind the seal of the United States. It shows a small Earth against the black background of space as an American eagle lands triumphantly on the Moon. In its talons is an olive branch, signifying the peacefulness of the mission. Notably, the patch is the first of the Apollo

<sup>71</sup> Wilson, "American Heavens: Apollo and the Civil Religion," 222.

<sup>72</sup> Cheryl L. Mansfield, "Apollo 1," *NASA*, 16 March 2015, [http://www.nasa.gov/mission\\_pages/apollo/missions/apollo1.html](http://www.nasa.gov/mission_pages/apollo/missions/apollo1.html).



insignias to not carry the names of its crewmembers.<sup>73</sup> The message is clear: America has left Earth behind and has taken the Moon. The use of the bald eagle, a symbol representing the boldness of the American people, invokes several values of the civil religion, such as the commitment to liberty and justice.<sup>74</sup>



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While physical symbols are certainly important in helping to convey civic pride, no symbol more effectively communicated civil religion than the astronaut. American journalist Hugh Sidney once observed that whenever President Richard Nixon came into contact with an Apollo astronaut, “the color comes to his face and the bounce to his step.” He believed that the astronauts were “the distillers of what Nixon considers to be the best in this country.”<sup>75</sup> Indeed, the men NASA was sending into space were “stereotypically American.”<sup>76</sup> The majority of the original astronauts were military test pilots, thus they had already proved to exhibit the qualities necessary to represent the United States. The manned space program came about as a response to the launch of Sputnik, and for NASA, the astronauts were “exactly the kind of loyal, modest men America needed to confront the Soviet Union in space,” who were “characteristically American figures — honest, energetic,

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<sup>73</sup> Sarah Loff, “Apollo 11 Mission Overview,” Text, *NASA*, (17 April 2015), [http://www.nasa.gov/mission\\_pages/apollo/missions/apollo11.html](http://www.nasa.gov/mission_pages/apollo/missions/apollo11.html).

<sup>74</sup> When viewing images like this I like to imagine what would have happened had Benjamin Franklin gotten his wish and the turkey became the symbol of America. Obviously, a turkey landing on the Moon does not have the same visceral impact as the bald eagle.

<sup>75</sup> John M. Logsdon, *After Apollo?* (New York: Palgrave Macmillan, 2015), 9.

<sup>76</sup> Matthew H. Hersch, *Inventing the American Astronaut* (New York: Palgrave Macmillan, 2012), 25.

reverent — [and] who would master space technology and claim America’s rightful place in the heavens.”<sup>77</sup>

As Matthew Hersch writes in his book *Inventing the American Astronaut*, the astronauts “personified the competence of the space program and so thoroughly represented American values — courage, service, faithfulness — that any failure on their part would have reflected poorly on the nation that produced them.”<sup>78</sup> Similarly, Charlie Duke, the Capsule Communicator for Apollo 11, explained in his interview that many current and former astronauts have been Eagle Scouts — the highest rank in Boy Scouting. He believed that this is no coincidence, and said, “I learned in Scouts responsibility, dedication, perseverance, goal-setting, patriotism...”<sup>79</sup> This shows that the personality attracted to the job of astronaut is one that upholds values of the civil religion — civic-mindedness, teamwork, and perseverance, among others.

As Chapter III will show, the civil religion that gave birth to the Apollo program soon came to be represented by it. Astronauts demonstrate this on a micro level. The position of astronaut was created out of necessity by civil religion, and the men chosen to fill the role exemplified civil religion through their own values and actions. It was not long before the astronaut himself became a symbol of the values behind the space program and all that it stood for.<sup>80</sup> Their jobs made the astronauts heroes. In fact, while interviewing John Glenn, the first American to orbit the Earth, the interviewer referred to him as “America’s first hero.”<sup>81</sup> Indeed, Glenn was such an important symbol for the United States and NASA that after his first flight he never went on another mission into space.

Glenn speculated that, “President Kennedy — I don’t know whether he was afraid of the political

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<sup>77</sup> Ibid., 26.

<sup>78</sup> Ibid., 70.

<sup>79</sup> Charles Moss Duke, Jr., interview by Doug Ward, 12 March 1999, 1, NASA Johnson Space Center Oral History Project.

<sup>80</sup> I say “himself” because while the Russians first sent a woman into space in 1963, it wasn’t until 1983 when NASA’s first female astronaut flew on a mission outside of Earth’s atmosphere.

<sup>81</sup> John Herschel Glenn, Jr., interview by Sheree Scarborough, 25 August 1997, 21, NASA Johnson Space Center Oral History Project.

fallout or what would happen if I got bagged on another flight. I don't know what it was, but apparently he didn't want me used again right away."<sup>82</sup> Indeed, the death of an American hero would have meant not just the failure of the country, but the failure of its civil religion and values as well.

## Conclusion

A few days before he was assassinated, President Kennedy made a statement about the viability of the space program. He said, "There will be, as there always are, pressures in this country to do less in this area as in so many others, and temptations to do something else that is perhaps easier... This space effort must go on... This Nation has tossed its cap over the wall of space, and we have no choice but to follow it."<sup>83</sup> The space program was born out of a commitment to liberty and justice, as well as civic-mindedness. It prospered because of workers' self-sacrifice and work toward a higher purpose. The feasibility of the project was not questioned due to the shared belief in American exceptionalism, and Apollo was able to recover after terrible tragedy because of NASA's employees' perseverance in the face of adversity. Because of Kennedy, the nation did throw its cap over the wall of space, but it is because of civil religion that the nation was able to rise to the challenge and retrieve it.

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<sup>82</sup> Ibid., 23.

<sup>83</sup> Quoted in Logsdon, *John F. Kennedy and the Race to the Moon*, 222.

## Chapter II

# The Greatest Week in the History of the World Since the Creation

“That’s one small step for man, one giant leap for mankind.”

Neil A. Armstrong’s first words when stepping onto the surface of the Moon, 1969.<sup>1</sup>

“I couldn’t go to sleep... I walked outside the Control Center and looked up, saw the Moon, and thought, ‘You know, I am part of history. This is incredible. Here I am sitting here looking at the Moon, knowing that there’s somebody there looking back.’ ...My eyes were like silver dollars. There was absolutely no way I was going to go to sleep, no way. I got up, got dressed, went back down to the console, and I sit behind the guy [working his shift] and just watched what was going on. Just listened; plugged in beside him and just listened, watched. I was awake the entire time we were on the Moon... I really felt a sense of accomplishment. I felt like it was something I was proud to be a part of.”

David W. Whittle, an electrical engineer at NASA, commenting on the Moon landing, February 2006.<sup>2</sup>

“This albino crewcut [Neil Armstrong] has been selected with more precision than the American machine selects a president. Man, this cat is the unknown soldier from Arlington Cemetery, resurrected just for this special mission. A number one all American cracker.”

Abbie Hoffman, writing for *The Madison Kaleidoscope*, an underground newspaper, circa 1969.<sup>3</sup>



THE MORNING OF 21 DECEMBER 1968, several thousand Americans visited Cape Canaveral, Florida to watch the crew of Apollo 8 launch into space using the Saturn V rocket. This was the first manned mission aboard the rocket that would carry Apollo 11 to the Moon seven months later, and the crew made up of Commander Frank Borman, Command Module Pilot James Lovell, and Lunar Module

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<sup>1</sup> Data Logistics Office, “Apollo 11: Technical Air-To-Ground Voice Transcription” (Manned Spacecraft Center, Houston, Texas, July 1969), 248.

<sup>2</sup> David W. Whittle, interview by Sandra Johnson, 16 February 2006, 22, NASA Johnson Space Center Oral History Project.

<sup>3</sup> Abbie Hoffman, “Proud to Be an Earthman; Ashamed to Be an American,” *Madison Kaleidoscope*, n.d., 14, Independent Voices.

Pilot William Anders were well aware of the importance of their undertaking.<sup>4</sup> Their job was to leave Earth's orbit for the first time in order to go around the Moon. It would be the furthest distance man had ever been away from his home. Watching the liftoff, Anne Morrow Lindbergh, the wife of aviator Charles Lindbergh, remarked, "The earth shakes; cars rattle; vibrations beat in the chest. A roll of thunder, prolonged, prolonged, prolonged. I...put my hands to my ears, holding my head to keep it steady...My eyes are fixed on the rocket, mesmerized by its slow ascent."<sup>5</sup> After watching the same rocket take Apollo 11 to the Moon, Norman Mailer concluded, "man now had something with which to speak to God," so impressive was the Saturn V.<sup>6</sup> Fired poured out the bottom of the rocket, and it lifted up, as in slow motion. As it climbed higher and higher, reaching toward heaven, hundreds of birds filled the sky — frightened out of their perches in nearby trees and marsh.<sup>7</sup> Man was on his way to the Moon.

Once Apollo 8 had settled into its orbit around the Moon, the astronauts started broadcasting live back to Planet Earth. As they passed over the Sea of Tranquility, the future landing site of Apollo 11, the Module started making its journey to the dark side of the Moon, where all communications with Earth would be cut off. Anders spoke to his audience back home.

We are now approaching lunar sunrise, and for all the people back on Earth, the crew of Apollo 8 has a message that we would like to send to you: '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, and that it was good.'<sup>8</sup>

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<sup>4</sup> "Apollo 8 Press Kit" (Washington, DC: National Aeronautics and Space Administration, 15 December 1968), 1, NASA History Division.

<sup>5</sup> Quoted in Tribbe, *No Requiem for the Space Age*, 96.

<sup>6</sup> Norman Mailer, *Of a Fire on the Moon*, (New York: Random House Trade Paperbacks, 2014), 98.

<sup>7</sup> Tribbe, *No Requiem for the Space Age*, 96.

<sup>8</sup> "Apollo 8 Onboard Voice Transcription" (Manned Spacecraft Center: National Aeronautics and Space Administration, January 1969), 195, NASA History Division.

People all over the world hung onto the astronaut's every word as they took turns reading the creation story from the book of Genesis.<sup>9</sup>

While NASA would face the ire of American atheists for the astronauts' choice to read the Bible on their mission, I believe this act is more reflected of civil religion than it is of religion in the typical sense. While it does come from the Bible, the passage read features only God and the Earth, and no other prophets. If the astronauts were hoping to celebrate Christmas in space, they could have chosen a chapter from the New Testament. Instead, they read a section from the Old Testament that permeates into all major religions in order to unify the people watching at home. An important belief in the civil religion is the belief that God guides America, and that the American people are destined to accomplish his plan for them. This God, however, is non-biblical; he cares for all of America's peoples and can be mentioned without invoking Christ. The fact that the Old Testament was used, then, shows that this was the God the Apollo 8 crew was invoking.

In Mission Control, Eugene Kranz, the man who would be the flight director of Apollo 11, was mesmerized. He was having the most "magical" Christmas Eve he had ever experienced. As he listened to the transmission coming in, "It was literally magic. It made you prickly. You could feel the hairs on your arms rising, and the emotion was just unbelievable."<sup>10</sup> What was a *magical* feeling for Kranz translated into a religious feeling for others. Glynn Lunney talked about "a sense of, maybe we were being looked after...I talked about my Control Center as a church...I felt very — I *feel* very emotional and personal about it all."<sup>11</sup> Whether it was for religious reasons, or because the engineers in Mission Control could finally breath a sigh of relief, Thomas Loe, the Electrical, Environmental, and Communications Controller in Houston, recalled, "I'm not sure there was a dry

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<sup>9</sup> David Meerman Scott, Richard Jurek, and Eugene A. Cernan, *Marketing the Moon: The Selling of the Apollo Lunar Program* (MIT Press, 2014), 64.

<sup>10</sup> Eugene F. Kranz, interview by Rebecca Wright, 8 January 1999, 17–18, NASA Johnson Space Center Oral History Project.

<sup>11</sup> Glynn S. Lunney, 9 March 1998, 54.

eye in the whole control center that night.”<sup>12</sup> Many NASA men and women attribute the magic in the Control Center to the patriotic feelings they had while watching Apollo 8 come back around from the dark side of the Moon. After numerous defeats by the Russians, as well as a tragedy on its own turf, NASA had pulled ahead.

During the celebrations, NASA received a telegram reading, “Thank you. You saved 1968.”<sup>13</sup> Indeed, 1968 was a turbulent year in American history. In his book *1968 In America*, historian Charles Kaiser describes the year as “The moment when all of a nation’s impulses toward violence, idealism, diversity, and disorder peaked to produce the greatest possible hope — and the worst imaginable despair.”<sup>14</sup> Assassinations, the war in Vietnam, civil unrest, and political disaster all combined to form a year during which many Americans seemed to lose hope in their country. This contrasts mightily with the feeling of the space program during the same time, when the Apollo 1 disaster could not even deter NASA from accomplishing its goal.

Landing on the Moon ensured that the 1960s, a decade known for protests, revolution, and counter-culture, ended on a hopeful note for those watching their world seemingly fall apart. In this chapter, I will explore how Apollo 11 invoked civil religion in order to unite the country in celebration, and in this celebration, Americans invoked civil religion. Next, I will show that, paradoxically, certain groups, most notably Black Americans, turned away from the Moon landing because it was at odds with their own experiences. Lastly, I will show that the flights served to spread American values to other countries by showing what American civil religion could accomplish. This was accomplished by playing off of the dual nationalist/universalist tensions in

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<sup>12</sup> T. Rodney Loe, 28.

<sup>13</sup> Frank Borman, 36. While several dozens of sources describe this telegram, none can definitively say who sent it, and the telegram itself is not available in the NASA history archives.

<sup>14</sup> Charles Kaiser, *1968 in America: Music, Politics, Chaos, Counterculture, and the Shaping of a Generation*, (New York: Weidenfeld & Nicolson, 1988), xv.

civil religion. Ultimately, this chapter will use the Moon landing to understand civil religion in America, as it stood in 1969.

### **Celebrating Civil Religion Within “Solomon’s Temple”<sup>15</sup>**

After the success of Apollo 8, NASA was on fire. Jerry Bostick explained, “We were running full steam and we were doing things right and left, and they were working and we were all happy and we were going to land on the Moon. Nobody could stop us now.”<sup>16</sup> The launch date was set, the calculations complete. Because the Earth and Moon were a constantly moving system, Apollo 11 needed to leave at exactly 9:32 A.M. on 16 July 1969 in order to land on the designated spot on the Moon.<sup>17</sup>

As he walked into work on the determined day, the energy that greeted Eugene Kranz in Mission Control in Houston was palpable. The guard at the entrance to the complex greeted Kranz with a salute, saying, “You’re going to do it today, Mr. Kranz.”<sup>18</sup> He gave him a salute in return, and headed into the room, which had begun to resemble a college dormitory rather than the hub of importance it was.

You can tell people have been in there for a long period of time. There’s enough stale pizza hanging around and stale sandwiches and the wastebaskets are full. You can smell the coffee that’s been burned into the hot plate in there. But you also get this feeling that this is a place something’s going to happen at. I mean, this is a place sort of like the docks where Columbus left...it’s a place where you know something is going to happen.<sup>19</sup>

While Kranz received an update from the director of the team he was taking over for, Armstrong, Aldrin, and Collins were in orbit around the Moon. Everything was going smoothly, so

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<sup>15</sup> Owen E. Maynard, interview by Carol Butler, 21 April 1999, 11, NASA Johnson Space Center Oral History Project.

<sup>16</sup> Jerry C. Bostick, 48.

<sup>17</sup> Farmer and Hamblin, *First on the Moon: A Voyage with Neil Armstrong*, Michael Collins, Edwin E. Aldrin Jr., 55.

<sup>18</sup> Eugene F. Kranz, 34.

<sup>19</sup> *Ibid.*, 38.



smoothly that it seemed just like any other simulation the engineers had completed. As the module went behind the Moon, away from all communications, Kranz, as well as every other engineer in Mission Control, went to the bathroom.<sup>20</sup> It suddenly hit Kranz that this was no simulation — this was the real deal. “You’re standing in line, and for a change, there isn’t the normal banter, no jokes, etc.... it’s really starting to sink in, and I have this feeling I’ve got to talk to my people.”<sup>21</sup>

The communications from Mission Control to Apollo 11 were all recorded and transcribed, however within Mission Control there was a private communications line that went unrecorded. Usually, this line was used for disciplinary reasons during a mission, however, before the lunar module broke away from the rest of Apollo 11 to head toward the Moon, Kranz used it for a different purpose. He told all controllers in the room to switch their headsets to the private channel, and suddenly all chatter stopped; the room was silent as everyone turned to listen to Kranz speak.

I had to tell these kids how proud I was of the work that they had done, that from this day, from the time that they were born, they were destined to be here and they’re destined to do this job, and it’s the best team that has ever been assembled, and today, without a doubt, we are going to write the history books and we’re going to be the team that takes an American to the Moon.<sup>22</sup>

Kranz ended his speech, and everyone returned to work. It is notable that in his speech Kranz chose to invoke the destiny and history that his team was a part of, as well as the patriotism they should all have felt for putting an American on the Moon, demonstrating that civil religion did not only spark the work on the road to the Moon, but that it was also present during the event itself.

Four days after he took off from Cape Canaveral, Armstrong received the go-ahead from Mission Control for a landing and started the decent to the Moon. Unfortunately, things started to go awry. A meter malfunction onboard the spacecraft resulted in Mission Control having to monitor

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<sup>20</sup> In her interview, Ivy Hooks describes how there were no ladies rooms at Mission Control at the time because of how few females there were working for NASA. She had to go inside an entirely separate building to find a restroom.

<sup>21</sup> Eugene F. Kranz, 40–41.

<sup>22</sup> *Ibid.*, 41.

the electricity from the ground, which was difficult as a communications problem with the lunar module prevented Houston from talking directly to Aldrin and Armstrong. On top of all this, a navigation error had forced the lunar module over a different area of the Moon than was anticipated. Of course, all of these problems occurred *before* the computer alarms started going off, indicating that they were overworked and needed to cut out some computations.<sup>23</sup> While all of this occurred, the employees at NASA never lost their composure. An unidentified engineer reminded everyone that “This is just like a simulation,” and Mission Control slowly gained back its control.<sup>24</sup> With communications restored, it was now up to Armstrong to listen to the elevation readings coming in from Houston and to eyeball a new landing site — before running out of fuel.

Granville Paules, a Flight Dynamics Branch guidance officer, was sitting in front of Kranz at the time of the Moon landing. He recalled, “In the Control Center there’s usually a background hum of voices talking...Not during this phase. When [Armstrong] was landing, it got so quiet in there that it was just like they had turned off all the electricity and all the people, and everybody was holding their breath.”<sup>25</sup> The only voice to be heard was Robert Carlton, who was counting down the seconds until the module ran out of fuel: “60 seconds...30 seconds...”<sup>26</sup> After what seemed like an eternity, Armstrong finally found a spot suitable enough and lowered the module to the ground. The call came in. “Houston, Tranquility Base here. The Eagle has landed.” Mission Control erupted into cheers. Kranz was caught so off guard by the celebrating that he snapped the pencil he was holding in half. Charlie Duke, the capsule communicator replied, “Roger, Tranquility. We copy you on the

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<sup>23</sup> Ibid., 45–46.

<sup>24</sup> Ibid., 47.

<sup>25</sup> Granville E. Paules, interview by Rebecca Wright, 7 November, 2006, 38, NASA Johnson Space Center Oral History Project.

<sup>26</sup> Robert L. Carlton, 43.

ground. You got a bunch of guys about to turn blue. We're breathing again. Thanks a lot."<sup>27</sup> Apollo 11 had landed on the Moon.



*Celebrating Apollo 11 in mission control  
Nasa.gov*

## Outside Reactions

While this world outside of NASA may have been the farthest thing on Charlie Duke's mind when he spoke to Neil Armstrong, the mission control room in Houston was not the only place celebrating when the Eagle landed on the Moon. Over 500 million people around the world were watching the events unfold on live television, and millions more listened in on the radio.<sup>28</sup> Despite the rain in New York City, thousands of people gathered in Central Park to watch the Moon landing on large screens in an event that "was a cross between a carnival and a vigil."<sup>29</sup> A great cheer went up when Armstrong stepped out onto the Moon's surface — a cheer that was echoed in baseball parks, courtrooms, movie theaters, and pubs across the nation.<sup>30</sup> Throughout the world all eyes were on the Moon. In Europe, like New York, large crowds watched in public spaces. Germany reported

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<sup>27</sup> Eugene F. Kranz, 50–51.

<sup>28</sup> Ibid.

<sup>29</sup> McCandish Phillips, "A Fete in Central Park Celebrates the Landing," *The New York Times*, 21 July, 1969, Proquest, Document ID 118559192.

<sup>30</sup> Ibid.

an enormous drop in its crime rate during the Moonwalk and Paris, France had to turn to emergency generators because of how many televisions were turned on.<sup>31</sup>

In the days before the launch, spectators, journalists, and NASA scientists started flooding into Cape Canaveral to watch the launch of Apollo 11 in person. Dee O'Hara, one of the nurses assigned to maintain the health of the astronauts, told Neil Armstrong about all the people who had come to cheer him on. "You will not believe the number of people that have congregated down here," she said. "The causeways are jammed. They've been out here for a week. It's just this mass of people."<sup>32</sup> Armstrong just laughed. "Well, yeah, I suppose people are going to make a big deal out of this."<sup>33</sup> Armstrong's cavalier attitude contrasted heavily with the scene around him. The stakes were high, and consequently so were tensions. The White House was constantly calling for updates, as well as to ensure that the phone lines remained clear for the astronauts to receive a call from President Nixon, who wanted to wish Armstrong, Collins, and Aldrin good luck on their mission.<sup>34</sup>

The sense of history being written drew thousands of people to the Cape. The VIPs in attendance included 200 congressmen, Johnny Carson, James E. Webb, Sargent Shriver, 400 foreign ministers, President Lyndon B. Johnson, and several leaders of American industry and commerce.<sup>35</sup> Norman Mailer observed the "diversity" of the crowd surrounding him the night before the launch: "It was hardly just middle-class America here tonight, rather every echo of hard trade-union beer-binge paunch-gut-and-muscle, and lean whippy redneck honky-tonk clans [came] out to bird-watch in the morning."<sup>36</sup> Indeed, Americans from (almost) all walks of life showed up to watch history in the making. While they had different jobs and lived in different areas, the people who showed up

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<sup>31</sup> Tribbe, *No Requiem for the Space Age*, 6.

<sup>32</sup> Delores B. "Dee" O'Hara, interview by Rebecca Wright, 23 April 2002, 21–22, NASA Johnson Space Center Oral History Project.

<sup>33</sup> Ibid.

<sup>34</sup> Jamye Flowers Coplin, interview by Rebecca Wright, 12 November 2008, 26–27, NASA Johnson Space Center Oral History Project.

<sup>35</sup> Mailer, *Of a Fire on the Moon*, 88.

<sup>36</sup> Ibid., 59.

were all well off enough to take a week away from work to lounge in the Florida sun and wait for a rocket to go off.



*A beaming President Lyndon Johnson watches the Saturn V launch alongside fellow Americans  
Nasa.gov*

The higher purpose and sense of history that inspired NASA's hard work had permeated into the country at large. Geneva Barnes, a public affairs officer with NASA, saw people sleeping on benches and in their cars because all of the hotel rooms were filled. She said, "You just couldn't help but feel that there was something big happening, you know, and you were just glad to be a part of it."<sup>37</sup> The atmosphere of the launch mirrored that of a carnival. American flags waved everywhere and spectators were out in their Sunday best taking photographs and drinking beer. As the countdown toward launch neared zero, binoculars everywhere were trained on the rocket. When liftoff initiated, the crowd cheered and everyone was grinning ear-to-ear.<sup>38</sup> Compared to the history-making events of the 1960s, this was a peaceful endeavor that Americans were able to unify behind.

## A Special Relationship

<sup>37</sup> Geneva B. Barnes, interview by Glen Swanson, 26 March 1999, 39, NASA Johnson Space Center Oral History Project.

<sup>38</sup> Theo Kamecke, *Moonwalk One* (NASA, 1970), <https://www.youtube.com/watch?v=70bFsUdepyA>.

The reactions from humans all over the world show how much foreigners admired the United States for their ability to land a man on the Moon, and the feelings of foreigners working *within* NASA demonstrate some of the nationalistic motivations in the space program. For many of the foreigners who came to work for NASA, the space program was a way for them to gain cultural citizenship and to really feel like part of the country. Farouk El-Baz, an Egyptian, is one such example. When he joined NASA in 1967, there were no diplomatic relations between the United States and Egypt, and his name and accent made it difficult for him to fit into America. At NASA, however, he was able to use his knowledge of geology to gain acceptance.<sup>39</sup> Not only did he assimilate with the scientists, but he also joined in with American civil religion. During his time at NASA, El-Baz recalls that, “Everybody was charged with this [space] race, because...it had a reflection on our ability as a nation.” Additionally, he mentions discussions over methods being solved by someone saying, “guys, listen, we’re not going to let the Russkies beat us. What the hell is this? We got to do it right, we got to do it on time.”<sup>40</sup> While he may have started off as a scientist, El-Baz was also motivated by American civil religion, showing that the program radiated nationalism that was simply waiting to be absorbed.

Owen Maynard was a Canadian working at NASA during the time of the Moon landing. He joked that it was in his nature as a Canadian to “go help Americans in their hour of need,” but, like El-Baz, he was also swept up by American civil religion.<sup>41</sup> When giving a talk at his church, Maynard decided to address what the Apollo program was and why it was so important, and he did so by comparing the building of Solomon’s temple to the American people building the Apollo Program. He noted that the Apollo Program, like the temple, was “a magnificent undertaking and a

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<sup>39</sup> Farouk El-Baz, interview by Rebecca Wright, 2 November, 2009, 8, NASA Johnson Space Center Oral History Project.

<sup>40</sup> *Ibid.*, 16.

<sup>41</sup> Owen E. Maynard, 11.

magnificent accomplishment,” and that people all over the world admired it.<sup>42</sup> While Maynard may have originally joined NASA to marvel at its work, it is evident that he joined into the civil religion because of the way he describes President Kennedy giving “us” a challenge to go to the Moon.<sup>43</sup> While he was not actually American at the time, the space program provided a way for Maynard to feel American and to express his patriotism to the world.

The most famous foreigner to join NASA was Wernher von Braun, a former-Nazi who developed the Saturn V that sent Apollo to the Moon.<sup>44</sup> Brought to the United States after the end of World War II, von Braun is unique because of his apparent willingness to adapt to the nationality of whatever nation had the wherewithal to spend money on space. During World War II, von Braun designed rockets for the Nazis, but when the United States offered him amnesty in exchange for his science after the war, von Braun was quick to alter his allegiance. By the mid ‘60s, von Braun realized that he had to walk the walk of civil religion in order for the American people to accept him and forget his Nazi past, and so he radiated American culture in the presentation of himself. After the success of Apollo 11, von Braun remarked “The world is with us...where even people on both sides of the Iron Curtain seem to be able to see eye to eye.”<sup>45</sup> By invoking the Soviet Union, von Braun showed that he saw the American success as a success for world relations, not by uniting both parties in the middle, but by bringing the Soviets to the light on the side of the Americans.

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<sup>42</sup> Ibid., 18.

<sup>43</sup> Ibid., 104.

<sup>44</sup> von Braun is an interesting character who merits an entire thesis for himself. Unfortunately further dissection of his persona and history are outside the realm of *this* project, but other scholars have dedicated books to his biography. See, for example, *Wernher von Braun: The Man Who Sold the Moon* by Dennis Piskiewicz.

<sup>45</sup> Wernher von Braun, “Transcription of Dr. Wernher von Braun Following Apollo XI Mission at Madison County Courthouse, 1969” (The National Aeronautics and Space Administration, 24 July 1969), NASA History Division.



*A “thoroughly Americanized” Wernher von Braun.  
Tribbe, No Requiem for the Space Age.*

John Hodge, a Brit who was “pleased as punch” when President Kennedy challenged Americans to go to the Moon noted that “it’s just incredible...that an absolute foreigner can come into a country and become a part of the system, a real part of the system, I mean, to me that’s the personification of what the U.S. is all about.”<sup>46</sup> Indeed, not only did the space program provide citizenship in the form of civil religion to a group of foreigners, but these immigrants also absorbed the civil religion themselves. The fact that a Canadian was not going to the Moon for the Canadians and an Egyptian was not going to the Moon for Egypt illustrates the unilateral nature of the Apollo Program. It was a nationalistic endeavor, and the foreigners who joined got swept up in these feelings. This description of the NASA community reveals a tension that was present within the space program: nationalistic intentions versus universalist ones. Whether the astronauts were Americans or humans who happened to be American was an important distinction, as NASA frequently claimed their missions were meant for all of mankind.

## **One Giant Leap For *Mankind*?**

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<sup>46</sup> John Dennis Hodge, interview by Rebecca Wright, 18 April 1999, 51, NASA Johnson Space Center Oral History Project.



On their way back to Earth, the Apollo 11 astronauts took the time to address the audience back home. Collins spoke first, thanking “the American workmen” who assembled the equipment that carried them to the Moon. He assured listeners that “This operation is somewhat like the periscope of a submarine. All you see is the three of us, but beneath the surface are thousands and thousands of others.”<sup>47</sup> Second, Aldrin discussed “the more symbolic aspects” of the flight to the Moon. Speaking for the three of them, he said, “this has been far more than three men on a voyage to the Moon...We feel that this stands as a symbol of the insatiable curiosity of all mankind to explore the unknown.”<sup>48</sup> He recognized that while it was the United States who organized the successful Moonshot, and that it was three Americans who went to the Moon, the entire journey belonged to mankind. When it was Armstrong’s turn to speak, however, the Apollo 11 commander gave credit for the flight to NASA, the American people, and the American government. He clearly did not get the “mankind” memo.

Once the astronauts had safely landed, the splashdown parties ended, and the hangovers cleared, the implications of what they had just completed struck the people of NASA. Many experienced moments similar to Thomas Holloway, who went outside one night the month after the landing and remarked how the Moon was in the same phase it was in when Apollo 11 landed. Looking up, he thought of how man had walked on that heavenly body more than 240,000 miles away, and the enormity of what that implied struck him.<sup>49</sup> People all over the world started asking what the Moon landing meant. Was it as Neil Armstrong said, “One small step for man, one giant leap for mankind?” Implied in this question was its follow-up: Was it one small step for *man*, or one small step for *an American*? Did the implications of the Moon landing affect the whole human race, or simply the ones who had led it to happen?

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<sup>47</sup> Data Logistics Office, “Apollo 11: Technical Air-To-Ground Voice Transcription,” 588–589.

<sup>48</sup> *Ibid.*, 589–590.

<sup>49</sup> Thomas W. Holloway, interview by Rebecca Wright, 25 July 2002, 11, NASA Johnson Space Center Oral History Project.

Looking at the crowds celebrating the astronauts and pondering the deeper meaning of Apollo 11, there is no evidence of the turmoil facing the country. There are no hippies, protestors, or even black faces in the crowd, yet over and over again the Moon landing is celebrated as an accomplishment for *all* Americans, and even *all* mankind. Jack Lousma, an astronaut at NASA, remembered that during the launch, “It didn’t matter what country one lived in or what the culture was or the language or the religion or anything. The astronauts were people who represented all of mankind, so to speak, and they wanted them to be successful. It didn’t matter who it was, as long as someone or humans like them were involved in this.”<sup>50</sup> Commentators echoed these sentiments throughout the coverage of the Moon landing. However, the thought that Armstrong, Aldrin, and Collins were representatives of mankind rather than just America is incredibly idealistic considering the history of the space program and the astronaut corps in particular. For instance, James McDivitt, an astronaut on Apollo 9 recalled, “the mission was...to land a man on the Moon and return him safely to Earth. And that didn’t say anything about science.”<sup>51</sup> Indeed, NASA ensured that no experiment was completed on Apollo 11 that would not produce results in more than ten minutes.<sup>52</sup> If the men being sent into space did not have a scientific purpose, it becomes clear that they were being used for other motives, especially when considering the fact that technology did not require a human being to be piloted into space.

A few days before Armstrong stepped out of Apollo 11 and onto the surface of the Moon, Physicist Ralph Lapp provided a summary in *The New York Times* of the arguments for un-manned space travel, writing, “Space gadgets require only small amounts of power, can tolerate extremes of temperature, and, being expendable, can be sent on one-way missions...Man’s brain, a wondrously fashioned three-pound computer, possesses unique capabilities, but the care and feeding of man in

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<sup>50</sup> Jack R. Lousma, interview by Carol Butler, 7 March 2001, 23, NASA Johnson Space Center Oral History Project.

<sup>51</sup> James Alton McDivitt, interview by Doug Ward, 29 June 1999, 78, NASA Johnson Space Center Oral History Project.

<sup>52</sup> Don L. Lind, interview by Rebecca Wright, 27 May 2005, 12, NASA Johnson Space Center Oral History Project.

space must focus on the 50-fold larger mass of his body.”<sup>53</sup> If the United States just wanted to prove to the Soviet Union and the world that they possessed the technological capabilities of landing on the Moon, then there was no need to invest the time and money into developing the technology capable of putting *a man* on the Moon. However, as Bill Anders, one of the Apollo 8 astronauts, recalls, “The American public was supporting Apollo not because they wanted science or even because they wanted exploration, they wanted to show those ‘dirty commies’ that America was still #1 technologically.”<sup>54</sup> Not only would a man on the Moon be a greater technological achievement, but it would also allow for the dissipation of an image of an American. It is because of these aspects, aspects that are part of the civil religion, that nationalism won out throughout the Moon landing.

The tension between nationalism and universalism is displayed very apparently in the artifacts that were left on the Moon. NASA administrators recognized that the whole world would be watching as Armstrong and Aldrin conducted their activities on the Moon, and so they planned out the lunar activities carefully. In February 1969, Thomas O. Paine, the administrator of NASA at the time, appointed the Committee on Symbolic Activities for the First Lunar Landing.<sup>55</sup> The purpose of this committee was to examine potential symbolic activities that would not jeopardize the mission or put the crew in harm’s way. The chosen activities would “signalize the first lunar landing as an historic forward step of all mankind that has been accomplished by the United States.”<sup>56</sup> The Committee’s own mission statement reflected the duality of the Apollo 11 endeavor — the United States put a man on the Moon for the entire world, and the world would know this.

As part of their efforts to share their mission with the entire world, Armstrong and Aldrin brought with them onto the surface of the Moon a golden olive branch, a replica of the Apollo 1

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<sup>53</sup> Quoted in Hersch, *Inventing the American Astronaut*, 76.

<sup>54</sup> William “Bill” A. Anders, interview by Paul Rollins, 8 October 1997, 9, NASA Johnson Space Center Oral History Project.

<sup>55</sup> Anne M. Platoff, “Where No Flag Has Gone Before: Political and Technical Aspects of Placing a Flag on the Moon” (Houston, TX: National Aeronautics and Space Administration, August 1993), 2.

<sup>56</sup> *Ibid.*

patch, and a small disk carrying messages of goodwill from over one hundred different countries and their leaders. Additionally, they left behind a plaque that read, “Here men from the planet Earth first set foot upon the Moon. We came in peace for all mankind.”<sup>57</sup> The plaque was signed by all three astronauts, as well as President Nixon. Lastly, and most memorable for Americans, the two astronauts erected and left behind an American flag, marking the place where they had landed. Aside from the flag, these symbols indeed represent people from different countries and cultures around the globe. On the surface, that is.

Take for instance the disk containing goodwill messages from the world’s leaders. Before the countries and messages were listed, there was a long list of leaders in the American government and at NASA. Additionally, the texts from the different countries all followed a rubric of sorts. They congratulated the United States on their achievement, especially the astronauts and president, and then gave their own interpretation of what the Moon landing meant. Several offered up prayers, and many of the lesser-known countries used the opportunity to tell future extraterrestrials about their small claim on Earth.<sup>58</sup> Across the board, all countries recognized the United States as the country to accomplish this feat, a fact that should have been unimportant if they were working for all of Earth’s peoples. Also significant here was the absence of a message from the Soviet Union or Russia. While some small member states such as Latvia and Estonia provided notes, the fact that the biggest competitor to the United States in the Space Race opted out demonstrates that nationalism was of higher importance than universalism to many.

One of the most notable images to come off of the Moon is that of Buzz Aldrin saluting the American flag in his spacesuit. He is not giving tribute to the flag of the United Nations, or any other flag that represents all of Earth; he is paying respect to the Stars and Stripes of the United

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<sup>57</sup> NASA, “Apollo 11 Goodwill Messages” (National Aeronautics and Space Administration, 13 July 1969), 2, NASA History Division, [http://history.nasa.gov/ap11-35ann/goodwill/Apollo\\_11\\_material.pdf](http://history.nasa.gov/ap11-35ann/goodwill/Apollo_11_material.pdf).

<sup>58</sup> Ibid.

States. This small act required hours and hours of planning and engineering in order to properly execute. Jack Kinzler brought the idea of planting an American flag on the Moon to the Committee on Symbolic Activities for the First Lunar Landing, and it was Kinzler who designed the collapsible flagpole and support for the flag to ensure that it waved in the atmosphere-less environment of the Moon.<sup>59</sup> While international law prohibits any nation from claiming title to the Moon, the United States sent a clear message to the world by planting its flag on the lunar surface: We got to the Moon first and we are the only nation to do so.

When Apollo 11 splashed down into the Pacific Ocean, it was President of the United States Richard Nixon who first greeted the astronauts. Because of the fear of “Moon bugs,” the astronauts were inside of a metal quarantine holding to meet him. After conversing about baseball and the weather, Nixon told the astronauts, “this is the greatest week in the history of the world since the Creation, because as a result of what happened in this week, the world is bigger, infinitely, and...the world has never been closer together before.”<sup>60</sup> Tactfully, Nixon voiced how NASA’s accomplishment benefited all of mankind, but his later actions show that like President Kennedy before him, he would use civil religion and the Moon landing to further his own nationalistic goals. The difference between Nixon and Kennedy, however, is that Kennedy used civil religion to inspire and accomplish the Moon landing, while Nixon used the success of the Moon landing in order to inspire civil religion.

After the astronauts left quarantine, and after they travelled cross-country, attending dozens of parades on the way, Armstrong, Aldrin, Collins, and their wives hit the road, or rather, the skies, to visit 23 foreign countries and share their American success with the world. Nixon sent the astronauts abroad on a mission to “share information gained from the flight with other nations and

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<sup>59</sup> Jack A. Kinzler, interview by Paul Rollins, 16 January 1998, NASA Johnson Space Center Oral History Project.

<sup>60</sup> Richard M. Nixon, “Remarks to Apollo 11 Astronauts Aboard the U.S.S. Hornet Following Completion of Their Lunar Mission,” 1969, The American Presidency Project, <http://www.presidency.ucsb.edu/ws/?pid=2138>.

to share plans for future space exploration,” however, the secondary effects of this goodwill mission across the world were much, much stronger.<sup>61</sup> Starting in Mexico, the small delegation made stops in France, Norway, England, Zaire, South Korea, Japan, Yugoslavia, and a dozen other countries.<sup>62</sup> Wherever they went, huge crowds turned out to see the men, *the Americans*, who had walked across the Moon.

During the cultural battle of the Cold War, having the astronauts on the side of the Americans was a major blow to the Soviet Union. Not only had the United States shown that it was technologically superior, but it was also parading its astronauts around the world, showing the American values that they held that had made the Moon landing possible. Nixon had to have been aware of this when he sent the Apollo 11 crew abroad. Under the pretense of a goodwill mission for “mankind,” he was able to broadcast American civil religion to the world, in an effort to once and for all prove that it was superior to any kind of spirit the Soviet Union may have possessed.

The fact that nationalism proved to be stronger than universalism in celebrating the Moon landing has implications for civil religion as defined by Bellah. In his original 1967 article defining civil religion, he wrote, “the emergence of a genuine transnational sovereignty [like the United Nations]...would necessitate the incorporation of vital international symbolism into our civil religion...it would result in American civil religion becoming simply one part of a new civil religion of the world.”<sup>63</sup> In other words, a successful universalist effort, such as the Moon landing, had the potential to spread American civil religion throughout the world, resulting in one worldwide civil religion. As shown above, however, the Moon landing was not this effort, as its nationalistic intentions and actions outweighed its universalist ones. The result of this is that American civil religion remained unequivocally American, and it was broadcast to the world as such, without the

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<sup>61</sup> Geneva B. Barnes, 4.

<sup>62</sup> *Ibid.*, 6.

<sup>63</sup> Bellah, “Civil Religion in America,” 54.

added international symbolism and values that Bellah predicted would accompany a worldwide civil religion.

### **Moon-doggle: The Experience of the Other**

In 1964, sociologist Amitai Etzioni published a book questioning the necessity of a Moonshot.<sup>64</sup> He argued that Kennedy's Moon challenge cost an "undue amount" of attention and resources, and that the act of *racing* into space against the Soviets, "instead of helping America regain the capacity to chart its own course in the world, the gigantic investments made in charting the Moon serve those who seek to preserve the America of yesterday as it is confronted with the problems of tomorrow."<sup>65</sup> He claimed that the funding, scientific resources, and manpower poured into the space program harmed, rather than benefited, the country, and that the result of the Moonshot would be "a Moon-rich, earth-poor program."<sup>66</sup> Ultimately, he concluded, "We are using the Space Race to escape our painful problems on Earth," and that the country needed to dedicate its resources to combatting poverty and inequality firsthand without waiting for the effects of the Moon program to trickle down to the masses.<sup>67</sup>

Etzioni's was not the only dissenting voice regarding the Moon program in the United States. In fact, throughout the 1960s, over fifty percent of Americans consistently opposed the continued government funding of a Moon program.<sup>68</sup> However, because of the tenor of the times and the potential that space had in influencing the Cold War, Etzioni noted, "anyone who dares to ask if a lunar adventure is worth the price is somehow almost un-American — or at the very least is the type of unimaginative clod who would have stopped Columbus' voyage with similar

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<sup>64</sup> Amitai Etzioni, *The Moon-Doggle: Domestic and International Implications of the Space Race*, (Garden City, NY, Doubleday, 1964).

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

<sup>66</sup> *Ibid.*, 8.

<sup>67</sup> *Ibid.*, 164.

<sup>68</sup> Roger D. Launius, "Public Opinion Polls and Perceptions of US Human Spaceflight," 166.

questions.”<sup>69</sup> It was only throughout the Moon landing and the weeks immediately after that the majority of Americans approved of the space program. This was because of the patriotism and civil religion evoked during the event, as well as because of an enormous public relations effort by NASA.<sup>70</sup> It was therefore only during this time that dissenters stood out and were confronted.

While mission control was cheering and celebrating the successful landing of Apollo 11, Reverend Ralph Abernathy was protesting the Moonshot outside. That morning, while driving to work, Dr. Charles Berry passed hundreds of trailers, tents, and vans filled with people who had been waiting for days to witness the launch of Apollo 11. The gates would not open to the public until 7:00, yet there were already four lanes of cars lined up, waiting to enter.<sup>71</sup> As Berry passed through the entrance a different kind of crowd caught his eye. Reverend Abernathy, who had gained a leadership role in the Southern Christian Leadership Conference and its Poor People’s Campaign after Martin Luther King Jr.’s assassination, was leading a few hundred black Americans in protest of the Apollo program.<sup>72</sup> Like many other NASA employees, Berry was very passionate about his work. The sight of Americans protesting something he believed would benefit all of them angered him. He got out of his car to confront Abernathy.

“You know, I do not understand why you would come and try and demonstrate and say that we ought not to have this flight to the Moon. Do you have any concept at all about what this can mean to the world and to us as a nation, having the capability to do this?”<sup>73</sup>

Abernathy calmly responded, explaining that he felt that the United States misaligned its priorities, and that the money being spent on the Moonshot should have been spent on the people who needed it back on Earth. In response, Berry echoed the remarks of Alan Shepard, who once

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<sup>69</sup> Etzioni, *The Moon-Doggle; Domestic and International Implications of the Space Race*, 44.

<sup>70</sup> David Meerman Scott, Richard Jurek, and Eugene A. Cernan, *Marketing the Moon*, ix.

<sup>71</sup> Joseph W. Schmitt, interview by Michelle T. Buchanan, July 1997, 17, NASA Johnson Space Center Oral History Project.

<sup>72</sup> Tribbe, *No Requiem for the Space Age*, 37.

<sup>73</sup> Charles A. Berry, 52.



said about the money spent toward the space program, “We didn’t spend a penny of it on the Moon. It was all spent right here on this Earth.”<sup>74</sup> He also added his own views, saying,

If a nation is great, it’s my view that that nation ought to be able to [spend money on social programs], and we ought to be able to do the things that are necessary here [at NASA]. We need the science and the technology on the cutting edge if we’re going to be a nation that’s going to progress. If you don’t, you’re going to die as a nation and you’re not going to solve any of the problems here on Earth or anywhere else.<sup>75</sup>

Many Americans sympathized with Abernathy and his delegation. The extravagance of Apollo juxtaposed next to the experience of thousands of Americans living in poverty made many question the funding of the Apollo program.<sup>76</sup> Black Americans in particular had a difficult time supporting NASA, especially when the agency itself was doing so little to address the civil rights problems and destitution in the country at the time. In September 1968, Abernathy spoke at a rally, saying, “I have news for White America. This is a sick nation, and we’re sick and tired of giving this nation aspirin... We are here representing fifty million poor people who are dying of starvation and malnutrition... [while t]his nation is spending 25 million dollars to put a man on the moon and will not spend 53 dollars to stand an American on his feet.”<sup>77</sup> To Abernathy and his followers, the America that put a man on the Moon was a separate country from the America that they lived in and experienced everyday.

The lyrics of the 1970 song “Whitey on the Moon” by Gil Scott-Heron, summarize the fact that many black Americans viewed NASA’s accomplishments as accomplishments of “white America.” Scott-Heron sings, “A rat done bit my sister Nell/with Whitey on the Moon/Her face and arms begin to swell (and Whitey’s on the Moon)/ I can’t pay no doctor bill (but Whitey’s on the

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<sup>74</sup> John B. Lee, interview by Jennifer Ross-Nazzal, 16 January 2008, 53, NASA Johnson Space Center Oral History Project.

<sup>75</sup> Charles A. Berry, 53.

<sup>76</sup> Tribbe, *No Requiem for the Space Age*, 37.

<sup>77</sup> “The New Order: ‘Keep Those Fires Burning,’” *Los Angeles Free Press*, 6 September, 1968, 14, Independent Voices.

Moon)/ Ten years from now I'll be payin' still (while Whitey's on the Moon)."<sup>78</sup> Americans like Scott-Heron and Abernathy were furious that a nation advanced enough to send a man to the Moon could still have thousands of citizens living in poverty and denied their basic rights. In an opinion piece for *The Baltimore Afro-American*, a concerned citizen wrote, "If there is no bread, eat cake, dog food or Moon cheese...the Moonshot has one great significance for the poor. It tells us that the gap between us and our oppressors is as wide as that between the Moon and the Earth. And from all indication, the gap will increase even though the Moon men have returned."<sup>79</sup>

Shortly after the Moon landing, Whitney Young, a prominent civil rights leader, wrote about the people who watched Armstrong and Aldrin walk on the Moon:

Some of those people watched men walk on the crater-pocked moonscape on television sets in rundown tenements in the ghettos of America... They watched, while plaster peeled from the ceilings and rats scratched in the walls. Millions of people watched after a long, hard day's work at sub-poverty wages... To America's 30 million poor people, the Moon landing had little meaning, except perhaps to taunt a child with dreams of accomplishment the system places beyond his reach, or to flaunt affluence and power in the face of a man who can't afford to feed his family.<sup>80</sup>

This experience described by Young is very obviously different from the experiences discussed at the beginning of this chapter, and it is easy to see why citizens watching the Moon landing in these conditions would be so against it.

In the early days of the Moon program, the Kennedy administration was aware of some of the potential pushback it would face for pouring money into the space program, especially from black Americans. In an effort to curb some of this opposition, the administration went to NASA and asked the astronaut selection corps to "assure that there is an African American in the next

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<sup>78</sup> Quoted in Tribbe, *No Requiem for the Space Age*, 39.

<sup>79</sup> Charles Simmons, "AFRO READERS SAY: Let 'Em Eat Moon Cheese," *Afro-American (1893-1988)*, 9 August 1969.

<sup>80</sup> Whitney Young, "To Be Equal: Men On The Moon Should Be Signal To Switch Priorities," *Afro-American (1893-1988)*, 2 August 1969, 4.

selection” of astronauts.<sup>81</sup> At the time, there were few black faces to be seen among the thousands of scientists and administrators representing NASA, and despite the administration’s efforts to put a black man on the front lines of the space program, the first black astronaut was not actually selected until 1978.<sup>82</sup>

As commentator Eric Sevareid told Walter Cronkite during coverage of the Apollo 11 mission, “while ‘ordinary people’ from the ‘normal healthy heart of the country’ appreciated Apollo, ‘the only people who [seemed] a little blasé and [found] this thing a little distasteful [were] the young intellectuals of a moral and sociological bent,’” in other words, the hippies.<sup>83</sup> Like America’s black citizens, the generation that celebrated free love lived experiences that made it difficult for them to celebrate the space program and all that it represented; they were much more concerned with the deterioration of the environment and the War in Vietnam than they were with the Moonshot.

The sentiments of the hippies are very clear in the underground newspapers published in the 1960s. In angry prose, writers deride the Moon landing, saying things like, “the flag has been planted on a new chunk of real estate — but one that only a few scientists will use. All that money spent on the Moon-doggle goes into the same pockets that are making money out of the Vietnam War,”<sup>84</sup> and, “Man is already on the Moon, and the first thing he does is litter it with plastic bags of shit and piss.”<sup>85</sup> One author could not believe that man was on the Moon, “Yet we are still living subject to written and unwritten laws which are, with very little modification, carried over from the earliest and

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<sup>81</sup> Charles A. Berry, 51.

<sup>82</sup> Caroline M. Fannin, “Robert Henry Lawrence, Jr.,” *American National Biography Online* (Oxford University Press, December 2003), <http://www.anb.org.proxy.library.vanderbilt.edu/articles/20/20-01871.html?a=1&f=bluford&g=m&ia=-at&ib=-bib&d=10&ss=2&q=3>.

<sup>83</sup> Tribbe, *No Requiem for the Space Age*, 131.

<sup>84</sup> “F.T.A.!” *The Ally*, August 1969, 18 edition, 7, Independent Voices.

<sup>85</sup> tari, “Diatribes by Tari,” *Berkeley Tribe*, 25 July 1969, 12, Independent Voices. Indeed, one of the first things that the astronauts did on the Moon was empty out their waste before the return trip home.

most primitive taboos of man's communal life."<sup>86</sup> He is incredulous at the fact that society is advanced enough to travel to the Moon, yet still cannot see the benefit in dissolving into anarchy.

NASA Administrator Thomas Paine recognized this divide in American culture and described it as "Squareland" versus "Potland" in a commencement address to the Worcester Polytechnic Institute. According to Paine, Squareland is the "bedrock of a well-functioning society" that "accepts as true only rational facts and theories which predict future events with mathematical precision under rigorous standards of reproducibility."<sup>87</sup> Potland, however, is "shadowy and shifting and partly underground."<sup>88</sup> Paine admitted that the space program concerned itself mostly with Squareland, but he was hopeful the opportunities NASA provided would be enough to uproot certain young individuals who had found a home in Potland.



*A portrait of the Astronauts and their families from Life Magazine. A visual representation of "Squareland"*  
Nasa.gov

As Paine made clear, NASA and the Moon landing belonged to Squareland, and on general principle, hippies tended to stay far away from Squareland. Not only did the Moonshot not mesh with their own values, but they also faced larger problems in their day-to-day lives than the Russians beating the Americans to the Moon. The counterculture movement was concerned with the war in Vietnam and other Earthly issues, so they could not be bothered with the activities of NASA. In

<sup>86</sup> John Doheny, "Alex Comfort As Novelist," *Limbo*, November 1964, 30, Independent Voices.

<sup>87</sup> Quoted in Tribbe, *No Requiem for the Space Age*, 135.

<sup>88</sup> Thomas O. Paine, "Worcester Polytechnic Institute Commencement Address: Squareland, Potland and Space," 7 June 1970, 2, Paine Speech, NASA History Office.

fact, hippies' interactions with the Apollo program are defined not by what they *are*, but by what they *are not*. Hippies had nothing to do with the Apollo program. In fact, after the Moon landing, Roulhac Hamilton of *The Columbus Evening Dispatch* declared that the “Squares’ Inherit the Moon,”<sup>89</sup> indicating that it was the Squares who had won the culture war, not the “hippies, yippies, and beatniks,... LSD eaters and the marijuana puffers, the wreckers of schools and colleges,” who opposed the Moonshot.

America’s hippies also noticed that they were living in a different reality than their Square counterparts. In 1965, one writer described how, “the whole machine works to make you feel responsible for what’s done... when a guy orbits the Earth for a cost that could feed them still down here — [you’re] encouraged to feel proud, that’s your man up there, and he’s white, and he’s moral, and he’s a perfect specimen — [and] he’s yours.”<sup>90</sup> The personification of America in the astronauts was not a personality that the hippies could support, for their America was different from the one the astronauts represented. Indeed, in defining the Squares and followers of civil religion in his article, Hamilton described the astronauts and engineers of NASA, writing that they,

are men and the sons of men and women who still believe that Boy Scouts are good, that divorce is bad, who teach Bible classes on Sunday, enjoy church suppers and Parent-Teacher meetings, who wash their kids’ mouth with soap, who regard sexual license as wicked, who respect the American flag and observe the Fourth of July... They are the sons of the kind of people — men and women — who had the pioneer spirit, the vigor and the simple virtues which made the United States great.”<sup>91</sup>

They were, in short, Proper Americans who held values associated with civil religion, and this was too different from the Americans who chose to live by hippy values for them to support the space program.

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<sup>89</sup> Quoted in “Squares’ Inherit the Moon,” Congressional Record, 12 August, 1969, ProQuest Congressional, 23610, CR-1969-0812.

<sup>90</sup> Ron Caplan, “The Gift of Books Was Wonderful and Impossible...,” *El Corno Emplumado*, 1 April 1965, 14 edition, 129, Independent Voices.

<sup>91</sup> “Squares’ Inherit the Moon,” 23610.

## Conclusion

The day after Neil Armstrong walked on the Moon, Edward Fendell, the Head of Mission Operations Section I in Houston, walked into a café to get his morning cup of coffee. He had been working nonstop inside Mission Control throughout the course of the mission, and this was his first foray into the outside world since the launch. He had cheered along with everyone else when Apollo 11 touched down on the Moon, but he had still had lots of work to do afterwards and had no time to stop and reflect on what had happened. At the café he sat down and started sipping his coffee. Two gentlemen next to him were discussing the landing. One said to the other, “You know, I went all through World War II. I landed at Normandy on D-Day...It was an incredible day, an incredible life...But yesterday was the day that I felt the proudest to be an American.”<sup>92</sup> Fendell froze. He remembered, “when he said that, I lost it. It all of a sudden hit me as to what we had done, you know. And I just threw my money down, grabbed my paper, and walked out and got in the car and started to cry...until that moment, I didn’t really have the feeling effect of what had happened, because you were in those closed-off room, working at what you were doing.”<sup>93</sup> For Fendell and the men in the café, the ultimate legacy of the Moon landing was a patriotic one. Watching it and being part of it made them proud to be American.

In the days and weeks after the Moon landing, conversations like the one recorded above took place all over the country. Many believed the Moon landing was the spark man needed to begin spreading out among the stars. Werhner von Braun believed that now was the time to start planning commuter routes to the Moon and onward, toward Mars.<sup>94</sup> In the epilogue to the 1970 book

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<sup>92</sup> Edward I. Fendell, interview by Kevin M. Rusnak, 10 October 2000, 45, NASA Johnson Space Center Oral History Project.

<sup>93</sup> Ibid.

<sup>94</sup> von Braun, “Transcription of Dr. Wernher von Braun Following Apollo XI Mission at Madison County Courthouse, 1969.”

detailing the Apollo 11 flight from the astronauts' points of view, Arthur C. Clarke, a science-fiction author and co-writer of the screenplay for *2001: A Space Odyssey*, wrote, "Anything written about the Moon at the beginning of the 1970's will probably look silly in the 1980's, and hilarious in the 1990's — particularly to the increasingly numerous inhabitants of our first extraterrestrial colony."<sup>95</sup>

Unfortunately, historical hindsight has shown that the Moon landing did not open the floodgates to the universe, and since no inhabitants exist on any extraterrestrial colony, it is clear that the ultimate legacy of Apollo was not man's first steps away from his home planet.

While some saw the Moon landing as the perfect opportunity to leave Earth, others saw it as the starting point to turn back toward their planet. In an opinion piece for *The Chicago Daily Defender*, editor Frank Stanley wrote, somewhat optimistically, "I am convinced that our Earth-bound human problems such as racism, ghettos and slums, poverty, hunger, illiteracy, crime and unemployment will no longer play second fiddle to anything."<sup>96</sup> Stanley, and Americans like him, saw what the United States accomplished technologically in just a few short years, and they figured that with the same workforce and motivation, the country could accomplish anything. Directly after the Moon landing, exasperated Americans said things like, "We put a man on the Moon, so why can't we..." in regards to poverty or problems in education. As time moved forward, however, the rhetoric changed. Americans started saying, "We put a man on the Moon, *so we can...*" The Moon landing became a monument to civil religion — the very force that had inspired its success.

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<sup>95</sup> Farmer and Hamblin, *First on the Moon: A Voyage with Neil Armstrong, Michael Collins, Edwin E. Aldrin Jr.*, 465.

<sup>96</sup> Frank L. Stanley, "People, Places, Problems," *Chicago Daily Defender (Big Weekend Edition)*, 9 August 1969.

## Chapter III

### Requiem for Apollo: The Lasting Impact of the Moonshot

“Choosing the Moon brings out the best in us.”

Audi commercial, 2016.<sup>1</sup>

“In 1957...The Soviet Union began a new Space Age with the launch of Sputnik. We rose to the challenge by passing the National Defense Education Act, and by inspiring the nation to land on the Moon...Today, we need a similar bold new commitment to enable the current generation of Americans to rise to the global challenges we face.”

Senator Ted Kennedy, 2007.<sup>2</sup>



NEARLY 50 YEARS AFTER APOLLO 11 LANDED on the Moon, President Obama laid out his vision for the future of America in his final State of the Union address. He acknowledged that the United States faced many challenges and needed to reignite the spirit of innovation that had made it a great country. In the same breath, he said, “Sixty years ago, when the Russians beat us into space, we didn’t deny Sputnik was up there. We didn’t argue about the science, or shrink our research and development budget. We built a space program almost overnight, and twelve years later, we were walking on the moon.” A few moments later, Obama added, “With a new moonshot, America can cure cancer.”<sup>3</sup>

Obama’s use of the Moon landing as proof of what America can accomplish when it is united toward a goal is evidence of a trend that began a few years after Apollo 11’s return to Earth.

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<sup>1</sup> Audi USA, *Audi R8 Big Game Commercial – Commander – Extended Cut*, <https://www.youtube.com/watch?v=yB8tgVqmKzw>.

<sup>2</sup> “College Cost Reduction and Access,” *Congressional Record*, 7 September 2007, Congress.gov.

<sup>3</sup> Barack Obama, “President Obama’s 2016 State of the Union Address,” *Medium*, 13 January 2016, <https://medium.com/@WhiteHouse/president-obama-s-2016-state-of-the-union-address-7c06300f9726#.edbbf7csk>.



It had entered into the civil religion as a “god term,” a word that is loaded with different connotations and emotions, one that brings to mind different positive events, values, and memories. Richard Weaver coined this phrase in his 1953 essay about “Ultimate Terms in Contemporary Rhetoric.”<sup>4</sup> He wrote that a god term is “that expression about which all other expressions are ranked as subordinate and serving dominations and powers...[it is] the one term which in our day carries the greatest blessing.”<sup>5</sup> Words and phrases that are god terms include “American,” “founding fathers,” “freedom,” and “patriot.” He added that in a culture with a “strong and evenly diffused religion,” a single god term carries heavy meaning for a people.<sup>6</sup> I contend that in the United States of America, where the civil religion is the strongest and most evenly diffused religion, god terms come from and invoke this civil religion. They are words that carry with them what it means to be American; people who do not support these words, or perhaps use them incorrectly, are assumed to be un-American. I believe that these words can also be symbols, events, or images, and I believe that after its success in 1969, Apollo 11 and the Moon landing became one such god term.

Viewing the Moon landing as a god term provides the solution to an inconsistency noted by historians Roger Launius and Matthew Tribbe. Both describe how Americans consistently believe that the American space program had overwhelming support in the decade leading up to the Moon landing, while polling evidence from the time shows otherwise, and both say that this is because of the way the Moon landing and Apollo has been depicted in popular culture since the ‘60s. Another solution emerges, however, when studying the memorialized version of the event. I believe that the reason the Moon landing stands out in the minds of Americans is because it has been inducted into civil religion.

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<sup>4</sup> Weaver, *The Ethics of Rhetoric*, 211.

<sup>5</sup> *Ibid.*, 212.

<sup>6</sup> *Ibid.*

This chapter will show that the Moon landing, as part of civil religion, is an example of a god term in American society. It will explore how, when, and why people invoke the Moon landing, as well as how public memory surrounding the event has changed in a way to ensure that the event continues to fulfill the purpose we have ascribed it. It will track the rhetoric and use of the Moon landing from 1969 to present day. There is a national pride surrounding the Moon landing, and for many people, it is the first thing that comes to mind when thinking about American values and what makes their country great. The Moon landing as an event now serves as a monument to the values and civil religion that allowed it to happen; rather than mention Americans' value in hard work, their sense of destiny, and their pride in country, one need only mention Apollo 11 to invoke the civil religion that creates the American identity.

### **Revealing Their Hand: Expressions of Civil Religion Within the JSC Oral History Project**

The oral histories that made up the bulk of evidence in Chapters I and II find themselves once again useful, this time in evaluating the impact time has had on memories and perceptions of Apollo, using the NASA employees as a case study. In retelling their stories from the Apollo Project, several men started crying or became too emotional to continue. Many professed that the time they spent working at NASA, specifically on the Apollo program, was the most important time of their lives.

John Boynton sums up why the time was so emotional in one quote from his interview:

I want to talk as much as I can in our interviews about the feelings that were generated working on Apollo, and the sense of pride, and the things that most engineers don't usually talk about...can you imagine how I felt when Neil got out of the Lunar Module [LM], stepped down that flimsy, too-short ladder on one leg of the LM and hopped the last three feet to the lunar soil? It was frankly surreal...that 'small step' for Neil, his 'giant leap for mankind,' was

the culmination of ten years of my work and of course thousands of others.<sup>7</sup>

The NASA engineers had great pride in their work, and as they got older and saw their work take on new meaning, this pride grew and grew.

For many interviewees, the Moon landing is the ultimate god term. Some saw it simply as a technical achievement; others saw it as an apex in American history. Whatever the feelings associated with it, not one worker at NASA in 1969 has something negative to say about the Moon landing. It is unsurprising, then, that so many would be angered by accusations of a Moon landing hoax. Conspiracy theorists make up a very tiny portion of the United States. Conspiracy theorists who claim the Moon landing was faked make up an even smaller portion. However, in February 2001 the Fox network gave credibility to these theories by airing a television special titled “Conspiracy Theory: Did We Land on the Moon?”<sup>8</sup> Several NASA engineers commented on this special in their interviews. John Annexstad “became dismayed while [he] was looking at it, [he] became very, very angry and very upset.”<sup>9</sup> Kenneth Young believed “it would have been an ever neater trick to fake it,” and said of the Fox program, it “made me so incensed...I told them I’d never watch another Fox program...I mean, that thing was so absurd it just — I told them the producers were irresponsible morons to just get ratings and whatever.”<sup>10</sup> It should be noted here as well that Buzz Aldrin once got so incensed at a conspiracy theorist cornering him with questions that he punched him in the face.<sup>11</sup>

Because of its value as a god term, NASA employees were quick to come to the rescue of the Moon landing. They hold the event up on a pedestal with all things that make America great.

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<sup>7</sup> John H. Boynton, 12.

<sup>8</sup> Tony Phillips, “The Great Moon Hoax,” National Aeronautics and Space Administration, *NASA Science News*, (23 February, 2001), [http://science.nasa.gov/science-news/science-at-nasa/2001/ast23feb\\_2/](http://science.nasa.gov/science-news/science-at-nasa/2001/ast23feb_2/).

<sup>9</sup> John Owen Annexstad, 45.

<sup>10</sup> Kenneth A. Young, interview by Kevin M. Rusnak, 6 June 2001, 5, NASA Johnson Space Center Oral History Project.

<sup>11</sup> “Ex-Astronaut Escapes Assault Charge,” *BBC*, 21 September 2002, <http://news.bbc.co.uk/2/hi/americas/2272321.stm>.

What is also evident in the interviews is that the interviewers themselves glorify the event, sometimes even to a greater extent than the employee being interviewed. An excellent example of this is the interactions between Douglas Brinkley, interviewer, and Neil Armstrong, interviewee. Reading the transcript, it is apparent that Brinkley is an excitable man who is thrilled to have the opportunity to talk with the first man on the Moon. Unfortunately, Armstrong does not share his excitement. For example, when asking how Armstrong felt when he heard he was going to be on the mission to the Moon, Brinkley stammered out, “It must have made you – ‘My goodness, this is happening now.’ The excitement, the reality that this could be the big moment...” to which Armstrong simply responded, “Well, it was going to be a big moment, no matter what the flight objective was.”<sup>12</sup> Later on, Brinkley tried to get to the symbolism behind the choice of names for the two modules, however, Armstrong merely stated that it was a crew decision, and that tasks like the naming of the modules “were kind of a pain to have to deal with...but we had to do it.”<sup>13</sup>

Reading his questions, it is evident that the Moon landing and Neil Armstrong meant so much to Brinkley. He loaded his questions with romantic background and tried to get answers out of Armstrong that line up with his expectations. Armstrong, however, does not comply. Throughout the entire interview he remains levelheaded and does not elaborate on the facts in any way that indicates he has been absorbed by the event he helped create. For Brinkley, the Moon landing is a god term and he is speaking with Armstrong, a god. Other interviewers have some of the same frustrations as Brinkley. In an interview with Aaron Cohen, the Director of Engineering in Houston, Summer Chick Bergen probes for his feelings during the Moon landing when he was in mission control, looking for the type of magic she associates with the event. Cohen simply told her “I just thought it was normal...I just really didn’t think it was anything great. I just thought that’s what we

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<sup>12</sup> Neil A. Armstrong, interview by Stephen E. Ambrose and Douglas Brinkley, 19 September 2001, 65, NASA Johnson Space Center Oral History Project.

<sup>13</sup> *Ibid.*, 66.

set out to do and that's what we were going to do."<sup>14</sup> Obviously dejected, Bergen had no choice but to change the subject.

From 1961 to the time the interviews were completed, the Moon landing cemented itself in the minds of the people who made it happen as the most important event they had ever contributed to. At the same time, a public that mostly did not support the endeavor forgot their misgivings and became unified to the idea that the Moon landing was a worthy project and one of the best things the country had ever accomplished. These processes occurred both because of the way the world celebrated the Moon landing after it occurred, and how the event started being used as a god term in the years since.

### **From Space to Grass-roots America**

In the months immediately preceding and then following the Moon landing, many brand names used the astronauts and Apollo to sell their wares. The Duro Pen Company sold a pen in packaging that read, "The Marker that went to the Moon NASA approved."<sup>15</sup> Stouffer's Frozen Prepared Foods announced, "Everybody who's been to the Moon is eating Stouffer's." Del Monte congratulated Armstrong, Aldrin, and Collins on their successful flight, and put out an ad showing a gaggle of press asking a cartoon astronaut, "Would you say your flight to the Moon was such a success because of the Del Monte dried fruits you ate on the way up or the frozen meals from the Del Monte Corporation you ate after you landed?" To his absurd question, the astronaut slyly replied, "Well, it's kinda hard to pin success on a dried apricot, but..." leaving the quality of Del Monte goods up to the consumer's discretion.<sup>16</sup> Companies selling items ranging from Tang, to watches, to tape recorders, all invoked Apollo 11 or the astronauts in some way. They did this

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<sup>14</sup> Aaron Cohen, interview by Summer Chick Bergen, 25 September 1998, 44, NASA Johnson Space Center Oral History Project.

<sup>15</sup> Scott, Jurek, and Cernan, *Marketing the Moon*, 44.

<sup>16</sup> *Ibid.*, 45.

because mention of the Moon landing stirred up sentiments of pride, patriotism, and power in Americans.

Some of the celebrations of the astronauts' return to Earth demonstrate early hints of how the Moon landing would be memorialized in the minds of Americans everywhere. In the weeks following their return, Americans gave the three astronauts true hero treatment. Once released from quarantine, Armstrong, Aldrin, and Collins travelled through three different cities on their way to a celebratory dinner sponsored by President Nixon in California. The parades they attended in New York City, Chicago, and Los Angeles rivaled those that occurred at the end of World War II. Silent footage shows smiling crowds waving American flags, watching marching bands and cowgirls twirling batons surround the astronauts' motorcade as confetti rains down on everyone.<sup>17</sup>



*A hero's welcome in New York City  
Nasa.gov*

At a State dinner in Los Angeles, the President presented Armstrong, Aldrin, and Collins with the Medal of Freedom, the highest civilian honor an American citizen can receive. Each astronaut graciously accepted the token by humbling himself and acknowledging the thousands of

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<sup>17</sup> Kamecke, *Moonwalk One*.

NASA employees who made the Moon landing possible.<sup>18</sup> Aldrin said it best when he spoke to the American people and declared,

Our flight was your flight. We flew Eagle and Columbia with your hands helping us on the controls and your spirit behind us. When Neil and I saluted the flag, all Americans, I think, saluted it with us...There are footprints on the Moon. These footprints belong to each and everyone of you, to all mankind, and they are there because of the blood, the sweat, and the tears of millions of people.<sup>19</sup>

Aldrin cemented the Moon landing as an event that belonged to all Americans and was truly American. This act positioned the landing and Apollo 11 in place to be invoked later on.

In the months that followed the Los Angeles dinner, Americans in all 50 states received a piece of the project that they had inspired. Parts of the lunar module, artifacts from the Moon, and sometimes the astronauts themselves, made their way through all the nation's capitols over the course of a year.<sup>20</sup> Millions of people flocked to hear speakers praise the astronauts and America. The slogan for this nation-wide tour, "From Space to Grass-roots America," showed NASA's desire to share the Moon landing with all of America.<sup>21</sup>

Over the course of one year, the Apollo spacecraft visited all 50 states and drew more than 3.25 million visitors.<sup>22</sup> Starting in Sacramento, California, NASA presented the Apollo 11 module, Moon rocks, and other memorabilia to the American public in the form of a mini state fair. It was not unusual for state governors to proclaim the time of the visit as "Space Week" or "Apollo Days," and ensure that local museums and science groups scheduled events to take advantage of the tour.<sup>23</sup> The tour turned into a competition of sorts, with the governors of several states "vying with each

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<sup>18</sup> Richard Nixon, M, "Remarks at a Dinner in Los Angeles Honoring the Apollo 11 Astronauts" (Gerhard Peters and John To. Woolley, 13 August 1969), The American Presidency Project, <http://www.presidency.ucsb.edu/ws/?pid=2202>.

<sup>19</sup> Ibid.

<sup>20</sup> Donald L. Zylstra, "Apollo 11 Fifty-State Tour, 1970-1971" (National Aeronautics and Space Administration, June 1971), NASA History Division.

<sup>21</sup> Scott, Jurek, and Cernan, *Marketing the Moon*, 101.

<sup>22</sup> Zylstra, "Apollo 11 Fifty-State Tour, 1970-1971."

<sup>23</sup> Ibid., 4.

other at each new stop in pointing up the significance of the Apollo 11 mission's achievement in the history of their region, the nation and the planet."<sup>24</sup> An effect of each state trying to "out-patriot" the next was the memorialization of Apollo 11 as a national monument that belonged to the American people, which set off a domino effect impacting how Americans viewed the Moon landing, lasting even until today.

### **1974: Five Years After**

After the national tour of Apollo ended, the lunar module and a Moon rock sample were placed in the Smithsonian Air and Space Museum. Five years after Apollo 11 successfully returned to Earth, Michael Collins spent every day going to work as the curator of this institution. He would walk through the morning crowds, and, on his way to his office pass by the very module he helped fly to the Moon and back.

But no one noticed.<sup>25</sup>

The Moon landing came about because of a perfect storm of factors that inspired specific values in the American civil religion. Once it successfully happened, those factors, such as the race with the Russians and desire to go where no man had gone before, disappeared, and the public soon lost interest in the space program. In a poll one year after the landing, *The New York Times* found that only one of fifteen responders in St. Louis and eight of twenty-two responders in New York City remembered the name of the first man on the Moon.<sup>26</sup> That year, faced with funding cuts and low public approval, NASA cancelled its last three Apollo missions.<sup>27</sup> In 1972, man left the Moon for the last time. Singer Harry Nilsson revealed the attitudes of Americans toward outer space when he

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<sup>24</sup> Ibid., 3.

<sup>25</sup> Rudy Abramson, "Man's 'Giant Leap' Begins to Lose Its Magic: 'GIANT LEAP,'" *Los Angeles Times (1923-Current File)*, 16 July 1974, sec. PART ONE.

<sup>26</sup> Tribbe, *No Requiem for the Space Age*, 8.

<sup>27</sup> Ibid., 9.



sang, “I wanted to be a spaceman, that’s what I wanted to be...But now that I am a spaceman, nobody cares about me.”<sup>28</sup> Indeed, Americans had turned their attentions away from space and toward more terrestrial matters.

On the fifth anniversary of Apollo 11, *The New York Times* published a short story toward the end of the paper. The piece looked back upon the celebrations of the Moon landing and the wondrous achievement of NASA. It noted that, in 1969, Americans believed the anniversary of the Moon landing would continue to be observed as a national holiday well into the future. It contrasted this with the quietly observed fifth anniversary of the event. Hopefully, however, the article projected that, “when those of future centuries look back on this one, the first time that men landed on another celestial body will loom large and they will be remembered long after those in today’s headlines have passed beyond recall.”<sup>29</sup> The author clearly still believed in the sacredness of the Moon landing, and that only in later years would it truly be appreciated.

As part of the planned fifth anniversary events, Armstrong, Aldrin, and Collins travelled back to the Kennedy Space Center in Florida to dedicate the launch pad that sent them to the Moon as a national monument, and together they attended a ceremony at the National Cathedral in Washington, DC to present the church with a Moon rock they had brought back with them.<sup>30</sup> As described in the introduction to this thesis, the main sanctuary in the National Cathedral has several stained-glass windows that depict various scenes out of American history. The “Scientists and Technicians” window in the National Cathedral celebrates America’s exploration of space and her first steps onto the Moon. It depicts several orbiting planets and stars in a wide array of colors and

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<sup>28</sup> Ibid., 10.

<sup>29</sup> “Apollo Five Years After,” *The New York Times*, July 20, 1974, Proquest Historical Newspapers: *The New York Times*, Document ID 119950502.

<sup>30</sup> Abramson, “Man’s ‘Giant Leap’ Begins to Lose Its Magic.”

shapes. Written at the very bottom of the window are the words, “Is not God in the height of heaven?”<sup>31</sup>

Were it not for several very small important details, a casual member of the Cathedral’s congregation might think nothing of what has become known as the space window; it could very well be a piece of art celebrating nature. However, minute details and the history of the window show its ulterior motives. Thomas Paine was the window’s benefactor, and the artist, Rodney Winfield, has said that he drew the inspiration of the colors he used from the Apollo 11 mission itself. Additionally, the trajectory of Apollo 11 as it left Earth and went toward the Moon is depicted centrally in the window, and lastly, centered in the window is a 7.18-gram Moon rock that Armstrong, Aldrin, and Collins brought back to Earth with them.<sup>32</sup> Taking the entire window into consideration, it becomes clear to any observer that it is not just celebrating space; it is celebrating America’s achievements there.

Along with the space window dedication, Congress quietly celebrated the fifth anniversary of the Moon landing with different leaders making short remarks on the floor. These speeches so soon after the event took place demonstrate that the early responses to the Moon landing were still balancing the nationalist and universalist themes of the Apollo program. For example, Representative Edward Boland of Massachusetts stated,

The Apollo project harnessed the best spirit of this country, and for a brief moment the world came a little closer together...[it] is an achievement we can be proud of — but we must temper our pride by remembering the promise we all shared on that day — and by recalling the message on the plaque that was left on the Moon that historic day 5 years ago... ‘We came in peace for all mankind.’<sup>33</sup>

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<sup>31</sup> Washington National Cathedral, *National Cathedral Tour: “Space” Stained Glass Window*, <https://www.youtube.com/watch?v=vUAGf3MmiFI>.

<sup>32</sup> “NASA - The ‘Space Window’ at National Cathedral in Washington.”

<sup>33</sup> “Fifth Anniversary of Moon Landing - ‘We Came in Peace For All Mankind,’” Congressional Record (Washington, DC, 18 July 1974), ProQuest Congressional, CR-1974-0718.

Americans could celebrate their achievement, but Boland wanted them to celebrate along with the world.

The remarks made in Congress around the fifth anniversary also demonstrate that a new train of thought was building around Apollo 11. During this anniversary, the first examples of the Moon landing serving as a god term begin to appear. Representative John Moss of California best articulated why this is so when he noted, “The very idea of going to the Moon in less than a decade...would have given pause to a people not raised in the American spirit, the ‘can-do’ optimism that has paced progress throughout our history. What came to be called the ‘spirit of Apollo’ actually was no more than this basic American spirit.”<sup>34</sup> While Moss chose to explicitly define the American spirit by using Apollo, others realized they could implicitly invoke this spirit simply by mentioning the Moon landing.

Once people realized the American spirit, or civil religion, could be invoked by mere mention of the Moon landing, the event started serving other purposes. One of the first such uses is given by Raymond Kudukis in an article entitled “In Response to an ‘Enviro-Elitist.’”<sup>35</sup> He used the Moon landing to question why Americans would not be able to clean up their environment and turn their eco-system into a less polluted place to live. He wrote, “many people certainly could have said that President Kennedy’s goal of putting a man on the Moon within 10 years also was...excessively ambitious. But this nation went ahead anyway — and succeeded.”<sup>36</sup> This shows that by five years after the Moon landing, it had started being used to demonstrate all that Americans could accomplish with their civil religion. Simply mentioning the event was enough to bring up several different emotions and facts. It had become a god term.

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<sup>34</sup> “Apollo 11 - 5th Anniversary,” Congressional Record (Washington, DC, 17 July 1974), ProQuest Congressional, CR-1974-0717.

<sup>35</sup> “Enviro-Elitist,” Congressional Record (Washington, DC, 24 July, 1974), ProQuest Congressional, CR-1974-0724.

<sup>36</sup> Ibid.

## 1979: Ten Years After

The ceremonies of the fifth anniversary were repeated in a similar fashion for the tenth. After Armstrong, Aldrin, and Collins presented President Jimmy Carter with a flag that had travelled with them to the Moon, Carter declared that in travelling to the Moon, “These three astronauts [represented] the spirit of our entire Nation.”<sup>37</sup> He then started to compare the nation’s contemporary battle for energy security with the contest between the United States and Soviet Union during the Space Race: “Like the Apollo mission, it is a test of our nation’s resources and our spirit as a people. We will win energy security for our nation in the same way we won the race to the Moon.”<sup>38</sup> Perhaps Carter was simply taking advantage of a universally popular event to promote his own political agenda and prove he was a capable president. The fact that he chose the Moon landing anniversary, however, shows that the event had begun to be viewed as a singularity. It had happened once because of American values, and because of this it could happen again.

The anniversary celebration of the Moon landing was not the only time that Carter used it to draw support from the American people; he also mentioned the event in a speech completely unrelated to the space program. Again talking about the energy crisis the country faced, Carter attempted to rally to his unsupportive citizenry by saying,

We know the strength of America. We are strong. We can regain our unity. We can regain our confidence. We are the heirs of generations who survived threats much more powerful and awesome than those that challenge us now. Our fathers and mothers were strong men and women who shaped a new society during the Great Depression, who fought world wars and who carved out a new charter of peace for the world. *We ourselves are the same Americans who just ten years ago put a man on the moon.* We are the generation that dedicated our society to the pursuit of human rights and equality. And we are the generation that will win the war on the energy problem and in that process, rebuild the unity and confidence of America.<sup>39</sup>

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<sup>37</sup> “Apollo 11 Anniversary,” in *Administration of Jimmy Carter, 1979*, n.d., 1276.

<sup>38</sup> *Ibid.*, 1277.

<sup>39</sup> Jimmy Carter, *Energy and the National Goals - A Crisis of Confidence* (Washington, DC, 1979), Americanrhetoric.com, <http://www.americanrhetoric.com/speeches/jimmycartercrisisofconfidence.htm>.

By mentioning the Moon landing in the same breath as the Americans who survived the Great Depression and won two world wars, Carter demonstrates that the Moon landing had entered into the books as an event on par with earlier great American achievements.

President Carter was not the only politician using the Moon landing to inspire Americans to work to fix the energy crisis of the late 70s. Representative Bill Nelson from Florida took to the floor on the tenth anniversary of the Moon landing to tell his colleagues, “If we miss this opportunity to once again tap the collective ingenuity of our people, history will not be kind. We simply must act now. There could be no more fitting date for the beginning of this new challenge than the anniversary of the victory which proves we are capable to meet it.”<sup>40</sup> For Nelson, the Moon landing showed that the United States had the potential to confront a dilemma as serious as the energy crisis, and so he chose to use the event to inspire Americans into the same frenzy that led them to accomplish their goal in 1969.

### **1989: Twenty Years After**

By 1989, the twentieth anniversary of the Moon landing, it had become clear that the legacy of Apollo 11 was not that it was the flight that opened up the doors of the Moon to the entirety of the American people. In 1972, Eugene Cernan was the last man to walk on the Moon, and America had not looked back since. After the final Apollo mission, NASA turned its energies toward the Space Shuttle and International Space Station, however enthusiasm for these programs never quite matched that of Apollo. In 1989, however, the country was facing tough times, and some politicians began to use the Moon landing as a god term in an attempt to rekindle Americans’ enthusiasm for

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<sup>40</sup> “Commemorating the 10th Anniversary of the First Walk on the Moon,” Congressional Record (Washington, DC, 20 July 1979), ProQuest Congressional, CR-1979-0720.

outer space. At the same time, however, other politicians were using the Moon landing to inspire Americans to focus on the problems that they faced at home, such as poverty and unemployment.

The two different uses of the god term form of the Moon landing came to a head on 20 July 1989. On the twentieth anniversary of the event, Congress debated enacting legislation that would increase funding to veterans affairs, while at the same time arguing over the United States' commitment to the Space Station. Representative Richard Durbin of Illinois, a Democrat, invoked the 1960s national goal of putting a man on the Moon when he said,

Our Nation came to its feet to cheer an astronaut's step into immortality. Today we can set a new national goal, the goal of safe housing for our Americans, health for our children, security for the elderly and for the veterans who risked their lives so we could have our own peaceful dreams. Bringing children in from the cold and the crime of the streets to a safe home does not have the pageantry of an astronaut girded for exploration hurtling into space. But our Nation can come to see a national goal of decent and affordable shelter as a great victory over the elements.<sup>41</sup>

Durbin wanted Americans to feel the same sense of motivation they had felt when putting a man on the Moon, and he wanted them to use this motivation to solve many of the problems facing the streets of the country. He thought that by invoking the Moon landing, Americans would be able to rally behind a new, more Earthly, cause.

In the same vein as Durbin, however, other Congressmen used the Moon landing to try and inspire Americans to once again set their sights on space. Republican Representative Jan Meyers from Kansas refuted Durbin when she told Congress, "As we recall the triumphs of the past, we must prepare for the needs of the future. America must build this space station, explore the solar system, and we must return to the Moon. On this heroic anniversary we must remember that, if America is to remain a great nation, it must remain a leader in space."<sup>42</sup> She agreed that the country

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<sup>41</sup> "Department of Veterans Affairs: Veterans Benefits Administration," Congressional Record (Washington, DC, 20 July 1989), 15376, ProQuest Congressional, CR-1989-0720.

<sup>42</sup> *Ibid.*, 15381.

needed to address poverty, however, she also believed that in order to be a leader on the world stage, the United States would once again need to set its sight on the stars. She brought this up on the anniversary of the Moon landing, and used the Moon landing to make her argument, because she knew it would have an emotional impact on her citizens, and it would be during this time they would be most supportive on any initiatives in outer space. The fact that the Moon landing can draw support to future space enterprises, as well as programs here on planet Earth shows its flexibility as a god term.

### **Toward the New Century**

At the end of the twentieth century, the country had not made many more strides toward the Moon. More than ever, however, Apollo was a celebration of America. In a White House ceremony on the twenty fifth anniversary of the Moon landing, President Bill Clinton said that the “Apollo 11 [astronauts] were our guides to the wondrous, the unimaginable at that time, the true handiwork of God. They realized the dreams of a nation; they fulfilled an American destiny. They taught us that nothing is impossible if we set our sights high enough.”<sup>43</sup> Clinton was explaining that the Moon landing proved that God had his eyes on America, and if he supported them in that venture, what was to say he would not support the country in the future? While not at the ceremony itself, John F. Kennedy Jr. sent a letter to be read at the twenty fifth anniversary. He wrote, “Perhaps the greatest lesson of the mission to the Moon is the confidence it should give us that we can succeed in other missions too. My hope on this impressive anniversary is that our success in space will inspire us to work harder together to meet and master the many challenges we face here on Earth.”<sup>44</sup>

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<sup>43</sup> C-SPAN, *25th Apollo Anniversary Commemoration* (Washington, DC, 1994), <http://www.c-span.org/video/?58831-1/25th-apollo-anniversary-commemoration>.

<sup>44</sup> “Apollo 11 Silver Anniversary With Vice President Al Gore,” 16 July 1994, NASA History Office, <https://historydms.hq.nasa.gov/sites/default/files/DMS/e000019003.pdf>.

Some of the challenges that politicians hoped to conquer by using the Moon landing included inspiring young children to study math and science in school, empowering teachers, fighting crime and violence, and gaining energy independence. For example, when talking about many of these ills, Democratic Senator Byron Dorgan from North Dakota said, “this is a country that got through a civil war and united on the other side. This is a country that survived the depression and got through on the other side. This is a country that defeated Hitler and cured polio and put a man on the Moon. This is a country with remarkable resources and remarkable will,” and because of all of this, there was no reason the United States could not find a way to fix itself.<sup>45</sup> Here, the Moon landing is again used in tandem with other god terms and phrases from American history. Dorgan shows that the event is now considered on par with winning World War II or uniting the Union and Confederacy together after the Civil War. He uses the event to remind Americans how great their country is in order to inspire pride and perhaps motivation to get to work solving its problems.

During election years, it has become very common for politicians to use the Moon landing as proof that Americans have the power to change the direction their country is going in. When announcing his candidacy for President in 2007, Barack Obama assured those listening to him that the hardships of the past few years would not continue:

In the face of tyranny, a band of patriots brought an empire to its knees. In the face of secession, we unified a nation and set the captives free. In the face of Depression, we put people back to work and lifted millions out of poverty. We welcomed immigrants to our shores. We opened railroads to the west. *We landed a man on the Moon.* And we heard a King's call to let ‘justice roll down like waters, and righteousness like a mighty stream.’ We've done this before: Each and every time, a new generation has risen up and done what's needed to be done. Today we are called once more, and it is time for our generation to answer that call. For that is our unyielding faith –

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<sup>45</sup> “The American People Have Choices to Make,” *Congressional Record*, 6 March 1996, S1538, Congress.gov.



that in – in the face of impossible odds, people who love their country can change it.<sup>46</sup>

Again, the Moon landing is listed as one of the most notable accomplishments of the United States in its history, and again its use as a god term is intended to strike up the same feelings that surrounded it in its original context, showing the power it has on American citizens. When voters questioned Obama on his seeming over-eagerness and overconfidence in the country, Senator Edward Kennedy himself invoked the Moon landing in defense of him, saying,

We are told that Barack Obama believes too much in an America of high principle and bold endeavor, but when John Kennedy thought of going to the Moon, he didn't say, 'It's too far to get there. We shouldn't even try.' Our people answered his call and rose to the challenge, and today an American flag still marks the surface of the moon. Yes, we are all Americans. This is what we do. *We reach the Moon*. We scale the heights. I know it. I've seen it. I've lived it. And we can do it again.<sup>47</sup>

Kennedy, the younger brother of the President who put America on the Moon, rebutted the charge that Obama was too eager by simply invoking the Moon landing.

### **City Upon a Hill: America and the Moon Landing in the Eyes of Foreigners**

It is not just Americans who invoke the Moon landing to describe what makes their country great; foreign visitors also use it as a god term to list the positive attributes of the United States. For example, when visiting the United States in 2011, Australian Prime Minister Julia Gillard addressed Congress and heaped praise upon praise upon the country. She said,

For my own generation, the *defining image of America was the landing on the Moon*... I always remember thinking that day, Americans can do anything...As I stand before you in this, this cradle of democracy I see a nation that changed the world, a nation that has known remarkable days. I firmly believe you are the same people who

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<sup>46</sup> Barack Obama, *Official Announcement of Candidacy for US President* (Springfield, Illinois, 2007), Americanrhetoric.com, <http://www.americanrhetoric.com/speeches/barackobamacandidacyforpresident.htm>.

<sup>47</sup> Edward Kennedy, *2008 Democratic National Convention Speech* (Denver, Colorado, 2008), Americanrhetoric.com, <http://www.americanrhetoric.com/speeches/convention2008/edkennedy2008dnc.htm>.

amazed me when I was a small girl *by landing on the Moon*. On that great day, I believed Americans could do anything. I believe that still. You can do anything.<sup>48</sup>

In a room full of (presumably blushing) congressmen, Gillard defined America through the example of the Moon landing. For her, a foreigner, the Moon landing had demonstrated that the United States was truly a shining beacon on a hill for the rest of the world to look up to.

A few years earlier, another visiting Prime Minister, this time Gordon Brown from the United Kingdom, also mentioned the Moon landing when talking to Congress. In an address affirming his support of the United States, and presumably strengthening the Special Relationship, Brown asked the congressmen listening for help solving certain global issues, such as global warming and terrorism. He told them, “I believe you, as a nation that had *the vision to put a man on the Moon*, are also the nation with a vision to protect and preserve our planet earth.”<sup>49</sup> He used the Moon landing god term to remind America’s leaders of a time they had put America in shining light in the eyes of the world in order to convince them to commit to new efforts that could rival the Moon landing in terms of global respect for the country.

## Conclusion

Before the safety of the Apollo 11 astronauts and the success of their mission could be verified, President Nixon instructed his speechwriters to draft a short speech “in event of Moon disaster.”<sup>50</sup> If, for some reason, Armstrong and Aldrin failed to get off the Moon and reconnect with Collins, Nixon had the instructions to call their wives, read his statement, and then allow a clergyman to

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<sup>48</sup> Julia Gillard, *Address to a Joint Session of Congress* (Washington, DC, 2011), Americanrhetoric.com, <http://www.americanrhetoric.com/speeches/juliagillardjointsessioncongress.htm>.

<sup>49</sup> Gordon Brown, *Speech to a Joint Session of Congress* (Washington, DC, 2009), Americanrhetoric.com, <http://www.americanrhetoric.com/speeches/gordonbrownstospeechtocongress.htm>.

<sup>50</sup> Bill Safire, “In Event of Moon Disaster,” 18 July 1969, Richard Nixon Presidential Library and Museum, <https://www.archives.gov/presidential-libraries/events/centennials/nixon/images/exhibit/rn100-6-1-2.pdf>.

perform the same rituals surrounding a burial at sea.<sup>51</sup> Thankfully, Nixon never had to recite this speech. The would-be-eulogy, however, was one of the first statements to hint at what the Moon landing would become. In part, it read,

They will be mourned by their families and friends; they will be mourned by their nation; they will be mourned by the people of the world...In their exploration, they stirred the people of the world to feel as one; in their sacrifice, they bind more tightly the brotherhood of man. In ancient days, men looked at stars and saw their heroes in the constellations. In modern times, we do much the same, but our heroes are epic men of flesh and blood. Others will follow, and surely find their way home. Man's search will not be denied. But these men were the first, and they will remain the foremost in our hearts. For every human being who looks up at the Moon in the nights to come will know that there is some corner of another world that is forever mankind.<sup>52</sup>

This statement makes several things clear. First, should there have been a Moon disaster, the United States would not have halted its mission of putting a man on the Moon and returning him safely to Earth. Second, had Armstrong and Aldrin passed away on the Moon, they would have become martyrs for the American people and the world. Just like the astronauts who died on Apollo 1, they would go down in history as great men who held exceptionally American characteristics. Lastly, the statement reveals the contradictory nature of the Moonshot. If it had failed, it would have been a failure for all of mankind, but it did not fail. It succeeded and the Moon landing went down in history as one of the most American endeavors of all time. Simply eluding to the event is enough to bring up memories of what transpired and what it means to the country.

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<sup>51</sup> Ibid., 2.

<sup>52</sup> Ibid., 1–2.

## Epilogue

IN 1865, FRENCH AUTHOR JULES VERNE, in writing about the satellites of our solar system, proclaimed that the Earth's partner, "one of the least important of the entire solar system," was the satellite "whom the daring genius of the Americans professed their intention of conquering."<sup>1</sup> Those who know that Verne lived 1828-1905 understand that the publication date of this quote is no typo, rather, Verne, one of a handful of Frenchmen fascinated with American culture at the time, recognized something special about the United States, and he wrote a science fiction novel based upon that *je-ne-sais-quoi* of American culture. In *From the Earth to the Moon* and *Round the Moon*, Verne created a scenario in which a passionate subsection of American society dedicated itself to putting its efforts and resources into sending a man to the Moon, and in doing so, he correctly predicted several aspects of the real Moon landing that took place more than 100 years afterwards. He was able to do this, not out of ingenuity, but because certain American tenets did not change over the course of 100 years. These characteristics, of course, are part of the civil religion.

Verne's Moonshot takes place after the end of the United States Civil War — a period when Robert Bellah believed civil religion was being intensely scrutinized on its national meaning.<sup>2</sup> The President of the Gun Club, an establishment whose members profited from the weapons experimentation during the war, notices that, "too long already a paralyzing peace has plunged the members of the Gun Club in deplorable inactivity."<sup>3</sup> The President, Impey Barbicane, believes that the Club has the capability to turn its energies toward "some grand experiment worthy of the nineteenth century," and adds that he has studied a problem that could be solved by the Club's artillery knowledge. He has considered every side and calculated every possibility, and he concludes

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<sup>1</sup> Jules Verne, *From the Earth to the Moon; And, Round the Moon* (Public Domain, Apple Books, 1905), 35.

<sup>2</sup> Robert N. Bellah, "Civil Religion in America," 47.

<sup>3</sup> Jules Verne, *From the Earth to the Moon*, 14.

that, “we are safe to succeed in an enterprise which to any other country would appear wholly impracticable. It is worthy of yourselves, worthy of the antecedents of the Gun Club; and it cannot fail to make some noise in the world.”<sup>4</sup> He reveals his plan to go to the Moon:

Don’t be surprised if I am about to discourse to you regarding the Queen of the Night. It is perhaps reserved for us to become the Columbuses of this unknown world. Only enter into my plans, and second me with all your power, and I will lead you to its conquest, and its name shall be added to those of the thirty-six states which compose this Great Union.<sup>5</sup>

Finally, to a cheering and rambunctious crowd, Barbicane concludes, “It is reserved for the practical genius of Americans to establish a communication with the sidereal world.”<sup>6</sup>

It is obvious from the very onset that Verne hit the nail on the head on what it would take to send an envoy from Earth to the Moon – he tapped into civil religion and used it to fuel the adventure. As Chapter I of this thesis revealed, the 1969 Moon landing came about because of civil religion. Kennedy, young and charismatic like Barbicane himself, appealed to the patriotism and dedication to freedom of American citizens in order to rally up the enthusiasm for going to the Moon. In 1865, Verne wrote, “We might well ask ourselves of what materials are the hearts of these Americans made, to whom the approach of the most frightful danger added no pulsation.”<sup>7</sup> Indeed, as in real life, the engineers working on Verne’s Moonshot surmounted every hardship and obstacle that came their way. This was because of the implicit attributes of civil religion; the values like a commitment to liberty and justice, civic mindedness, perseverance, self-sacrifice, and dedication to a higher goal. Verne also demonstrates observation of the explicit values of civil religion; those which raise the United States high above other countries, such as its chosen-ness and exceptionalism.

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<sup>4</sup> Ibid., 15.

<sup>5</sup> Ibid., 16.

<sup>6</sup> Ibid., 19.

<sup>7</sup> Ibid., 218.

When it came to the launch of the Columbiad, the celebration of the men travelling in it, and the fervor surrounding its return, Verne might as well substitute “Apollo 11” for all mentions of the projectile; he accurately describes several scenes that actually took place in 1969. As Chapter II showed, in celebrating Apollo, people were actually celebrating civil religion and all it entailed. Americans flocked to watch the Moonshot, both real and fictional, unfurl. The astronauts became national heroes, celebrated for their American qualities. On the return to Earth, Americans hailed the Apollo and Columbiad missions as great achievements for the American people. During the celebrations, Verne writes that the astronauts,

sped from one town to the other, finding whole populations at table on their road, saluting them with the same acclamations, lavishing the same bravos!...for four days one would have thought that the United States of America were seated at one immense banquet, saluting them simultaneously with the same hurrahs! The apotheosis was worthy of these three heroes whom fable would have placed in the rank of demigods.<sup>8</sup>

Indeed, as Chapter III showed, during and after the celebrations, the United States elevated the astronauts and Apollo 11 up to a status higher than that of just man.

While the only dissenter to Verne’s Moonshot eventually came around and went with the Columbiad to the Moon, Chapter II demonstrated that in reality not all Americans shared the same enthusiasm for the Moonshot. “The squares” worked to make the feat possible, and another sect celebrated it. Minority groups such as African Americans and hippies had other problems concerning them. However, while these American groups opted out of the Moon landing, some foreign groups joined in. Apollo 11 captured national attention, especially as it was hailed as a “giant leap for mankind.” The nationalist undertones of the Moon landing, however, overtook these universalist intentions. While man had left his home planet, the United States wanted the world to remember that it was Americans who made it possible.

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<sup>8</sup> Ibid., 462.

Just as the successful return of the Columbiad from the Moon inspired Americans to dedicate themselves to a future in space, the actual Moon landing went from an undertaking of civil religion to a part of it, as described in Chapter III. As god terms, the Moon landing and Apollo 11 are used to invoke the civil religion — what Americans can accomplish because of their unique set of values and history. Mention of the Moonshot is enough to rally Americans to a new venture, such as going to Mars, curing cancer, or helping fellow citizens at home. Apollo 11 recalls to Americans the great things they can accomplish when they set their minds to a high enough goal. It is a reminder that nothing is impossible, and that even the highest bars can be surpassed.

While Jules Verne intended *From the Earth to the Moon* and *Round the Moon* as “satire of the human preoccupation with war,” he managed instead to describe certain foundations of American civil religion.<sup>9</sup> And, while he missed many of the minute scientific details (there is no water on the dark side of the Moon), Verne accurately pinpointed the characteristics that make America *American*. This demonstrates the sustainability of civil religion. The fact that a foreigner predicted 100 years beforehand the themes and ways that Americans would use to put a man on the Moon shows how powerful civil religion is in shaping our countries history. It was because of this civil religion, and the values it extolled, that America was able to successfully put a man on the Moon. Their civil religion fueled the NASA engineers to success, and it was this civil religion that Americans celebrated when Armstrong set foot on the Moon and in the years after.

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<sup>9</sup> Jules Verne, *From the Earth to the Moon*, ed. Aaron Parrett, trans. Edward Roth (Barnes & Noble Publishing, 2005), IX.

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