

# Moon Shot

## *From Renaissance Imagination to Modern Reality*

Mari-Tere Álvarez

First used by Shakespeare in 1603, the term “futurity” is referred to in the lexicon as the “quality or state of being future.”<sup>1</sup> Distinct from “future,” futurity is a vision of the future; it is not a fixed event. Futurity is essentially a forward-driven mode, but it does not simply mean development. Much as Europeans aspired to reach India via a western sea route in the Middle Ages, futurity is an image and a horizon: seen and discussed but just out of reach.<sup>2</sup> This essay explores a number of future-oriented speculations in the practices and theories of sixteenth- and seventeenth-century art worlds (both visual and literary), with a particular emphasis on the ways in which future-making was a critically fundamental part of the ambitious imperial ventures of Early Modern Europe.

Human beings have always had a penchant for the marvelous, for that which seems beyond our reach. Perhaps not surprisingly, the motto for the Holy Roman Emperor Charles V (1500–1558) was *Plus Ultra*, “further beyond,” that is, going beyond the known reaches of Europe stretching into the unknown, the future.<sup>3</sup> The Early Modern period was marked by individuals who saw beyond known boundaries and were seeking to create future worlds. Whether it was Columbus attempting to circumnavigate the globe or Francis Bacon’s new utopian society—emperors sought and dreamers dreamed. It was left to the artisans, writers, and cartographers to make visual these imagined futures and thereby help us, the readers and viewers, to see these imagined futures as possible reality.<sup>4</sup> This essay looks at the futurists of the Early Modern period who first gazed into the night sky and began to dream of new possibilities, which would take an additional four hundred years to make reality.

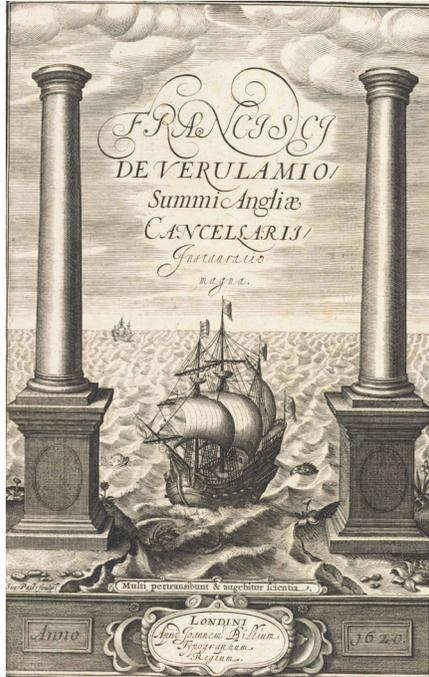


FIGURE 1.1. Artist unknown, title page, engraving from Francis Bacon, *Instauratio magna*, 1620. SOURCE: Wikimedia Commons. [https://commons.wikimedia.org/wiki/File:Instauratio\\_Magna.jpg](https://commons.wikimedia.org/wiki/File:Instauratio_Magna.jpg)

### A POST-COLUMBIAN WORLD

Etched on the Pillars of Hercules, *Non Plus Ultra* (nothing further beyond) marked the westernmost entrance to the Mediterranean at the Strait of Gibraltar, warning travelers that nothing lay beyond (figure 1.1). In other words, the only thing beyond the strait was the end of the then-known world.<sup>5</sup> Consequently, before the Renaissance, most people across Western Europe simply believed that the juncture of the Mediterranean with the Atlantic was in fact the limit of the known world.<sup>6</sup>

Any remaining doubts regarding the known boundaries of the world were completely eradicated by the Spanish expedition to the West Indies in 1492.<sup>7</sup> Celebrating the transgression of “*non plus ultra*,” that is, the encounter with the Americas, *Plus Ultra* (“there is more beyond”) was adopted by King Charles V of Spain and I of the Holy Roman Empire (1500–1558), who chose to apply the motto along with the Pillars of Hercules as his coat of arms. This risk-taking call-to-arms to go further, to challenge oneself to move beyond that which is understood, to go where no one has gone before, would have particular resonance to a nation at the vanguard of global exploration.<sup>8</sup>

## THE WORLD IS NOT ENOUGH

Not to be outdone by his father, King Philip II of Spain (1527–1598) expanded Spanish power to encompass global domination.<sup>9</sup> Exploiting the unexpected demise of Philip II's nephew, King Sebastian of Portugal (1557–1578), which left Portugal and its territories without an obvious heir, Philip II asserted his familial rights to Portugal and, more significantly, its entire colonial enterprise. This land coup, coupled with new acquisitions in New Spain, Tierra Firme, and the Philippines, as well as areas on the continent of Africa, created the first empire in history on which the sun never set.<sup>10</sup> And it seems that global domination might not have been enough; in 1583, Philip II's imperial aspirations were recorded on a special medal. To commemorate Philip II's annexation of the Portuguese dominions and celebrate all he had accomplished to date, a medal was coined with a portrait of Philip II circled with the words *Philippus Hispaniarum et Novi Orbis rex* (Philip, King of Spain and of the New World). While that is impressive, it is the medal's obverse that is of greater interest. Philip II's motto on the reverse represents a horse sitting atop a terrestrial globe surrounded by the legend *Non sufficit orbis* ("The world is not enough").<sup>11</sup> By 1583, the motto was adopted into the Spanish coats of arms.<sup>12</sup> Not surprisingly, like his father before him, Philip II had adopted a mantra that captured the new futurist sentiment of the sixteenth century: truly, the world was not enough. With the terrestrial world now conquered, the Spanish monarchy turned its thoughts to a vaster universe to conquer, starting with the moon.

With Spain, and by extension, greater Europe, drunk on these ever-expansive imperial real estate grabs, it would not be long before everyday people considered a future that would include exploration of worlds beyond our own. From the mid-sixteenth century forward, the moon would figure prominently in the European imagination. In 1551 George Ferrers, the Lord of Misrule, organized that year's annual Christmas festivities for the Royal House; the festivities' theme was space.<sup>13</sup> So popular was the theme that the following Christmas festivity at Greenwich Palace focused on "outer space."<sup>14</sup> This fascination with a world beyond our terrestrially bound Earth was not limited to monarchs; people across Europe and the Americas were captivated by the idea of other worlds. And so Early Modern writers and artists began to feed this growing fascination by creating narratives about life on the moon.

## THE MOON AND THE EARLY MODERN IMAGINATION

Well before humans could fly, a literary and visual tradition for space travel developed.<sup>15</sup> In the sixteenth and seventeenth centuries, fiction writers dreamed of a new world filled with cosmic voyages, and artists created images to accompany the fantastic tales.<sup>16</sup> Guy Consolmagno reminds us that we should not be surprised to find a strong interaction between science-fiction stories, the science behind

those stories, and the popular culture from which those stories sprang.<sup>17</sup> And, whereas it is true that these tales of wonder were never understood by sixteenth-century readers to have been based in reality, the tales did sow seeds of possibility, dreams of what might be someday possible. Of course, these seeds of futuristic possibility were possible only in the post-Columbian world in which Europeans were living, one in which the inconceivable was made real. It was once unimaginable that Europeans could circumnavigate the globe, much less that Europeans could encounter a whole then-unknown hemisphere. Yet these once unbelievable achievements allowed Europeans to begin to conceive of other impossible ideas as being possible. Europeans, particularly the English, were filled with feelings of envy, suspicion, and even awe toward Spain. Before sailing the West Indies, Columbus had visited other ruling houses for sponsorship, including the Tudors. As history has recorded, it would be only Isabel of Castile who would support this expedition and consequently change Spain's course of history.

To make matters worse, the Treaty of Tordesillas, drafted in 1494, divided the trade and colonization rights of the globe between the Portuguese and the Spanish.<sup>18</sup> The official reason for the treaty was to prevent confrontation between these two exploring nations. Although initially successful at maintaining an armistice between the powers, the 1494 treaty eventually backfired and had sweeping repercussions on history, unleashing nearly two hundred years of espionage, piracy, smuggling, and warfare between the European nations. By the sixteenth century, the division of the Earth by the Treaty of Tordesillas had propelled Spain into global superpower status. And England, which had its own aspirations, had developed a strong envy-hate relationship with Spain.<sup>19</sup> Imagine, just as new navigational technologies and knowledge were about to open the world's oceanic routes, a treaty was put in place that sought to restrict access exclusively to two nations (Spain and Portugal). Thus began the struggle for control of the seas; with the Crown's blessings, English privateers attacked Spanish ships throughout the Atlantic and the Pacific. The English viewed Spain as the default, but unworthy, inheritor of the Earth. So not surprisingly, it would be English writers who viewed Spain as the natural inheritor of the moon. I postulate that post-Columbian encounters coupled with advances in astronomy began to plant possibilities in the minds of the futurist Europeans, so much so that when writers began to write about other-worldly encounters, they envisioned the conqueror of these lands as the Spanish, then the most logical inheritors of the greater universe.<sup>20</sup>

It is similarly not surprising to find an incredible growth in what can only be described as a type of Early Modern space-colonizing science fiction, with the first explorations focusing on the moon. And to give those early space explorations even more credibility, Early Modern writers often created explorers-protagonists who were Spaniards, not unlike their real-life counterparts who explored the Americas. Historian Richard Kagan has focused attention on one of the most

interesting and understudied stories in the Early Modern space-travel genre.<sup>21</sup> Written in 1532 by Juan Maldonado, a cleric and teacher residing in Burgos, the novel *Somnium (The Dream)* describes a dream in which the author journeys to the moon. The text, which became an international bestseller, was owned by both Charles V and Philip. It opens with Maldonado, who wakes up to observe a comet with his female students. His friend María de Rojas journeys to the moon and discovers an untouched society whose citizens are known as Selenites.<sup>22</sup> The second half of *Somnium* describes the “noble savages” found in the “new world” who are now Christians, making clear the case for the connection between imperial projects of the time and futuristic aspirations toward space.<sup>23</sup> Kagan points out quite aptly that this was written while Spain was in the midst of securing its imperial control over Mexico and Peru.<sup>24</sup> This very critical point should not be glossed over, and I do not think it coincidental that rising interest in futuristic moon journeys coincided with imperial aspiration and assertions. Already in the sixteenth century the idea of Philip II’s imperial acquisitions was being subsumed into futuristic lunar narratives such as that of Maldonado. Both this world and the next were all trophies for Spain.

This idea of potential “discovery,” acquisition, and incorporation into the greater empire, which began in the terrestrial world and moved out into interstellar space, would only grow stronger as time passed, allowing the next generations of the Spanish royal house to think of the moon as a Spanish trophy. Theatrical productions devoted to the theme of the moon attempted to sate European interest in the topic. The 1588 sellout Elizabethan production of *Endimion, the Man in the Moone* by John Lyly tells the story of Endymion, who falls in love with the moon goddess.<sup>25</sup> As in all great rom-coms, the wrong goddess ends up with the wrong boy, but in the end it all has a way of working out. In this case, although Endymion, a human, cannot marry the moon goddess because she is too far above his station in life, he lives a life of eternal devotion from afar.<sup>26</sup>

With each new conquest and new “discovery,” the impossible and fantastic increasingly seemed to be more possible, and consequently the body of work devoted to the moon grew exponentially more fanciful.<sup>27</sup> By 1611, rumors surfaced throughout England that the Jesuits were engaged in a plan to colonize the moon.<sup>28</sup> This bizarre story had its source in John Donne’s *Ignatius His Conclave*, which describes Lucifer and the Jesuits establishing “a church in the moon” to “reconcile the lunatic church” with the Church of Rome.<sup>29</sup> Less than a decade later, the Lord Bishop of Chester, John Wilkins, founder of the famed Royal Society, produced a curious book titled *The Discovery of a New World in the Moone, or, A Discourse tending to Prove that ’tis probable there may be another habitable World*. This book became one of the earliest attempts to establish similarities and relationships between Earth and the moon. Wilkins postulated that birds migrated to the moon during their annual autumn migration, an event of great mystery to some Euro-

peans at the time. Basing his theories on Wilkins, science, and scripture, Charles Morton, an English natural philosopher who himself emigrated to the American colonies, theorized that since no one had ever seen where birds migrated in winter, it followed that one could hypothesize that they left the Earth.<sup>30</sup> And, really, because some species seemed to disappear entirely, the only logical conclusion was that they set off into space, for as Morton notes: “Now, whither should these creatures go, unless it were to the moon?”<sup>31</sup>

Five months after the publication of Wilkins’s work, Francis Godwin published the tale of the adventurer Domingo Gonsales (figure 1.2). Forced into exile after killing a man in a duel, the book’s protagonist Gonsales, a Spanish merchant and nobleman, travels to the West Indies. He is then stranded on the remote but “blessed Isle of St. Helens,” where he trains twenty-five swans, probably somewhat hesitant, to ferry him around. To his amazement and fear, “with one consent” the *gansas* rise up, “towering upward, and still upward” (figure 1.3).<sup>32</sup> Free of the Earth’s atmosphere, after twelve days of flight Gonsales eventually lands on the moon in the year 1599. Influenced by Morton’s theory of bird-moon flight, science fiction, both literary and visual, became science in the 1600s.<sup>33</sup> Thanks to the widespread dissemination via multiple editions in multiple languages sold in bookstalls across the continent, stories like the moon exploration of Gonsales became part of the European vernacular. This was the lunar moment, inspired by the age of exploration across the ocean and projecting a new age of exploration across the cosmos.<sup>34</sup>

For example, in 1700 a London bookseller, Nathaniel Crouch (ca. 1632 to after 1700), also known by the name Richard Burton, using the initials R.B., published the book *The English Acquisitions in Guinea and East-India*, a proto-encyclopedic encapsulation, which described the new colonial possessions of an ever-growing British Empire as well as provided counsel on the “Religion, Government, Trade, Marriages, Funerals, strange Customs, &c., Also the Birds, Beasts, Serpents, Monsters and other strange Creatures found there.” One of the most incredible things about a book clearly about British imperial colonization and expansion is that the tale of the moon explorer Gonsales is included in the larger text. Although little known today, Crouch attended meetings of the Royal Society, and his writings were admired by both Samuel Johnson and a young Benjamin Franklin, who mentions Crouch’s work in his autobiography.

#### FROM SCIENCE FICTION TO SCIENCE FACT

European conversations about a populated moon during the Early Modern period were an extension of a much more expansive European discourse on voyaging and geography to uncharted territories such as the Americas. The works discussed above, and others, share a common feature: They conflate futurist fantasy and actual reality. Writers make overt connections between the voyages of Columbus and other explorers and space travel. To the European mind, it stood to reason that

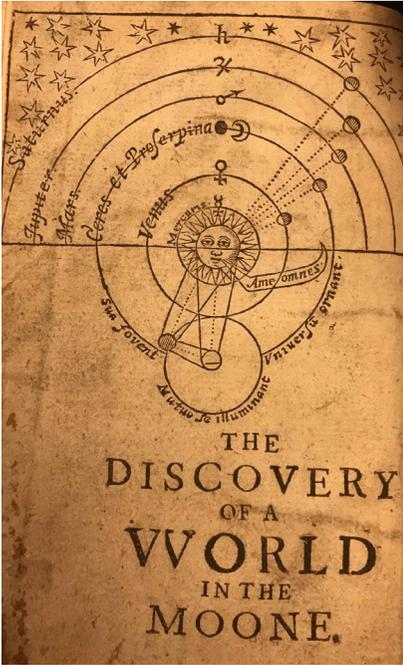


FIGURE 1.2. Artist unknown, frontispiece and title page, engraving from Francis Godwin, *The Man in the Moone*, 2nd edition, 1657.

SOURCE: Wikimedia Commons. [https://commons.wikimedia.org/wiki/File:Godwin\\_man\\_in\\_the\\_moone.jpg](https://commons.wikimedia.org/wiki/File:Godwin_man_in_the_moone.jpg)

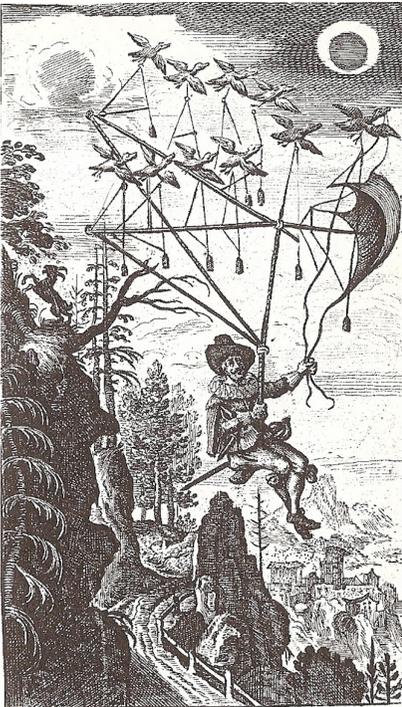


FIGURE 1.3. Artist unknown, frontispiece, engraving from Francis Godwin, *Der Fliegende Wandersmann nach dem Mond*, German translation of Bishop Godwin's *The Man in the Moone*, 1659 (Wolfenbüttel).

SOURCE: Wikimedia Commons. [https://commons.wikimedia.org/wiki/File:Fliegende\\_Wandersmann\\_1659.jpg](https://commons.wikimedia.org/wiki/File:Fliegende_Wandersmann_1659.jpg)

if Europeans were able to encounter immense and previously unknown lands by traveling across seas, then similar marvels awaited those who would venture into the sky.

#### MAPPING IMPERIAL FUTURITY

Cartography was an essential weapon to imperial powers. The creation of “accurate” maps demarcated boundaries and consequently identified and established colonial territories. David Turnbull comes to some acute inferences concerning the symbiotic relationship between mapping and controlling:

[T]he real distinguishing characteristic between Western maps is that they are powerful because they enable forms of association that make possible the building of empires, disciplines like cartography and the concept of land ownership that can be subject to juridical processes. The use of such means of geographic representation may not be an overt assertion of power, yet its influence on how regions and nations are perceived is undeniable. Thus the power to map was crucial to the power of European nations to control much of the world: to map at least in part implies claiming it.<sup>35</sup>

Rulers, via the creation of maps, would shape and define their worlds: “Land is empty, apparently unintelligible until individuals anthropomorphically project [their own internal images] upon the face of the earth [or, for our discussions, the moon], so that the earth bears or carries [their] own face—a face determined by political, cultural and personal factors.”<sup>36</sup> And so, maps were created to manage and assert control efficiently over colonial possessions. And, perhaps of even greater significance, it is under the guise of scientific rendering and geographic description that maps in fact exert control; maps define how the boundaries of the world are understood. Not surprisingly, the cartographer held a critical position within the empire. It was the cartographer who, by creating a miniature living version of imperial possessions or “trophies,” created visually perfect similitudes of imperial ambition. With each new imperial “discovery,” acquisition, or political change, the cartographer would also alter the model (add boundaries, reflect natural or political changes, identify monuments). Once fixed on the map like a self-affirming Möbius band, the map then fixes in the minds of others imperial ambitions and futurities, affirming belief.

By the time of his birth in 1605, King Philip IV of Spain and Portugal (1605–1665) had inherited an empire, which his grandfather King Philip II had solidified; the former would spend most of his reign trying to maintain it. One critical aspect of maintaining an empire is to be able to visualize it; the Golden Tower (*la torre dorada*) of the Royal Alcazar in Madrid held all the visual evidence of this great empire.<sup>37</sup> It was in the tower where maps that illustrated the many villages, territories, countries, and colonies which made up this great empire were dis-

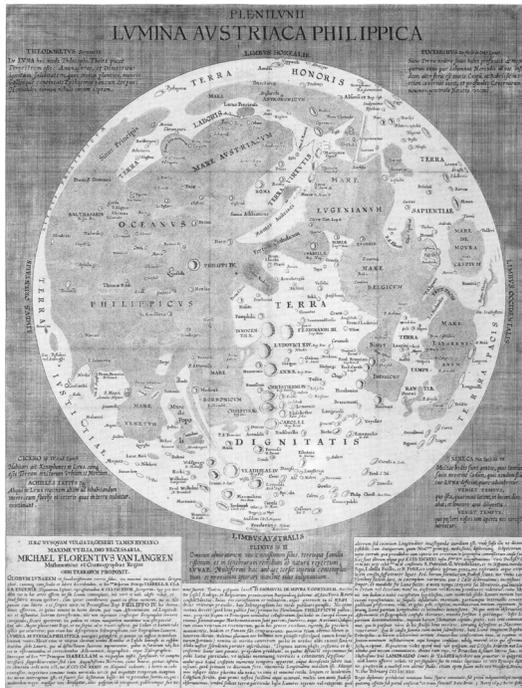


FIGURE 1.4. Michael van Langren, *Map of the Moon, Plenilunii Lumina Austriaca Philippica*, engraving, 1645.

SOURCE: Wikimedia Commons. [https://commons.wikimedia.org/wiki/File:Langrenus\\_map\\_of\\_the\\_Moon\\_1645.jpg](https://commons.wikimedia.org/wiki/File:Langrenus_map_of_the_Moon_1645.jpg)

played prominently on critical sight lines for both the king's perusal as well as to impress and instruct all who visited. The Golden Tower thus became a synecdoche for the vastness and greatness of the empire.<sup>38</sup> Of course, the Golden Tower not only held what was already part of the imperial holdings; it also housed the futurity of empire.

In 1645, the cosmographer in service to King Philip IV, Michael Florent van Langren (1598–1675), drew several lunar maps for the king. While lunar maps had previously existed, none before had been created with such specificity. Galileo had identified the geographic structures (i.e., mountain, sea, lake) but not given these structures proper names, thus leaving a door open. This obvious cartographic *lacuna* on the lunar map was not lost on the imperial cosmographer Van Langren, who filled this gap and christened each topographical item on the lunar map with the names of key figures, which directly related to the Spanish royal house: The ocean was named after King Philip IV, the seas after royalty (and himself), and the lands after royalty and nobility.<sup>39</sup> In one fell swoop, Van Langren both named the

moon after the Spanish monarchy and via these very names laid claim to the moon for Spain as a future acquisition. (figure 1.4) When a draft of the lunar map was presented to Philip IV in 1633, according to Van Langren himself, the king “liked that the names of illustrious men were applied to the mountains of the lunar globe, luminous and resplendent, which could be used in astronomical, geographical and hydrographical observations and corrections.”<sup>40</sup> The world might have been enough for Philip II, but not for his grandson, who, in addition to presenting himself as the Planet King, could also dream of nothing less than being the lunar king, the true “man in the Moon.” For when authority is emblazoned upon a territory via a map, what was once an abstract idea becomes a reality; it makes the relationships of power tangible by making them visible.

#### THE FUTURE IS NOW

In the 1420s, the Portuguese set their flag on the Azores Islands. At the time it was hard to envision what could surpass such an incredible feat. Before the end of the century, however, the Spanish and Portuguese would plant their flags across the globe, dividing up the world forever. And once the terrestrial globe had been carved up by the various European powers, it would not be long before cosmographers, writers, monarchs, and artists began to turn their sights to worlds beyond our own territorial home. Whereas efforts in the sixteenth century were valiant and impressive, it would be another colonizing empire, the United States, that would plant its flag on *orbe novo* in 1969.<sup>41</sup> The day that U.S. astronauts Buzz Aldrin and Neil Armstrong pierced the moon’s surface with the Stars and Stripes, a chapter of science fiction became science fact, and the future became the present. Alas, when a once-conceptual futurity is replaced by a specious present, a new conception will rise. For the astronauts had not even yet returned to Earth when a new futurity replaced five hundred years of lunar fantasy. Futurists now focused new literary and visual traditions on Mars and beyond. It is not an exaggeration to say that since the transgression of *Non Plus Ultra* and its resulting encounter with the Americas, our conceptions have been forever altered. From that point onward, everyone to some extent became a futurist.