

The Maculate Moon: Galileo, Kepler and Pantaleón de Ribera's *Vexamen de la luna*

Frederick A. de Armas
Pennsylvania State University

The works of Anastasio Pantaleón de Ribera (1600-1629) are scarcely read today, even as they are rescued from critical neglect by careful editors such as Rafael de Balbín Lucas and Kenneth Brown. Pantaleón died young, of syphilis, at the age of twenty-nine, before he could develop some of his more enticing conceptions. Many of his works are occasional pieces, most often written for the Academia de Madrid. As Willard King notes: "He seems, in fact, to have written very little else but academy material: *carteles* setting forth the subject of coming certámenes, *oraciones* to open poetic contests, biting *vejámenes* to close them, etc." (55). One of his most engaging texts, is, indeed, a *vejamen*. This type of fiction or verse serves to satirize a person or group (often members of the academy). This genre contains, according to María Soledad Carrasco Urgoiti, a series of common characteristics, among which is the "hallazgo — generalmente en sueños— de un artificio fantástico o alegórico que encuadre el desfile de ingenios" (102). In Pantaleón's *Vexamen de la luna* the writer goes to sleep and "llevado de mi phantasia, iba peregrino por esos aires" (Brown 285) finally reaching "Selenópolis, Corte Imperial de la Luna, situada en el centro de aquella Esphera" (Brown 285). Both Carrasco Urgoiti, and Kenneth Brown (to whom we owe an edition of the unexpurgated version of the *vexamen*), show that part of the humor of the work stems from the contrast between the high style and many classical references found in the description of the voyage and the "sátira despiadada que sigue" (Brown 213) dealing with members of the Academia de Mendoza. Selenópolis is nothing more than a disguised Madrid where poets are lunatics: "una deformación satírica de la Academia madrileña de Mendoza vista 'de por dentro'" (Brown 213).

The *Vexamen de la Luna*, written in 1626, was published posthumously in 1634, the year of the prohibition of Galileo's famous *Dialogue Concerning the Two Chief World Systems — Ptolemaic and Copernican*.¹ In this essay, I would like to argue that Pantaleón's *Vexamen* stands apart from other such incidental works of the period in that it responds in part to a new interest in cosmology, one that grew out of Galileo's and Kepler's discoveries during the first third of the seventeenth century. Even though some of the classical models Pantaleón utilized may seem to belie this asser-

tion, it will be shown that they, in turn, acquired new significance with the dissemination of Copernicus', Galileo's and Kepler's theories and discoveries. It may be that Pantaleón's text can be studied as one of many intersections between literature and science, between the remnants of the ptolemaic universe and the new discoveries that were being silenced by the ecclesiastical powers.²

In 1609 the telescope was a new instrument,³ and Galileo used it in an unheard of manner: turning it towards the heavens and seeing what, for many of the church leaders, should have remained hidden. Galileo's small instrument was key in bringing down the comfortable Ptolemaic universe, a small cosmic abode with a discrete number of celestial spheres, with human beings at the center and God and his heaven at the edges. Intuiting the impending dissolution of this comfortable cosmos, John Donne would cry out "Tis all in pieces, all coherence gone" (Kuhn 194; Nicolson 1960, 100, 120). But the disintegration was halted for a while by the denunciation in 1616 of Copernicus' heliocentric theories;⁴ by the admonition to Galileo not to teach the heliocentric theories; by a decree of June 22nd, 1633, where Urban VIII condemned heliocentrism; by Galileo's trial of that same year; and by the consequent prohibition of Galileo's *Dialogue* in 1634.⁵ Thus, what Galileo saw through the telescope could not be accepted as real. For surely, the moon could not contain true spots, seas or craters, since its light and purity stood for both the perfection of the planetary spheres⁶ and the immaculate conception of the Virgin. The moon's maculate nature would be a signature⁷ that could carry with it an unwanted revelation: that such beliefs and doctrines were counterfeit.

Like Galileo's telescope, Pantaleón's *Vexamen de la luna* allows one to view that which should remain hidden. But contrary to the scientific instrument, the text reveals the lights and shadows of the heavens through obscure allusion. The magnifying glass is transformed into a prismatic text that points to a series of perspectives. Let us look then, at how Pantaleón's *Vexamen* was able to conceal the dangerous debate on cosmology, revealing it in a cryptic manner.⁸ The work begins with a lengthy citation of authorities in regards to the possible existence of life in the moon. Thus, it cleverly reveals that the author was acutely aware of the implications of the new discoveries concerning this celestial body. The very first line of the *vexamen* gives away the game of hidden allusions: "Que el cuerpo de la Luna es habitable tuvo por opinión la escuela toda de Pythágoras" (Brown 283). The reference to Pythagoras, a figure of such influence during the Renaissance and Spanish Golden Age, may at first appear rather innocuous⁹, but it is key to the ludic referentiality of the text.

The years previous to the composition of Pantaleón's *Vexamen* wit-

nessed an intense debate over cosmology, where the figure of Pythagoras acquired particular significance: "the cosmological system proposed by the ancient philosopher was frequently (if erroneously) compared to the heliocentric model of Copernicus." Consequently, "Copernicans were often called 'Neopythagoreans' (Reeves 63). Galileo, knowledgeable of this link, often referred to the ancient philosopher.¹⁰ In the *Sidereal Messenger* (1610), where Galileo announces to the world what he saw through the telescope, he mentions "the old opinion of the Pythagoreans that the Moon is, as it were, another Earth," in that "its brighter part would represent the land surface, while its darker part would more appropriately represent the water surface" (43). And indeed, when Galileo describes the topography of the moon, he could well be confirming what certain Pythagoreans had declared. In an anthology of ancient poets and thinkers probably written in the fifth century A.D. Stobaeus explains: "Some Pythagoreans, among whom is Philolaus, suggest that the moon's resemblance to the earth consists in its surface being inhabited, like our earth, but by animals and vegetation larger and more beautiful" (Guthrie 170; Heringer 125). This is the very Philolaus (born circa 470 B.C.) who displaced the earth from the center of the cosmos, and replaced it with fire (Guthrie 170). By the time of Galileo and Copernicus, this central fire was transformed into heliocentrism. The relation between the Pythagoreans and heliocentrism was well-known in Spain as demonstrated by the *Commentary on Job* published by the Augustinian monk Diego de Zúñiga in 1584 (Reeves 186; Vernet 176-77). Thus, Pantaleón's initial line in the *Vexamen de la luna* is laden with authorities and meanings including Pythagoras, Philolaus, Copernicus, Galileo and even Zúñiga. The initial words of Pantaleón's treatise would lead any learned reader to consider the theories of heliocentrism as well as the notion of an inhabited moon.¹¹

In order to depict without fear of censorship the virulence of the argument in favor or against the inhabited moon that was raging before the prohibition of heliocentrism, Pantaleón situates it in ancient times. He continues his parade of classical authors showing how "Plutarcho y Firmiano condenan rasamente, sin parecerles digna de disputa esta mentira" (Brown 283). Curiously, Pantaleón includes Plutarch as the first among these "condemning" authors. It is true that Theon, one of the characters in Plutarch's *Concerning the Face which Appears in the Orb of the Moon* wants to hear "about the beings that are said to dwell on the moon—not whether any really do inhabit it but whether habitation there is possible" (157). This may be the source of Pantaleón's statement that Plutarch rejects lunar habitation. Pantaleón goes on to say that according to Plutarch such a hypothesis is not "digna de disputa." But characters do dispute about it in *Concerning the Face which Appears in the Orb of the Moon*. Lamprias

answers Theon telling him that there could well be living beings on the moon, but they would be different from humans.¹² Thus, the “mentira” of habitation is cancelled out by another lie: Pantaleón’s lie concerning Plutarch’s opinion. The mendacious structure of Pantaleón’s allusive text should alert the reader that certain “truths” may be hidden through lies. These truths may have to do with the structure of the cosmos.

Furthermore, Pantaleón uses Theon’s initial rejection of lunar habitation as a point of departure for a lengthy list of classical authors who did accept the “lie” of lunar habitation. Thus, the enumeration of classical authors who support the notion of lunar habitation—“la tragó Anaxágoras Clazomenio, la enseñó Demócrito Abdérytes, la disputó Thales Milesio, la siguió Arato, la interpretó Macrobio, y la escribió (entre los antiguos) Luciano” (Brown 283)—overwhelms the short list of those who do not, and thus serves to persuade the reader to consider this possibility as authorized by the ancients. Pantaleón characterizes each positive response to this issue through the use of a verb: *tragó*, *enseñó*, *disputó*, *siguió*, *interpretó*,¹³ and *escribió*. The writers listed here by Pantaleón differ slightly from the catalogue of authors often cited by seventeenth-century writers to refer to the moon as an inhabitable world.¹⁴ Just as Pythagoras was the first classical authority mentioned since his relationship to heliocentrism and lunar habitation placed him at the foreground of classical authors dealing with the new cosmology, so Lucian is appropriately the last since his imaginative literary treatment of voyages through the cosmos provide Pantaleón with an approved authority for his voyage.¹⁵

Following this list of ancient writers, Pantaleón includes a catalogue of modern thinkers who have dealt with lunar habitation from Pico della Mirandola to Angelo Poliziano. Here, he eschews the question of lunar inhabitants and concentrates on authors who, also following the ancients, claimed that the moon created monsters.¹⁶ But again, debate on lunar monsters was not a naive literary exercise. In 1609 Johannes Kepler had composed his *Somnium*, an imaginary lunar voyage, one which actually presented his own scientific speculations “about planetary motion, gravity, tides, and the nature of life on other worlds” (Romm 99).¹⁷ In Kepler’s moon “whatever is born is of monstrous size; the life span of creatures and plants is brief, since they are often born to die in a single day, springing up to prodigious size while they exist” (Nicolson 1948, 46). Although not published until 1634, the manuscript had quite a reception before its publication. As John Lear asserts, this text “began to be read privately in the year 1611 in a manner beyond Kepler’s control and not always among people he would have chosen for an audience” (15). Kepler himself was able to trace a copy from Prague to Leipzig and then to Tübingen. Indeed, when a copy of the manuscript reached Kepler’s home duchy of Württemberg, his own mother was imprisoned for witchcraft since Kepler

had disguised his lunar geography as fictional tale where a sorceress sends her son Duracotus to the moon with the help of spirits or *daemones*. The inhabitants of Württemberg reasoned that, if Duracotus stands for Kepler, then the astronomer's mother must be a witch (Lear 17). Kepler even thought that the manuscript went well beyond Germanic lands: "at one point he thought the manuscript had reached England and there had inspired John Donne's devastating satire on the Catholic hierarchy, *Ignatius His Conclave*" (Lear 15). While Donne's text was written in 1611, Pantaleón's was composed fifteen years later, thus allowing more than sufficient time for the manuscript to travel as far as Spain.

Pantaleón's *vexamen* moves from monsters to lunar topography. The text now returns to the ancients. Instead of speaking of their lies, it refers now to their mistakes in science: "no sólo erró a los sabios antiguos la Ciencia muchas veces, sino también el seso algunas" (Brown 284). Among their errors and lunacies Pantaleón reveals that they imagined mountains on the moon: "que las manchas que afean el esplendor de este Planeta eran ciudades, montes y ríos como los de este mundo inferior que poseemos" (Brown 284-85). In this, he partially follows Galileo's *Sidereal Messenger*: "We have been led to the conclusion that we certainly see the surface of the Moon to be not smooth, even, and perfectly spherical, as the great crowd of philosophers have believed about this and other heavenly bodies, but, on the contrary, to be uneven, rough, and crowded with depressions and bulges. And it is like the face of the Earth itself, which is marked here and there with chains of mountains and depths of valleys" (40).¹⁸ Furthermore, Galileo "was able to estimate the depths of the moon's declivities and the height of its protuberances and to begin a three-dimensional description of the moon's topography. It was not, Galileo decided, very different from the earth's topography" (Kuhn 221). But as Kepler reminds Galileo in his *Conversation with the Sidereal Messenger*, he had already produced a series of speculations derived from his observations of shadows on the moon in 1593 while studying at the University of Tübingen (Lear 1965, 3). And in 1609, the year of Galileo's supposed discovery, Kepler had revised these speculations into "a complete geography of the moon" which he fictionalized in the *Somnium*, a manuscript that would have such disastrous consequences for his mother. Thus, the earth-like qualities of the moon could be discovered by Pantaleón both in Galileo's *Sidereal Messenger* and in Kepler's *Somnium*.

The result of this lunar "vision" as depicted by Kepler and Galileo was catastrophic for a well-ordered and home-like cosmos. The moon could no longer be viewed as the beginning of the incorruptible heavens. Their observations presaged the end of what Foucault has called the archeology of resemblance where: "The universe was folded in upon itself: the earth echoing the sky, faces seeing themselves reflected in the stars"

(17). Through *aemulatio* the mirroring effect was quite clear: "The human face, from afar, emulates the sky, and just as man's intellect is an imperfect reflection of God's wisdom, so his two eyes, with their limited brightness, are a reflection of the vast illumination spread across the sky by sun and moon; the mouth is Venus, since it gives passage to kisses," etc. (Foucault 19). The human being or microcosm found security through reflection.¹⁹ And the moon as mirror, reflecting the light of the sun was but an emblem for *aemulatio*.²⁰ Indeed, the face seen by some on the moon, would render the universe both more human and divine, recalling the earth's inhabitants as well as the Virgin Mary who was associated with this celestial body. And the moon spots which formed the lunar visage, were actually not there according to most artists, astronomers and theologians of the period. They were no more than an indication of *deus pictor*, who had painted or "fashioned with light and shadow" (Reeves 10) this celestial apparition.²¹

Pantaleón, following Kepler and Galileo, represents a corruptible and maculate moon. But the dangers to the order of things are attenuated through his claims that it is all a lie derived from the ancients. In fact, Pantaleón is more daring than Galileo. While the latter denied lunar habitation,²² Pantaleón speaks of lunar cities. In this, the Spanish author may be again echoing Kepler, whose *Somnium*, as noted, speculates about habitation, stressing the gigantic nature of lunar beings.²³ Other thinkers of the epoch followed suit. Most extreme was Gassendi's report that a telescope had revealed "forests, buildings and fortifications on the moon, none of them any different from those on earth" (Reeves 14). Reflecting speculation on the habitability of the moon, Pantaleón can claim that there are cities on the lunar surface.

Just previous to the assertion of lunar cities, mountains and rivers, Pantaleón had listed another supposed ancient error: "Que era el sol una masa candente" (Brown 284). Such a statement goes against Aristotle's notion, accepted well into the seventeenth century, that: "Aether is the celestial element . . . it is pure and unalterable, transparent and weightless. From it are made the planets and stars" (Kuhn 79). There is a link, then, between an earth-like moon and a sun that is no longer aetherial and perfect. Furthermore, this mass of fire can recall Philolaus and other Pythagoreans who, as noted above, argued for the presence of fire at the center of the universe. This theory was associated with heliocentrism in early modern Europe. Pantaleón must have been aware of the Church's condemnation of heliocentrism in 1616 (Pardo Tomás 183). It may be one thing to allude to it indirectly through references to Pythagoreanism, but quite another to cite Copernicus or Galileo. Thus, Pantaleón was able to avoid censure on the issue of heliocentrism by referring to it obliquely and labeling it ancient error. The first index published in Spain after the

1616 prohibition, the *Novus Index* of 1632 includes, for example, Diego de Zúñiga's *Commentary on the Book of Job* where: "El pasaje de esa obra donde figura la cita a Copérnico se mandó eliminar" (Pardo Tomás 185). Indeed, many of Kepler's works are prohibited in this Index. Curiously, his *Conversation with the Sidereal Messenger*, a work that would have most interested Pantaleón since it was a positive response to Galileo's lunar treatise, was amazingly approved (Pardo Tomás 184).

Pantaleón avoids unwanted censure not only by claiming that both lunar inhabitability and solar non-aetherial composition are ancient errors, but also by lifting this passage directly from Lucian's *Icaromenippus* where the moon complains to Menippus that she has been the subject of "contradictory theories" which are "silly and completely absurd" (2.279) being forged by men who can have little certainty of their celestial notions.²⁴ Thinking of lunar inhabitability, the fictional Pantaleón of the *Vexamen* falls asleep and traverses the different earthly spheres as described by Aristotelian and Ptolemaic astronomers.²⁵ The oneiric method used recalls Kepler's *Somnium*, where the narrative voice relates how he fell asleep while reading a book of Bohemian folklore and thus dreams of Duracotus and his mother the Icelandic sorceress Fiolxhilde. In Pantaleón, the dream is also the result of reading; here, it is treatises on the moon. The debt to Kepler's *Somnium* seems clear. But the narrative attempts to dissociate itself from this problematic model providing its own myth of origins. In doing so, the *Vexamen* reveals its dual and duplicitous nature. Instead of invoking the censored Kepler, Pantaleón points to Lucian as one of his models when he refers to the help given to the celestial traveler Menippus by Empedocles (2.289).

Once on the moon, the fictive Pantaleón describes in detail the lunatic poets that abide there. As if to underscore that the comic representation of these bards is also cosmic, the first, don Alonso de Oviedo, states that he received this post in the moon "despues de la muerte de Marco Manilio, que fue poeta de los Astros, y que enseñó con aplauso la Sciencia Sideral" (Brown 287). Marcus Manilius' *Astronomica*, perhaps the most famous poem on the cosmos written in Latin literature, is particularly concerned with the number twelve as a key division of the cosmos. His poetic treatise deals at length with the twelve signs of the zodiac, showing not only what planets rule each sign, but also what deities are allotted the guardianship of these spaces (2.433-52). Manilius even shows how different parts of the body are related to them. His mania for the number twelve leads him to discuss the Dodecatropos or twelve temples of the heavens (2.856-967) and the twelve athals or lots of the sky. The latter "conflicts in principle as well as in detail with the doctrine of the dodecatropos" (lxii). This concern for the number twelve is replicated in Pantaleón where the poets described are twelve in number.²⁶ It may be

that Pantaleón is presenting us with an astrological puzzle, using the most complex of Roman astral poets to construct his vision of the twelve lunar or lunatic bards. There are tantalizing links with the cosmos in Pantaleón's descriptions of the twelve poets: Alonso de Oviedo as sidereal messenger is Mercury; Juan de la Barreda is repeatedly linked to Venus; Castillo Solórzano is related to Sol; and the blackness of Gabriel del Corral could suggest Saturn.²⁷ What is important here is that the text suggests such an order so as to subvert the notion of a well-ordered cosmos. The characters are presented as lunatics, as madmen, perhaps arguing for the arbitrary division of the heavens at a time when Galileo was showing major flaws in the way the cosmos had been perceived.

The description of the second poet underlines this subversion of a well-ordered cosmos. Jacinto de Aguilar is a celestial tailor charged by the gods to mend ruptures in the heavens:

Diéronme oficio los dioses
y el orbe degé que vives
para sastre a los planetas
y a los cielos para tinte (Brown 289)

He thus implies that the spheres above the moon are not immutable. Indeed he declares that he has patched the signs of Sagittarius and Pisces. If this were not enough, he clearly declares: "Yo zurzí la esfera toda / de Marte que es corruptible" (Brown 289). If the moon had been shown by Galileo to be earth-like and thus subject to generation and corruption, then other planets could also partake of corruptibility.

The last poet described in the *Vexamen* is Anastasio Pantaleón's lunar double who identifies himself through a *romance* to Pantaleón. The earthly bard accuses this lunatic of stealing not only his semblance but also his *romance*, to which the latter replies: "No hurto de nadie yo . . . que si tubiere esa inclinación, no la gastara en hurtar cosa tan mala como vuestra figura" (Brown 302). Consequently, a violent fight ensues between the two; and, as the fight reaches its climax, the earthly Pantaleón awakes from his lunar dream. This awakening ends the *Vexamen*, providing a fitting conclusion for a satire that subverts the well-ordered Aristotelian and Ptolemaic universe. The image of the double recalls the notion of the moon as another earth. More importantly, the chief trait of the lunar Pantaleón is that he has "pegado (como yo) al ojo izquierdo un antojo, tan embaçosamente que por traerle solo, tenía una manos menos, como quien viene de la guerra" (Brown 301). The Spanish term for eyeglass was the same as that for telescope or spyglass.²⁸ It is even possible that Pantaleón had actually handled an early telescope, the one which, according to Vélez de Guevara, was in the possession of Juan de Espina.²⁹

Only three years before the composition of Pantaleón's *Vexamen*,

Benito Daza de Valdés had published a treatise on the *Uso de los antojos*. Here, he tells how utilizing such an instrument one can view the moon's maculate surface. As Eileen Reeves comments, "Daza's failure to mention Galileo is normally attributed to his position as notary for the Inquisition" (187). Pantaleón's silence echoes Daza's omission, as his telescopic text daringly describes not only the maculate nature of the moon but also the mendacious signatures of the heavenly spheres. The *Vexamen de la luna*, while satirizing members of the Academia de Mendoza, on a deeper level focuses on key scientific debates of the times, including the geography and habitability of the moon, the question of heliocentrism, the (im)mutability of the supra-lunar spaces, and the value of the telescope to reveal true images from the heavens. As a Spanish Galileo, Pantaleón observes and narrates with acumen and humor the wonders of the cosmos as well as those of the microcosm of the Madrid academy. The intersection between science and art, between major astronomical debates and co(s)mic literary quarrels makes of this text a multi-layered palimpsest where a constellation of poets is seen in the act of subverting the majestic and harmonious cosmos upheld from the times of Aristotle and Ptolemy to the beginnings of the early modern era.

Notes

¹Also in 1634 Lope de Vega penned his last comedy, *Las bizzarrías de Belisa* where there are allusions to a maculate moon and a voyage to the moon (135, 151). This was also the year when Kepler published his imaginary voyage to the moon, the *Somnium*.

²In a much less conspicuous way, the *Vexamen* may recall Milton's difficulty in recreating the cosmos in *Paradise Lost*. Although the English poet described the Copernican/Galilean system, he was compelled to follow the traditional Ptolemaic view so as to preserve traditional values in poetry and theology.

³Kuhn 220. Magnifying lenses were known in the Middle Ages, but the first telescope may have been created by the Dutchman Hans Lippershey in the first decade of the seventeenth century.

⁴He was denounced "by the congregation of the most Eminent Cardinals formed by his Holiness Paul V for the disposition of the Index of forbidden books" (Vernet 279; Pardo Tomás 183).

⁵Pardo Tomás 186. Curiously, the Spanish Index of 1640, the first published after the prohibition of Galileo's work, did not reflect the papal censorship. The reasons for Galileo's absence from the Spanish Index, as Pardo Tomás argues, have little to do with greater tolerance for scientific discovery in Spain. It had to do with who should exercise authority for censorship (186-88).

⁶Not all believed in the perfection of the moon. Plutarch, for example, states: "Clearchus, I think, would refuse to assume with us that the moon is a body of weight and solidity instead of an ethereal and luminiferous star as you say" (45). Later in *Concerning the Face which Appears in the Orb of the Moon* it is stated that the moon is "subjected to mixture" thus "it loses its purity." Consequently, "as a star

or luminary or a divine and heavenly body she is, I am afraid, misshapen, ugly, and a disgrace to the noble title" (99).

⁷On the theory of signatures see Foucault 25ff; Nicolson 1960, 37ff.

⁸Indeed, other works of the period could also reflect the debate, including Calderón's *La vida es sueño*. See de Armas 1986, 118-22.

⁹Pythagoras was often cited by early-modern poets to uphold their art since Plato was "in his most strongly Pythagorean mood when he wrote about creation in the *Timaeus*" (Heninger 291). In this platonic dialogue the deity is described as "the poet and father of this all" (Heninger 292).

¹⁰References are found in: *Siderius Nuncius, Letter to the Grand Duchess Christina* and in the *Dialogue Concerning the Two Chief World Systems* (Reeves 240 note 23).

¹¹However, Galileo did not believe that the moon was inhabitable.

¹²"It is plausible that the men on the moon, if they exist, are slight of body and capable of being nourished by whatever comes their way. After all, they say that the moon herself . . . is nourished by the moisture on the earth" (177-79). Plutarch's dialogue ends with Sulla's myth that the moon is inhabited by the souls of those who have died on earth and by those that are yet to be born.

¹³The term "interpret" is an accurate one to refer to Macrobius since in his *Commentary on the Dream of Scipio* he was "interpreting" the final section of Cicero's *Republic*. Macrobius posited that the moon was an "ethereal earth" with like inhabitants (131, 164).

¹⁴Among seventeenth-century writers, we find the idea attributed in turn to Heraclitus, Democritus, Anaxagoras, Macrobius, Pythagoras and the Pythagoreans generally" (Nicolson 1948, 27). Pantaleón's list includes Democritus, Anaxagoras, Macrobius, Pythagoras and the Pythagoreans. He fails to include Heraclitus, but adds Thales and Aratus. Thales, along with Plutarch and Pythagoras are cited by Robert Burton in his *Anatomy of Melancholy* (Nicolson 1948, 25).

¹⁵While Lucian's *True History* narrates how a whirlwind propels a ship into the sky and lands it in a war between lunar inhabitants and Sun people, the *Icaromenippus* shows a cosmic flight by Menippus with the aid of feathers. In this dialogue, Menippus makes a brief stop in the moon and discusses its qualities. The *Icaromenippus* serves as one of the models for the famous *Respuesta de Boscán a don Diego de Mendoza* (De Armas 1992, 863-64). It was translated into Spanish by Francisco de Herrera Maldonado just five years before Pantaleón's *Vexamen*. The translation was praised by Lope de Vega both in the *Laurel de Apolo* and in laudatory verses preceding the translation (Beardsley 78). Ironically, Lope criticizes Pantaleón in his *Laurel* (Brown 27). Pantaleón did not need to use a translation since he was a classical scholar. Pellicer states: "En sus labios se hizieron tratables los Apoctemas mas seueros de Griegos, i Latinos: los Adagios de ambos Idiomas" (Brown 4).

¹⁶Pantaleón cites, for example from Seneca's *Hercules furens*: "let Luna in the sky produce still other monstrous creatures" (11). The editor of the volume explains that: "The Nemean lion and other monsters were supposed to have fallen from the moon" (11, note 3).

¹⁷In his notes to the published *Somnium*, Kepler recognizes Lucian's *True History* and Plutarch's *The Face on the Moon* (together with Plato and Cicero) as the *prima vestigia* of his own work (Romm 101). Indeed, Kepler produced a new Latin ver-

sion of Plutarch "with its textual and substantive errors corrected by his running commentary, which came out with his *Somnium* in 1634" (Grafton, 211).

¹⁸In his *Conversation with the Sidereal Messenger* (1610), Kepler echoes Plutarch's and Galileo's assertion that the moon spots are seas and the bright lunar areas are land.

¹⁹There were different ways of placing the planets in the human microcosm. Lope de Vega in *El castigo del discreto* states: "La luna es [su] barba hermosa; / sus labios Mercurio son, / por su mucha discreción / y retórica famosa; / el cielo de Venus es / su lengua, y del Sol sus ojos" (Rico 212).

²⁰Macrobius, for example, states that the earth does not reflect light, but the moon is purer and can reflect the sun's light like a mirror (165).

²¹Plutarch, for example, commenting on the dark and bright patches that make up the figure asserts that "they are thoroughly intertwined with each other [so as to] have the [delineation] of the figure resemble a painting" (39).

²²Much later, in his *Dialogue Concerning the Two Chief World Systems* Galileo stated that there could be life on the moon, but the beings would be "far beyond our imaginings" (Reeves 13).

²³"I cannot help wondering about the meaning of that large circular cavity in what I usually call the left corner of the mouth [of the face in the Moon]. Is it a work of nature, or of a trained hand? Suppose there are living beings on the moon . . . ? It surely stands to reason that the inhabitants express the character of their dwelling place, which has much bigger mountains and valleys than our earth has. Consequently, being endowed with very massive bodies, they also construct gigantic projects" (Rosen 27-28; Galileo, 95).

²⁴Compare the passages: "Que era el Sol una massa candente (dixeron); q[u]e las estrellas padecían sed; que en el orbe de la Luna tuvieron vida los monstruos de que triumphó Alcides..." (Brown 284). "All but swearing that the sun is a mass of molten metal, that the moon is inhabited, and that the stars drink water" (2.279).

²⁵The two highest sub-lunar spheres are those of air and fire through which the fictive poet passes.

²⁶The twelve poets are: (1) Alonso de Oviedo; (2) Jacinto de Aguilar; (3) Joseph Camerino; (4) Joseph Pellicer; (5) Diego de Silva; (6) Juan de la Barreda; (7) Alonso del Castillo Solórzano; (8) Pedro Méndez; (9) Gabriel del Corral; (10) Gabriel Bocángel; (11) Nicolás de Prada; (12) Anastasio Pantaleón.

²⁷Pantaleón was also of dark complexion and he sang under Saturn at the 1622 *Justa para la canonización de San Ignacio de Loyola y San Francisco Xavier* (Brown 238).

²⁸Covarrubias says nothing of the second definition of *antojos*, although his own could be applied to the new instrument: "Los espejuelos que se ponen delante de la vista para alargarla a los que la tienen corta" (126). However, the term *antojos* used for spyglass was made popular by Rodrigo Fernández de Ribera's satiric novel *Los antojos de mejor vista*. Another possible model for Pantaleón could be Juan Enríquez de Zúñiga's *Amor con vista* where "Don Dionisio, un tipo cortesano disfrazado de pastor . . . sueña con un viaje a las regiones etéreas. Allí encuentra al dios Mercurio, quien le descubre el mundo y sus secretos" (Peale 61). George Peale sees these works as models for Vélez de Guevara's *El diablo cojuelo*. Since these texts, like Pantaleón's *Vexamen*, partake of cosmic and telescopic images together with reminiscences from Lucian, they should be investigated in terms of the intersection between science and literature.

²⁹Juan de Espina was a collector of scientific artistic and magical items. His house, as Caro Baroja has shown, was one of the most interesting places in Madrid in the early 1600's and many famous poets hoped for an invitation (396). The house was described, among others, by Castillo Solórzano, Juan de Piña and Vicencio Carducho. Among Espina's most important possessions were manuscripts by Leonardo da Vinci. But what interests us is his telescope. In Vélez de Guevara's *Diablo cojuelo* (1641), the devil is unable to answer don Cleofás's questions on the structure of the cosmos since his fall was too quick to able to see the order of the heavens. He adds: "Esto todo sea con perdón del antojo del Galileo y el del gran don Juan de Espina... señores antojadizos que han descubiertto al Sol un lunar en el lado izquierdo, y en la luna han linceado montes y valles..." (167-68). Here Vélez pokes fun at both Galileo's and Espina's telescopes turning the term for spyglass into a major defect in its users. Pantaleón visited Espina's house as attested by his sonnet "A la curiosa y celebrada casa de Don Juan de Espina" (Caro Baroja 396).

Works Cited

- Beardsley, Jr., Theodore S. *Hispano-Classical Translations printed between 1482 and 1699*. Pittsburgh: Duquesne UP, 1970.
- Brown, Kenneth. *Anastasio Pantaleón de Ribera (1600-1629). Ingenioso miembro de la república literaria española*. Potomac, Maryland: Studia Humanitatis, 1980.
- Caro Baroja, Julio. *Vidas mágicas e inquisición*. Madrid: Taurus, 1967 (2 vols.), volume 1.
- Carrasco Urgoiti, María Soledad. "Notas sobre el vejamen de Academia en la segunda mitad del siglo XVII," *Revista Hispánica Moderna* 31 (1965): 97-111.
- Covarrubias, Sebastián de. *Tesoro de la lengua Castellana o Española*. Ed. Martín de Riquer. Barcelona: Alta Fulla, 1987.
- De Armas, Frederick A. *The Return of Astraea. An Astral-Imperial Myth in Calderón*. Lexington: UP of Kentucky, 1986.
- . "The Soundless Dance of the Passions: Boscán and Calderón's *El pintor de su deshonra*," *Modern Language Review* 87 (1992): 858-67.
- Foucault, Michel. *The Order of Things. An Archeology of the Human Sciences*. New York: Vintage Books, 1970.
- Galilei, Galileo. *Sidereus Nuncius or The Sidereal Messenger*. Trans. Albert van Helden. Chicago: U of Chicago P, 1989.
- Grafton, Anthony. *Commerce with the Classics: Ancient Books and Renaissance Readers*. Ann Arbor: U of Michigan P, 1997.
- Guthrie, Kenneth Sylvan, ed. and trans. *The Pythagorean Sourcebook and Library*. Grand Rapids, Michigan: Phanes Press, 1987.
- Heninger, S. K. *Touches of Sweet Harmony. Pythagorean Cosmology and Renaissance Poetics*. San Marino, California: The Huntington Library, 1974.
- King, Willard F. "Literary Academies and Prose Fiction in Seventeenth-Century Spain." Dissertation, Brown University, 1957.
- Kuhn, Thomas S. *The Copernican Revolution. Planetary Astronomy in the Development of Western Thought*. Cambridge: Harvard UP, 1985.
- Lear, John. *Kepler's Dream*. Berkeley: U of California P, 1965.
- Lope de Vega, Félix. *El villano en su rincón y Las bizzarrías de Belisa*. Ed. Alonso

- Zamora Vicente. Madrid: Espasa-Calpe, 1963.
- Lucian. *Works*. Trans. A. M. Harmon. Cambridge: Harvard UP, 1915. (8 vols.), volume 2.
- Macrobius. *Commentary on the Dream of Scipio*. Trans. William Harris Stahl. New York: Columbia UP, 1952.
- Manilius. *Astronomica*. Trans. G. P. Goold. Cambridge: Harvard UP, 1977.
- Millar Wands, John. *Another World and Yet the Same*. New Haven: Yale UP, 1981.
- Nicolson, Marjorie Hope. *Voyages to the Moon*. New York: MacMillan, 1948.
- _____. *The Breaking of the Circle. Studies in the Effect of the "New Science" Upon Seventeenth-Century Poetry*. New York: Columbia UP, 1960.
- Pardo Tomás, José. *Ciencia y censura. La inquisición española y los libros científicos en los siglos XVI y XVII*. Madrid: Consejo Superior de Investigaciones Científicas, 1991.
- Peale, C. George. *La anatomía de "El diablo cojuelo": deslindes del género anatómico*. Chapel Hill: North Carolina Studies in the Romance Languages and Literatures, 1977.
- Plutarch. *Moralia*. Trans. Harold Cherniss and William C. Helmbold. Cambridge: Harvard UP, 1957 (15 vols.), volume 12.
- Reeves, Eileen. *Painting the Heavens. Art and Science in the Age of Galileo*. Princeton: Princeton UP, 1997.
- Rico, Francisco. *El pequeño mundo del hombre. Varia fortuna de una idea en las letras españolas*. Madrid: Castalia, 1970.
- Romm, James S. "Lucian and Plutarch as Sources for Kepler's *Somnium*." *Classical and Modern Literature* 9 (1989): 97-107.
- Rosen, E. *Kepler's Conversation with Galileo's Sidereal Messenger*. New York: Johnson Reprint Company, 1965.
- Seneca. *Tragedies*. Trans. Frank Justus Miller. Cambridge: Harvard UP, 1917 (2 vols.) volume 1.
- Vélez de Guevara, Luis. *El diablo cojuelo*. Ed. Angel R. Fernández and Ignacio Arellano. Madrid: Castalia, 1988.
- Vernet, Juan. "Copernicus in Spain," in *The Reception of Copernicus' Heliocentric Theory*. Ed. Jerzy Dobrzycki. Dordrecht, Holland: D. Reidel, 1972: 271-91.