

*The Study of Nature, Philosophy, and the Royal Library of San Lorenzo of the Escorial**

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Interpretations of the iconography of the Royal Library of the Escorial have fostered many assessments of the intellectual panorama of late sixteenth-century Spain. This study advances the thesis that once the Royal Library was established in its permanent premises attempts were made to define its intellectual agenda, and in particular to redirect the study of nature undertaken there in a rather distinct and novel direction. To identify this agenda, this study shuns iconographic interpretation to focus instead on Friar José de Sigüenza's description of the library's frescoes. Once this discourse by the librarian of the Escorial is read independently of meanings that might have been inscribed in the library's iconography and is complemented with insights gleaned from other works by its author and his mentor, Benito Arias Montano, the librarian's description reveals itself to be a manifesto of how the friar thought the study of nature should be undertaken at the Escorial. It entailed a reorientation away from Aristotelian and empiricist approaches and toward the elaboration of a radically new biblist metaphysics.

1. INTRODUCTION

Keeping vigil over the vast Castilian mesa that lies before it, San Lorenzo of the Escorial stands today as the iconic exemplar of the imperial power of the Habsburg monarchy. Philip II (r. 1556–98) ordered its construction to begin in 1562 and saw the ambitious project completed by 1586, although the decoration of its grand rooms continued well into the 1590s.¹ The documents that chronicle the founding of the Escorial describe a site meant to serve as a Hieronymite (Order of Saint Jerome) monastery, a royal residence, a dynastic mausoleum, and a church dedicated to commemorate the victory against the French in the Battle of San Quentin on the day of the feast of St. Lawrence, 10 August 1557. Soon after construction began, the plan was modified to accommodate a seminary, as well as a college that taught a liberal arts curriculum and granted bachelors' degrees. At the time of its inception, the Escorial was to house a hospital and a pharmacy, which were expanded later to include a lavish distillation

*Please see the online version of this article for color illustrations. All translations are the author's except where otherwise noted.

¹Bustamante García, 1994, 35, 423.

laboratory that prepared medical remedies.² Yet as the world learned of Philip's grand design, both the physical building and its final purpose baffled observers, who wondered if it was to be understood as a fortresslike bastion of the Counter-Reformation, or instead as a reconstruction of the Temple of Solomon, or if its majestic library signaled that it was a center of learning. Central as the site was to the idea of an imperial Spain, it was inevitable that it would become another contested arena where the many political, religious, and scientific factions in late sixteenth-century Spain negotiated for power and influence. Although Philip II closely supervised and personally approved all aspects of the project, the Escorial in both its physical and conceptual embodiments became a canvas upon which many painted.

This study emerges from a desire to understand how the study of nature — science in its many early modern guises — was carried out within the walls of Philip II's Escorial. Two premises undergird this study. The first is the understanding that the study of nature during the late sixteenth century was undertaken from a number of often-competing perspectives. Nature could be explained from Aristotelian, Neoplatonic, and Hermetic philosophical perspectives, and by using methodologies that ranged from the theoretical to the magical, or to the exclusively empirical. Many syncretic formulations of both conceptual constructs and methodological approaches vied to put forth a cohesive system. But despite the permanence of the peripatetic philosophy, no one way of understanding the natural world stood uncontested. The second premise is that the monastery-palace of the Escorial can be conceived as a microcosm of a wider European intellectual community, albeit one where public discourse was circumscribed within the ideological paradigms of Counter-Reformation Catholic dogma. During the late sixteenth century, as its various units began functioning within its walls, the Escorial coalesced as a coherent institution that was shaped by historical actors and that mirrored the intellectual struggles of the time.

The Royal Library at the Escorial served as the focal point for a number of important initiatives that framed the intellectual panorama of late sixteenth-century Spain and in which the study of nature played an important role. Hence this article begins with a brief survey of scholarly activities that took place at the Escorial and identifies several different perspectives from which the study of nature was pursued. This very plurality of perspectives and objectives constituted a polyphony that proved

²The documents that chronicle the history of the Escorial are published in the seventeen-volume collection *Documentos para la historia del Monasterio de San Lorenzo el Real del Escorial*.

disquieting to some. The thesis of this study is that once the Royal Library was established in its permanent premises, attempts were made to redirect the study of nature in a rather distinct and novel direction. This direction was never fully articulated as a program or agenda, nor was it ever expressed as a royal directive. Instead, it appeared coded in the frescoes that adorn the ceiling and walls of the Royal Library — at least according to its librarian, Friar José de Sigüenza (1544–1606).

A great deal of what we know about the genesis, design, and operation of the library comes from Friar Sigüenza, who included a detailed history of the construction of the Escorial in the third part of his *Historia de la Orden de San Jerónimo*.³ He completed his studies at the school of the monastery in 1575, returning occasionally to preach at the Escorial but not officially joining the community until 1589. In 1591 he became the librarian of the Royal Library and twice served as prior of the monastery before his death in 1606.⁴ In his description of the Escorial he took on the role of cicerone, most notably when describing the library and its spectacular frescoes: in the process he produced a text that, while disguised as a descriptive narrative, set the normative interpretation of the iconography of the Royal Library.

Over the centuries, the frescoes that decorate the library have shared in what art historian E. H. Gombrich describes as the elusiveness of meaning characteristic of Renaissance art.⁵ As the historiographical survey will show, the multivalenced nature of the iconography used in the library's decoration has yielded many often-conflicting interpretations of the intellectual panorama of late sixteenth-century Spain that it supposedly emblemizes. The aim here is not to fashion another iconological interpretation of the library based solely on its iconography.⁶ Instead, this study will intentionally turn its gaze away from the frescoes and focus instead on Sigüenza's

³Sigüenza, 1605. The edition cited in this article is Sigüenza, 2000. To my knowledge there is no English edition.

⁴Sigüenza's biography is known mostly from the monastery's necrology, the *Memorias sepulcrales*, reprinted and commented in Sigüenza, 1916, 1:vii–xx, xxiv–xxxiii. Other biographical material can be found in the introduction in Sigüenza, 1907–09. See also, Andrés, 1975, 16–22; Rubio Gonzalez; Andrés, 1980; Campos y Fernández de Sevilla, 2006; Sabau.

⁵Gombrich, 107.

⁶I follow the distinction in Panofsky, 3–17, between iconography and iconology: iconography studies the subject matter of a work of art by means of a thorough understanding of the imagery used and how a specific theme was expressed within a given historical context, while iconology attempts to uncover the intrinsic meaning of a work of art, one that is understood to lie beyond conscious volition and responds to the essential tendencies of the human mind.

description of them. By analyzing it independently of what the iconography of the library might have suggested to its sixteenth-century audience, and by complementing the discourse with insights gleaned from some of Sigüenza's other works — and, as it is likely the author intended, those of his intellectual mentor, Benito Arias Montano (1527–98) — I hope to show that coded in his discourse is a manifesto of how the friar thought the study of nature should be undertaken at the Escorial.

2. THE *BIBLIOTECA REGIA*

The magnificent Royal Library (fig. 1) was actually a late addition to the plan of San Lorenzo of the Escorial. The idea of augmenting the intellectual prestige of the Habsburg dynasty with a royal library was not novel: royal chronicler Juan Páez de Castro had advocated on its behalf years before construction began.⁷ Once the imagined library found a setting at the Escorial, the concept of the library changed. Rather than a building meant solely to showcase the knowledge of the realm in a setting suitable for the world's most powerful monarchy, it now also had to serve the school and the monastery. When the first architect of the Escorial, Juan Bautista de Toledo, died in 1567, the library and the corresponding west façade had not been designed.⁸ Toledo's successor, Juan de Herrera (1533–97), later designed one central library and situated it above the entrance to the main cloister, as was customary with Spanish university libraries.⁹ Within the plan of the Escorial, the library acts as a bridge between the monastery and the schools, just as the basilica serves to link the monastery, the palace, and the schools. When completed, the library consisted of three rooms: a small antechamber that held manuscripts, a large room upstairs, and the long hall of the Royal Library. The library's mission remained similar to what Páez de Castro had suggested. It was to mirror the magnificence of its patron and to house the knowledge of the realm, but it now also had to serve the monastery and the school. Philip II commissioned the Spanish humanist and royal chaplain Benito Arias Montano to purchase books for the library. While in Antwerp overseeing the Plantin press's publication of the Antwerp Polyglot Bible, and later in Rome, Arias Montano avidly purchased manuscripts, books, maps, instruments, and curiosities on behalf of the monarch, including

⁷Páez de Castro, BME Mss &-II-15, fols. 190^v–195^v. The manuscript is published in Páez de Castro, 2003.

⁸Bustamante García, 1994, 132.

⁹Ibid., 282.



FIGURE 1. Royal Library of San Lorenzo of the Escorial. Photo courtesy of Martin Gordon.

a significant collection of scientific books.¹⁰ Pellegrino Tibaldi and Bartolomé Carducho executed the frescoes and finished the decoration of the library in 1593, at which point the collection was installed on the premises it still occupies. The result was stunning, as Sigüenza notes: “I have never seen a man enter this illustrious room who has not been surprised and left as if stunned, and with reason, because even those of us who are here every day, if we happen to be away from it, seeing it upon our return causes us the same wonder and emotion.”¹¹ The decoration of the vault of the main hall was divided into seven sections separated by architectural elements, both structural and trompe l’oeil. At the center of each section, at the cusp of the vault, is an allegory of the seven liberal arts, each in the form of a female figure: grammar, rhetoric, dialectic, arithmetic, music, geometry, and astrology (fig. 2 shows the arrangement of the paintings in the room). Each allegory is flanked in turn by images of ancient and modern exponents of these disciplines. The program continues beneath the cornice separating the vault from the walls, where on facing walls each discipline is further illustrated in two paintings, or *historias*, on subjects pertaining to the sciences depicted above. These *historias* run the length of the room, forming a set of sixteen, including the two over the doors at either end of the room. These are also in composition with the allegories above them: over the door leading to the school and seminary is an allegory of philosophy with a depiction of the School of Athens beneath it, while over the door leading to the monastery is an allegory of theology with its corresponding *historia* showing the Council of Nicea.

Of the other two rooms that formed part of the Royal Library complex, a smaller room housed ancient manuscripts in Latin, Greek, Arabic, Chaldean, Syrian, Italian, French, and Spanish. This room also featured some fine terrestrial and celestial globes, maps, and other mathematical instruments, including one invented by Peter Apian and given to Charles V that was kept next to the four books in folio that explained its use.¹² The rooms upstairs, a space equal in plan to the Royal Library below it, served as the repository of the king’s cabinet of curiosities and stored the printed books written in common languages. By 1602 it also housed a significant cartographic collection and over 150 mathematical instruments such as terrestrial and celestial globes,

¹⁰The catalog is available in Fernández. For the Antwerp Polyglot Bible, see Arias Montano et al., 1569–73.

¹¹Sigüenza, 2000, 2:616: “No he visto entrar hombre en esta tan ilustre pieza que no le haya puesto en admiración y como dejado suspenso, y verdaderamente con razón, porque aun a los que estamos en ella cada día, si sucede hacer alguna ausencia, cuando volvemos nos causa su vista esta misma novedad y movimiento.”

¹²Ibid., 623.

Allegory	Illustrious men flanking each allegory <i>Varones insignes</i>	Secondary figures between columns	<i>Historias</i>
Theology	St. Jerome St. Ambrose St. Augustine St. Gregory		Council of Nicea
Astrology	Ptolemy Alphonse X "The Wise" Euclid Sacrobosco		Passion eclipse observed by Dionysus the Aeropagite Miracle of the Sun and King Hezekiah
Geometry	Archimedes Regiomontanus Alcabitius Aristarchus of Samos	Apollo Misenus Dicaearchus of Messina Eratosthenes of Cyrene	The Egyptian priests Archimedes and the Roman soldiers
Music	Jubal Pythagoras Amphion Orpheus	Mercury Pan	David playing for Saul Orpheus freeing Eurydice from hell
Arithmetic	Archytas of Terentum Boethius Jordanus de Nemore (Saxo) Xenocrates		King Solomon and the Queen of Sheba The Gymnosophists
Dialectic	Melissus of Samos Zeno of Citium Protagoras Origenes	Homer Virgil	Zeno of Elea leading to doors VERITAS/FALSITAS Saints Ambrose, Augustine, and Monica
Rhetoric	Isocrates Demosthenes Cicero Quintillian	Pindar Horace	Caius freed by Cicero Hercules Gallicus chaining his listeners
Grammar	Marcus Terentius Varro Sextus Pompeius Festus Aelius Donatus Elio Antonio de Nebrija	Pliny the Elder Titus Livy	The Tower of Babel Daniel at the Chaldean school
Philosophy	Socrates Plato Aristotle Seneca		The School of Athens Academics versus Stoics

FIGURE 2. Iconography of the Royal Library of San Lorenzo of the Escorial.

astrolabes — including exquisite ones made by Gemma Frisius, and others by the finest craftsmen from all of Europe — astronomical rings, armillary spheres, and Jacob staffs. Sigüenza explains that the collection of instruments was very complete, and well suited for those given to carrying out observations and who wished to work with precision. He chooses not to describe them in detail: “it seems trite to describe them, although elsewhere they would be quite valued.”¹³

3. SCHOLARSHIP AND SCIENCE AT THE ESCORIAL

Even before it was installed in its final space, the library emerged as the intellectual center of the monastery-palace complex and of the Habsburg

¹³Ibid., 622: “Hay también ámulos, armillas de muchas diferencias, ráditos y otras cien buenas alhajas de esto, que me parece menudencia detenerme en ellas, aunque en otra parte fueran muy estimadas.”

monarchy. The library was the king's personal repository of books and other didactic material, and his personal library had formed the basis of the collection. Furthermore, the library was exempt from inquisitorial oversight and could have unexpurgated and prohibited books in its collection; however, many books that entered the library through the purchase of private collections had been previously expurgated.¹⁴ Benito Arias Montano ensured that the library housed the best exemplars of humanistic scholarship, while acquisitions from the estate of Diego Hurtado de Mendoza and others would later supply the library with rare ancient manuscripts.¹⁵

The library proved to be more than simply a passive collection of precious books and artifacts. It functioned very much as the central reference collection for a number of important projects undertaken during the reign of Philip II. For example, the library became the repository of all the known manuscripts of St. Isidore of Seville (560–636), the great medieval encyclopedist. For over a decade there was a concerted effort to locate, edit, and publish the works of St. Isidore, culminating with the publication of the complete works in the Pérez y Grial edition of 1599. Similarly, the works of Raymond Lull (1233–1315) were systematically collected from throughout the empire, catalogued, and kept at the library awaiting further study in anticipation of an effort to canonize the Mallorcan proselytizer.¹⁶ Both projects took place in response to the desire of Philip II to increase the cult of Spanish saints and to have new saints canonized after Rome instituted the predecessor to the Congregation for the Causes of Saints in 1588.¹⁷ Fernando Bouza has noted that by collecting and treasuring these codices a symbolic appropriation took place of both classical and patristic authorities. In the context of the Counter-Reformation and the prevailing concern with dogma, this appropriation was instrumental in launching these projects intended to anchor intellectual and theological endeavors in original sources.¹⁸

Antonio Gracián Dantisco, the king's royal secretary, coordinated these and other projects, the fruits of which would become part of the royal collection. He also participated in the project to compile a geographical

¹⁴Fernández, 17, 20.

¹⁵The original catalogs and chronicles of the book deliveries are published in volume 7 of Andrés, 1964.

¹⁶Lull's *Ars magna* was a system of organizing knowledge based on a combinatorial method that drew on principles common to Christianity, Judaism, and Islam, interpreted within a hybrid Neoplatonic and Aristotelian understanding of the natural world. On early modern understanding of the Lullian corpus, see Yates, 1982; Bonner, 1994 and 2007.

¹⁷Dandelet, 171–80.

¹⁸Bouza Álvarez, 90–99.

description of Spain on the basis of responses to questionnaires, which the historiography labeled the *Relaciones topográficas*.¹⁹ After the death of Gracián Dantisco, Juan López de Velasco, the royal cosmographer of the Council of Indies, continued these projects, dedicating particular effort to the *Relaciones topográficas* and the Isidorean corpus. He also routinely borrowed books and astronomical instruments from the library and relied on its collection as his principal resource of astronomical books.²⁰

The fate of the documents of Francisco Hernández's natural history expedition to Mexico once they arrived at the Escorial illustrates how the library and its librarian cared for what they perceived as a storehouse of imperial knowledge.²¹ When Hernández returned to Spain in 1577 after compiling a natural history of Mexico, the sixteen volumes, extensive herbaria, and several folios of illustrations that resulted from seven years of work were deposited in the library. Philip II instructed Nardo Antonio Recchi to compile a treatise of the medicinal plants (1580–82); later, Juan Eusebio Nieremberg and others also consulted the material. In his capacity as librarian, José de Sigüenza drafted a letter in response to a petition by Dr. Luis de León, an expert in the preparation of medical remedies, or *simples*, who wanted to borrow the Hernández collection in order to correlate the medicinal properties of Mexican plants with Spanish equivalents.²² Although he describes this as a worthwhile effort, Sigüenza was concerned that once removed from the library the books could be damaged or lost. He advises against removing the books and adds, “[M]y opinion is that the books should not be taken just to do this, leaving the library without them since so much benefit is derived from having here such a singular and rare thing, just as there are many things in libraries whose purpose is no other than to recreate the intellect and the senses of man, and doing so might also allow us to know what is new of what is brought from the Indies.”²³

¹⁹Alvar Ezquerro, García Guerra, and de los Angeles Vicioso Rodríguez, 1:31–38.

²⁰Portuondo, 158–59.

²¹For more on Francisco Hernández, see Somolinos d'Ardois; López Piñero and Pardo Tomás; Hernández; Varey, Chabrán, and Weiner.

²²I thank Mar Rey Bueno for suggesting that this might be Luis de León, who since the 1560s had served as *maestro de simples* at Aranjuez: Rey Bueno and Alegre Pérez, 29–30.

²³Sigüenza. n.d. BME Manuscript C-III-3, fol. 391^r: “Segun esto mi parecer es que no se lleve los libros para solo esto sin dexalos estar en la libreria que tanto fruto se saca dellos en que este aqui una cosa tan singular y tan rara, como estan otras muchas en las librerias que su fin no es mas que deleitar el ingenio y los sentidos del hombre y con esto puede tambien aprovechar de que con ellos sabremos lo que de nuevo nos trujeren de las indias.”

Sigüenza's attitude suggests that the library was intended first and foremost to serve as a carefully guarded reference collection where books and manuscripts took center stage.

The projects in the Royal Library's orbit were not the only way nature was studied at the Escorial. The college that occupied one quadrant of the building granted degrees in arts and theology that had equal standing with those from other universities of the kingdom, and it admitted students who had not taken religious vows. By express order of the king, its professors were not to be from the Order of Saint Jerome or any other order, but were either lay clerics or secular instructors.²⁴ (After a number of years this injunction was lifted.) The course of arts followed a rather traditional scholastic curriculum, in which natural philosophy was interpreted through the lens of Thomism. Students learned about the natural world via coursework that began with Saint Thomas's resolution of Aristotle's *On Sophistical Refutations*, followed by the first four books of the *Physics*, *On the Heavens*, *On Generation and Corruption*, and, again with an unspecified resolution and clarification, the *Meteorology*, supplemented with the *Sphere* (probably Sacrobosco's), and specifically excluding planetary theory. If time permitted, the students would also read some sections of Aristotle's *History of Animals*. In the final year, students delved into the *Metaphysics* and *De anima*, again via the commentaries of St. Thomas and St. Cajetan of Thiene.²⁵

In contrast to the scholastic teaching of the college taking place at the far side of the building, the distillation laboratory followed the distinctive experimental and empirical approach of alchemy. Philip II's interest in alchemy lay mostly in securing a supply of therapeutic products for the royal household, that is, the products of the spagyric and distillatory branches of the discipline — although he also on occasion underwrote transmutation trials.²⁶ At his palaces in Aranjuez and Madrid he established distillation laboratories under the direction of Flemish, and later Italian, masters. These laboratories prepared distilled waters and simples, as well as the Lullian quintessence, that elusive celestial and sovereign essence of plants that because of its purity was thought to conserve the health of the human body.²⁷ The Escorial's distillation laboratory under the direction of Spanish distillers

²⁴Modino de Lucas, 1985, 3:77–83.

²⁵There is an extract of the directives about the college's curriculum in Flórez and Balsinde, 202–03. The directives pertaining to the college were published in Modino de Lucas, 1962, 135–38.

²⁶For more on Philip II's interest in alchemy, see Tausiet Carles.

²⁷Rey Bueno, 36–57.

formed part of a large pharmacy and infirmary installed under the southwest tower. Among the therapeutic remedies prepared in the laboratory were various formulations of potable gold, as well as other chemical remedies. At the library the royal alchemists could consult a large collection of alchemical texts, including the pseudo-Llullian and Paracelsian corpus. After 1595 a special dispensation was issued by the Inquisitor General allowing only the director of the pharmacy to read alchemical books written by banned authors, among them Paracelsus.²⁸

By the late sixteenth century the microcosm that was the Escorial resonated with many ways of understanding the natural world, from the empiricism of alchemical practitioners who labored in its distillation laboratory and pharmacy, to the scholasticism taught at the college, to the bookish focus of its librarians preserving codices in which to anchor the intellectual heritage of the realm, and, finally, to those of the humanist scholars who took part in the projects described above and who sought to stamp the library with the hallmarks of a universal monarchy. Yet the historical record has thus far failed to reveal testimony that these activities took place in response to a clearly articulated cultural program.²⁹

The very presence of the library, with its storehouse of knowledge about the natural world — both ancient and contemporary, compiled by pagan, Jewish, Christian, and Islamic sources, ranging from the purely philosophical to the products of keen observation — begged for an interpretation.³⁰ It is reasonable to suppose that those involved in the projects discussed above had opinions about the best way to pursue inquiries into the natural world, but testimonies are scant. We do have, however, the testimony of one protagonist, José de Sigüenza, who spoke not just for himself but also for Benito Arias Montano. His testimonial was unconventional, for rather than writing a straightforward exposition on the subject he chose to present it in the form of a guided tour of the library, particularly of the frescoes decorating the ceiling and walls. In an exquisite flash of intuition he realized that anyone entering the library would be dazzled and drawn to its exuberant decoration. Indeed, even to this day the expressive figures seem to demand to have their stories told. By offering to interpret the imagery, Sigüenza was sure to capture his audience's

²⁸Ibid., 83.

²⁹For an approximation of what this cultural program might have been, see Bustamante García, 2003, 54–56.

³⁰For historical surveys of the library as a center of scholarship, in particular where it pertains to the study of nature, see Campos y Fernández de Sevilla, 1994; Vicente Maroto and Esteban Piñeiro, 35–64.

attention. Time has proved him right: the library's iconography and Sigüenza's description has never failed to intrigue generations of scholars.

4. HISTORIOGRAPHY OF THE ICONOGRAPHY

Historical discussions of the library during the first 350 years of its existence were largely circumscribed to descriptions of the library and its collection, based largely on writings by Sigüenza and of other visitors.³¹ The historiography of the library's frescoes took an interesting turn in the latter half of the twentieth century, when it emerged as a vehicle for understanding the reign of Philip II. This recent scholarship has largely abandoned the former obsession with whether the library's collection was consulted or not and has instead sought to find within the library examples that illustrate the cultural and intellectual preoccupations of late sixteenth-century Spain.

To this end, one of the methodologies most frequently adopted has been to study the iconography of the frescoes with the final objective of uncovering what the frescoes mean and what they can say about the intellectual universe of Philip II's court. Some have gone further and constructed iconological interpretations in the hopes these in turn would further unravel the enigmas of the Philippine monarchy. Not surprisingly, the iconological turn proved controversial and sparked a number of studies that sought to challenge these interpretations. It also brought to the fore the question of attribution. Was the theme of the program conceived and designed by an individual, or was it the product of a process of negotiation that involved many historical actors? The lure of the single-author thesis lies mostly in how this might help identify a single operative ideology governing the library's decoration, whereas the possibility of multiple contributors surely complicates matters.

The historiographical watershed of the library's iconography was René Taylor's 1967 essay that sought to reconstruct the iconology governing the frescoes.³² Taylor understands the iconology to have been present both at a conscious and unconscious level when the library was decorated, and concludes that there was indeed a unified program in place, with its constitutive iconology informed by a desire to reconcile the occult with Catholic orthodoxy. Perhaps Taylor's most daring assumption is attributing the program to Juan de Herrera and suggesting further that the architect was a magus along the lines of a John Dee. He also states unequivocally that the Escorial was meant to be a re-creation of the Temple of Solomon. Others

³¹For a survey of early texts that fashioned the historical image of the Escorial, see Sáenz de Miera.

³²Taylor.

later elaborated on Taylor's ideas.³³ Many of these studies fall victim to the difficulty that Carlo Ginzburg warns lies in wait in iconographic research and iconological interpretation. He highlights Gombrich's observation about the dangers of constructing circular arguments when interpreting works of art. This can lead a historian to find in a particular iconographic program the supporting evidence for a presupposed interpretation: a graver issue results when an artistic work is taken as a visual manifestation of the psychic expression of a collective group.³⁴ Ramiro Floréz admonishes some of Taylor's followers, pointing out that they often bow to the apparently irresistible attraction of the words *magic*, *hermetic*, and *esoteric* and have fallen into a trap of a reductionism where everything in the library becomes hermetic. Moreover, they blur distinctions between the Hermetic corpus itself and the interpretations of Ficino and Pico and others, while also negating centuries' worth of tradition chronicling the dialectic between images and meaning.³⁵

Correctives to Taylor's original theses yielded most of the scholarship in the area. Architectural historians, including George Kubler, Catherine Wilkinson-Zerner, and Luis Cervera Vera, responded by challenging some of Taylor's premises.³⁶ In 1979 Osten Sacken wrote an iconological interpretation based on the premise that the Escorial was intended principally as a visual manifestation of the Counter-Reformation, a site where rituals served to define "a place for the protection and defense of the faith and the Catholic forms of worship threatened by Protestantism."³⁷ She finds that the iconography of the library is not a hermetic manifesto, but instead obeys an extraordinarily extensive and convoluted program, with "tortuous associations and in many cases masked allusions and metaphors."³⁸ Scholz-Hänsel further refines this argument, finding links between the frescoes and the Christianized

³³Such as Gonzalo Sanchez-Molero; Cuadra; Pizarro Gómez. For a recent survey of this historiography, see Lazure. Taylor's interpretation of the frescoes reduces the rich and variegated panorama of medieval and Renaissance emblematics solely to interpretations that fit the hermetic paradigm. See, for example, in Sebastian López, how the layers of possible meanings are discarded lest they not fit the hermetic mold in what is otherwise an insightful study of the frescoes. Taylor's influence is also evident in the survey of occult activities at the court of Philip II in Goodman, 9–14.

³⁴Ginzburg, 35–36.

³⁵Flórez and Balsinde, 60–90. This problem is hardly exclusive to this instance. For a study of how these terms have been misused, see Copenhagen.

³⁶Cervera Vera, 1977, 1981, and 1997; Kubler, 1981; Wilkinson-Zerner, 1985 and 1993.

³⁷Osten Sacken, 27.

³⁸Ibid., 104.

Neoplatonism of the librarian of the Vatican, Eugubinus (Augustin Steuco, 1497–1548).³⁹ He also increases the profile of the artist Pellegrino Tibaldi (Pellegrino Pellegrini, 1527–96) as a possible contributor to the iconographic program, and highlights the place of the frescoes within a Counter-Reformation aesthetic of this reformed Michelangelo.⁴⁰ Meanwhile, von Barghahn describes the library's iconographic program as stemming from the artistic formulas of Francisco de Holanda with his emphasis on representations that elevated the ruler — in this case Philip II — to near-divine status by situating him as an heir and equal to biblical kings and ancient sages.⁴¹

Sylvaine Hänsel attributes the authorship of the iconographic program to Benito Arias Montano, based largely on parallels between Montano's *Humanae Salutis Monumenta* (a collection of seventy poems and engravings on biblical topics) and other religious emblem books made in collaboration with engraver Philip Galle. For Hänsel, the Laurentine frescoes do not address a unitary concept, but rather follow a plan designed to achieve the same didactic effect as in Arias Montano's emblem books.⁴² What is unclear from her summation is the nature of the message delivered by this didactic effect. Scholars have found that precisely what makes the iconography of the frescoes of the Escorial so fascinating is the possibility of multiple authorship and the lack of a coherent program. Gajate explores the plurality of meanings attributed during the Renaissance to the images used to represent the liberal arts and their respective *historias*, concluding that, other than a preference for choosing exemplars that had links to Spain, it was impossible to discern a coherent program.⁴³ For Ramiro Flórez, the frescoes in the library do not obey a unified iconological program, and efforts to try

³⁹Scholz-Hänsel. On the influence of Steuco's *Philosophia perenni*, see Flórez and Balsinde, 56.

⁴⁰The appellation is from Kiefer. Tibaldi's intellectual formation has recently been the object of study. While working at the Escorial from 1586 to 1595, he wrote a commentary on Alberti and Vitruvius that reflects his preoccupation with reconciling classical and humanistic sources with the then-coalescing aesthetics and ideology of the Counter-Reformation: Pellegrini, 1988. Giuliani, 1997, 49, interprets Tibaldi's role in the design of the iconography of the Royal Library as that of a *coordinato di una équipe* (coordinator of a team). Giuliani, 2001, 404, summarizes Tibaldi's choice of artistic motives as characterized by an abundance of suggestions drawn from an available repertoire to affect a display of his personal culture and to amaze the observer. It is interesting to note that Italian scholarship recognizes Tibaldi's role in Spain as that of an architect rather than of a painter, because during his years working at the Escorial Tibaldi was given the title of architect and received his pension as such upon his return to Milan in 1595.

⁴¹von Barghahn, 1:117–20, 136–41.

⁴²Hänsel, 177.

⁴³Gajate.

to reduce it to a single one lead to incongruencies.⁴⁴ Yet he concedes that Arias Montano must have had a hand in defining the program.

Stratton-Pruitt avoids the question of authorship and instead finds that the key to the iconography of the library is its *raison d'être* in the Escorial complex, that is, as an imperial mausoleum of the Spanish Habsburgs. For Stratton-Pruitt, Sigüenza could not have been as influential as he claimed in designing the frescoes, stating this largely on the basis of the disorganized way he presents the images in the narrative.⁴⁵ For Rincón Álvarez, the key to the iconography lies in identifying parallels and contrasts among earlier works by Michelangelo and Raphael and the iconography of the Royal Library.⁴⁶ For whereas the works of the former had shown science, philosophy, and revelation coexisting in a spirit of harmony and in apparent communion of ancients and moderns, the Royal Library was instead the product of a Mannerist style at odds with the Tridentine dictum that art had to have a didactic mission.

Despite the light these insightful studies shed on the possible meanings of the iconography, the question of authorship of the frescoes remains unanswered, as does the question of whether the art was designed to follow a unified program. As discussed below, in the *Fundación del Monasterio de San Lorenzo*, José de Sigüenza makes a statement that has been interpreted to mean that he either designed the iconographic program or contributed significantly to its composition. Yet only one document survives that addresses directly the issue of authorship, while plenty of payment receipts attest to Tibaldi's and Bartolomé Carducho's work as artists.⁴⁷ The document is a pen-and-brown-ink study of the rhetoric series of frescoes and shows the *historia* of the Tower of Babel. The document resides at the British Museum under the catalog name *Study for the Decoration of the Escorial Library* (fig. 3).⁴⁸ The drawing has annotations in many hands, with some notes signed by Juan de Herrera and other unsigned notes in Italian. Clearly legible at the bottom of the drawing, a note made in reference to the *historia* reads, "The program [memoria] of these scenes must be either with His Majesty or with Francisco de Mora. Please order it to be sent."⁴⁹ (Mora

⁴⁴Flórez and Balsinde, 230–35.

⁴⁵Stratton-Pruitt.

⁴⁶The similarity between the images in the programs is remarkable and sometimes might border on copying: Rincón Álvarez, 436–41.

⁴⁷Their payments are recorded in the monastery's procurement archive: Andrés, 1972, 191, 198–202.

⁴⁸Discussed by Kubler, 1982, 128–29; von Barghahn, 116.

⁴⁹"[L]a memoria destas istorias a detener su mag[esta]d o fran[cis]co de mora manda V[uestra] M[erced] [en]viarla." As transcribed in the catalog notes in Gere and Pouncey, 8:171 (item 275).

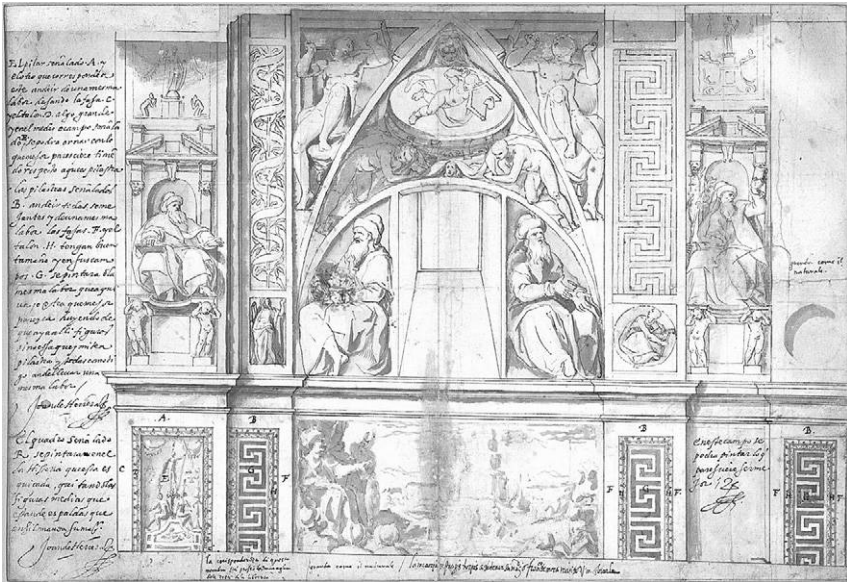


FIGURE 3. Pelligrino Tibaldi. *Study for the Decoration of the Escorial Library*, ca. 1586. © Trustees of the British Museum.

was Juan de Herrera's assistant and later succeeded him as the architect of the Escorial.) The note leaves little doubt that at one time the iconographic program was articulated in a document referred to as a *memoria*, or descriptive narrative. Furthermore, it suggests that the king was familiar with it and commented upon it and, moreover, that it circulated among the artists and architects involved in the project.⁵⁰

Evidence that the iconographic program of the Royal Library had at one time been articulated in writing brings to mind some cautionary words that E. H. Gombrich states in his own study of Raphael's *Stanza della Segnatura*.⁵¹ A Renaissance artwork should be understood as owing far more to formal influences dictated by its genre than to unconscious expressions, all the while keeping in mind that large commissioned works in the Renaissance owed their didactic intent more to the institution that commissioned them

⁵⁰Bustamante García, 1993, 342–43n33, observes that the notes in Herrera's hand concern only architectural matters and not the subject matter of the mural. Although one note asks that some figures that had their back to the viewer be removed from the painting's composition, Herrera made clear to the artists that it was the king who had ordered the change.

⁵¹Gombrich, 85–101.

than to the symbols used to convey the message. The dominant meaning of such art is thus conscious and is often the highly elaborated work of the artist and other contributors obeying a carefully constructed *libretto*. In the case of the Escorial, the artists were closely supervised by appraisers who judged whether the artist's work followed an established plan.⁵² Similarly, historical records suggest that the iconography of the Royal Library was mediated via a *libretto*, the *memoria* mentioned above that was in all likelihood the coproduction of an unknown number of historical actors. Yet absent a *libretto*, Gombrich warns of the futility of trying to discern an aspect of a pictorial representation that was intended to have an amplified meaning from others in the same composition that simply lack significance.⁵³

That there was a didactic intent behind the frescoes of the Royal Library, and principally its *historias*, goes unchallenged. The formal structure of the frescoes, with their seven allegorical figures of the arts augmented by the figures of illustrious men and each with its two corresponding *historias*, was by its very composition designed to be didactic. The messages, however, were delivered by means of a complex Renaissance iconography that was understood to carry a multitude of meanings. These are the layers upon layers of meaning that the iconographical studies discussed above have successfully wrested from the symbols and allegories used in the decoration of the library. This methodology fails us, however, if it is asked to identify a unitary prescriptive program, or, for that matter, an iconology of the frescoes that was present when the program was designed. Without a *libretto* or a clear statement of the intent of the author(s) and institutional patron, the question of which of these possible meanings delivered designers' intended message is destined to remain unknown.

José de Sigüenza's *La Fundación del Monasterio de San Lorenzo*, useful as it has been in helping scholars decipher the iconographic elements used in the library, should not be used as a proxy for the *libretto*. The purpose of his description of the library was not to parrot the explanation of the iconography given in the *libretto*, but instead to set forth his own interpretation in the hope of advancing a particular agenda, an important part of which concerned the study of nature. He writes with the authority granted by his institutional role as librarian, and only secondly as someone who "had a hand in it." At the beginning of the discourse he states, "Let us then first see the library. . . . I will be able to talk about it with more liberty than the other parts of the house, because it is

⁵²In January 1592 the appraisers Diego de Urbina and Patricio Caxés agreed that Tibaldi should be paid for the work he had done on the sixteen *historias*, since the paintings had been executed "according to the order he had been given": Andrés, 1972, 198–202.

⁵³Gombrich, 88.

something more akin to my abilities, for in the end books are the principal thing, my friends and perpetual companions almost since the cradle, and because I have had a hand in and given it some part of my intellect. . . . I will only say what rightfully pertains to the subject, so that if perchance what is here is not seen due to my failing, at least conjectures can be made based on what I said.”⁵⁴ Contrary to what many scholars have thought, Sigüenza is not claiming authorship of the frescoes in the phrase “I have had a hand in and given it some part of my intellect.” Here he is referring to the library as an organic whole to which he had contributed much indeed as librarian and prior of the monastery. What follows in the text, however, is a long description (twelve pages in the cited edition) where he systematically explains the iconography. In fact, throughout the text he mentions consulting sources in order to find why certain elements were included in the iconographic program: St. Jerome, Aristotle, Cicero, and Diogenes Laertius’s *Lives of Philosophers*. If we divorce Sigüenza from the question of authorship (or give him a diminished role), the question of why he chose to describe and interpret the iconography at such length becomes more intriguing. In the passage cited above, Sigüenza appears preoccupied that the purpose of the library will not be correctly understood: in a later section he expresses the same concern about its decoration.

For indeed, the multivalenced nature of the artistic elements chosen for the library’s decoration brought with it the possibility that viewers could fashion idiosyncratic interpretations based on its plurality of possible meanings. Once the artwork was finished and could be seen by the public — a very select and educated public, but one unfamiliar with its *libretto* — the iconographic program ran the risk of not being understood in the same spirit in which it was conceived. This was likely to happen, given the program’s exuberance of both forms and themes. These interpretations could also be problematic and this motivated Sigüenza to write his own interpretation of the iconography in an attempt to redirect an observer’s understanding of the art to Sigüenza’s subjective interpretation. He sought to direct the observer to what was truly important among the riot of colors and expressive figures, in the hope that “conjectures” about the library would be based “on what [he] said.”

⁵⁴Sigüenza, 2000, 2:608: “Veamos pues la librería primero. . . . Podré hablar de ella con más libertad que de las otras partes de esta casa, por ser cosa más llegada a mi propia facultad, pues al fin lo principal es libros, amigos y compañeros perpetuos casi desde la cuna y porque he puesto en ella las manos y parte del ingenio. . . . Solo diré lo que derechamente tocara al sujeto, de suerte que ya que no se vea lo que está por falta mía, se conjeture al menos por lo que dijere.”

5. SIGÜENZA'S DESCRIPTION: STRUCTURE AND SOURCES

In this section I argue that José de Sigüenza used the library's iconography to state how the study of nature would be pursued in the library, and in so doing to advocate in favor of Arias Montano's biblist natural philosophy. He presents this argument in two parts in his description of the library, intermingled with, but distinct from, other issues addressed in the same discourse.⁵⁵ The first part of the argument addresses the question of the library's purpose — we might say its final cause — which included a qualification of what the role of philosophy and the arts should be during man's time on earth. Sigüenza uses the answer to this question to frame the description of the allegories of the seven arts painted on the ceiling vault. The second part of his argument addresses how this knowledge of philosophy should be acquired and, therefore, how the library should be used. He develops this argument in the description of the sixteen *historias*. The structure of the narrative is similar for each image: after Sigüenza describes the particulars of the iconography depicted, he delivers the message the image sought to convey. He often truncates the message, excusing his abruptness by not wishing to appear prolix, and asks the reader to consult his works, those of Pedro de Valencia (1555–1620), and, although without acknowledgment, those of the intellectual mentor to both, Benito Arias Montano.

Sigüenza refers the reader to his *Life of Saint Jerome* and to other works he left unnamed.⁵⁶ One of these is most likely his *Historia del Rey de los reyes*, a large work that remained in manuscript until the early twentieth century, when Villalba Muñoz noted its striking similarity to Arias Montano's *Naturae historia* and to the *Commentaria in Isaias*.⁵⁷ In the *Historia del Rey de los reyes*, Sigüenza paraphrases in Spanish complete sections of his teacher's work, principally the sections where Arias Montano defines key terms from the biblical Hebrew. The *Naturae historia* forms part of a work that Arias Montano called his *Magnum opus* and that his disciples considered his intellectual testament. It was to be composed of three parts: only the first part, the *Liber generationis et regenerationis Adam . . . id est Anima* (1593),

⁵⁵Thompson, 81, sides with modern scholarship that distances Sigüenza from Erasmism and places him firmly in the context of post-Tridentine Catholicism: from this perspective, Sigüenza's discourse can be seen as also preoccupied with "the relationship between pleasure and profit in art; the nature of education and scholarship; the relationship between Scripture and scholasticism; and the links between religious life and broader culture." See also Ozaeta, 1993; Fremau-Crouzet.

⁵⁶Sigüenza, 1595. The edition cited here is the English translation: Sigüenza, 1907.

⁵⁷Sigüenza, 1916, 1:cclxvii–cccix.

and the first volume of the second part, the *Naturae historia . . . Corpore* (1601), were ever printed.⁵⁸ (A third part, *Vestis*, was perhaps never written.) Although the *Magnum opus* relies heavily on biblical exegesis, the thematic structure of the books is dictated by their central preoccupation: purpose. In the *Liber generationis* this preoccupation takes the form of the question, What is man's purpose on earth? Likewise, the guiding theme of the *Naturae historia* are the questions, What is the purpose of nature? Why and how is man to understand and gain knowledge of this nature? These are themes Arias Montano had begun to explore with methodologies he developed during the years he supervised the publication of the Antwerp Polyglot and included in the *Arcano Sermone*, part of the problematic exegesis (or *Apparatus*) that would require his careful stewardship through the Vatican's inquisitorial offices.⁵⁹

One of the guiding themes of the *Magnum opus* is the belief that in the course of time the study of nature had been corrupted, a sentiment Sigüenza echoes in the opening pages of the *Historia del Rey de los reyes*.⁶⁰ Arias Montano argues that what stood as natural philosophy had lost its connection to any true knowledge of the natural world, that is, the knowledge of nature that man possessed before the Adamic Fall — and that God in an act of mercy and favor to the Israelites had again communicated to Moses, and later revealed to Solomon. Since then, Montano explains, man had fallen prey to the words of the philosophers, who had fabricated a tangled web of inventions that led man dangerously away from his true purpose. It was only in returning to the revealed word itself that man could find a true understanding of nature. In the *Naturae historia* his exegesis is directed at trying to reconstruct, by means of

⁵⁸Arias Montano, 1593 and 1601. Villalba Muñoz, a biographer and scholar of Sigüenza, believed that Arias Montano had finished the *Anima* by 1589 and that it was during his final visit to the Escorial during the first months of 1592 that a previous acquaintance with Sigüenza blossomed into the deepest of friendships. The two discussed the ideas behind the *Magnum opus* as Arias Montano continued working during those months on the *Naturae historia*. (By this time the painting of the frescoes in the library was well underway.) Those conversations led Sigüenza to begin his paraphrases of the *Magnum opus*, the *Historia del Rey de los reyes*: its elaboration was apparently interrupted by Sigüenza's inquisitorial trial but resumed in earnest in 1603, when the published edition of the *Naturae historia* became available: Sigüenza, 1916, 1:lxviii–lxxi, lxxii. On the other hand, Rekers, 113, interprets Sigüenza's work on the *Historia del Rey de los reyes* as an attempt to perpetuate Erasmian spiritualism.

⁵⁹Arias Montano, 1572. This and other works by Arias Montano are currently the subject of a superb effort by the University of Huelva to prepare critical editions and translations into Spanish of the humanist's works: Arias Montano, 1999, 2002, and 2006.

⁶⁰Sigüenza, 1916, 2:24.

Hebrew etymologies, the true *prisca sapientia* that he believed God had coded into the sacred scripture.⁶¹

In the *Magnum opus*, Arias Montano calls for a reform of knowledge and suggests how this reform should take place. First, a new natural philosophy required a new metaphysical foundation, understood as the knowledge of first principles. Arias Montano finds these in the Bible, derived directly from the language of the biblical text and extracted from it using exegetical and philological tools. Since for Arias Montano the Bible was the final arbiter of knowledge about the natural world, he cultivates, and his disciples emulated, a skeptical perspective about the validity of natural knowledge not stemming from the Bible — whether gained through sense perception, the result of philosophical speculation, or derived using scholastic methods. In Arias Montano's schema, knowledge constructed out of purely empirical observations is inferior and never leads to true knowledge. First principles are to be found in the biblical text, not in sense experience. Nonetheless, in the Montanian program, sense experience, observation, and rudimentary experiments can (and should) be used to confirm the first principles derived from the biblical text.⁶²

His discoveries led him to depart radically from the understanding of nature dictated by Aristotelian Scholasticism, although heavily influenced by Neoplatonic thought.⁶³ What follows is a synthesis of some of his more novel ideas. Arias Montano presents the source of everything in nature as the result of the action of four principles derived from words of the book of Genesis: *causa*, *iehi*, *elohim*, and *maim*. Montano's *causa* stands for God's kindness, which was understood to be first cause. *Iehi* (in Latin, *fiat* or *erit*) contains the notion of all time, past, present, and future, and when spoken by God stands for all creation that has been, is, and will be in perpetuity and immutable in form. *Iehi* also rules how *elohim*, the theurgic agent that permeates everything, carried out the actions of *iehi*. For Montano, "the spirit is *elohim*: prepares all forms, distinguishes among them, establishes

⁶¹For Arias Montano's use of Hebrew in his exegetical works, see García de la Fuente; Fernández Marcos; Morocho Gayo; Fernández Tejero and Fernández Marcos, 242–46; Arias Montano, 2002, 21–26.

⁶²His use of observation and experiments to determine the mechanical properties of fluids and pumps has been studied by Cobos Bueno and Vaquero Martínez. Gil, 39–40, accounts for Arias Montano's extensive natural history collection. On Arias Montano's relationship with some of the most prominent scientific practitioners of his time, see Gómez Canseco, 2008.

⁶³Arias Montano's natural philosophy has recently received the attention of historians. In addition to the introductory studies to his works cited above in n59, see Paradinas Fuentes; Gómez Canseco, 2008.

them, and directs them.”⁶⁴ *Maim* is a fluid with dual nature that over the course of creation formed all on earth. It is the stuff things were made from, and when subjected to *elohim*, it takes on form. One fluid is greasy, fertile, sweet, and flexible, can go anywhere, and will not condense. The other nature of *maim* is humid and salty: it fills voids, holds onto heat and cold, and condenses. Everything in nature proceeds from these, and, with the help of other agents under the direction of *elohim*, they create the conditions to form everything found in the heavens and on earth.

Arias Montano is clearly working from within a Neoplatonic framework that locates God at an apex of an ontological hierarchy of theurgical effects reminiscent of the Plotinian hypostases — the One, the Divine Mind, and the World Soul — as interpreted through the Christianizing lens of Ficino. Montano, however, does not simply copy Ficino’s hierarchy and map a biblical term to it. The Montanian hypostases endow the material world with their substance and form by carrying out the act of naming. In this he follows the Pseudo-Dionysian and Procline tradition of names as signifiers of a higher reality.⁶⁵ Although he explains the hypostases’ actions upon matter in Aristotelian terms, Montano’s exegesis leads him to reject several key postures of Aristotelian philosophy such as the four Empedoclean elements of earth, water, air, and fire, along with the Aristotelian ether. Furthermore, Arias Montano’s cosmology is not Aristotelian. There are no neatly nested ethereal spheres, but one region he calls *cielo* extending from the surface of the orb of earth and water to the outermost sphere. This *cielo* is in three parts. Its first part, called the firmament, extends from the surface of the sphere of earth and water to where the superior bodies began. This firmament is composed of a more rarefied matter, *rakiagh*, which can transmit its influences of the upper bodies onto the lower bodies. The second region encompasses the space between the firmament and the farthest stars. He calls this heaven; this region in turn is divided into the regions of the *ministrantes* (planets) and *militiae* (fixed stars). Beyond it lies the third region, the heaven of heavens, inhabited by the spirit of holy men.⁶⁶

Arias Montano’s unconventional natural philosophy found in José de Sigüenza a true believer. This is nowhere more evident than in his surviving correspondance with Pedro de Valencia. As Sigüenza worked on the paraphrases of the *Naturae historia*, the *Historia del Rey de los reyes*, he routinely asked Valencia for clarification. For example, he found the

⁶⁴Arias Montano, 2002, 253: “El Espíritu es *elohim*: prepara todas las formas, las distingue, las establece y las dirige.”

⁶⁵Wear and Dillon, 89–92.

⁶⁶Arias Montano, 2002, 283–84.

Montanian interpretation of *maim* difficult to understand. Valencia acknowledges the difficulty of the concept and notes that others in the Sevillian circle of Arias Montano's friends had run into similar difficulties when they inadvertently introduced terms created by philosophers, such as *prime matter*, when trying to understand what the biblical term meant.⁶⁷ Sigüenza understood Valencia's clarification, and in the *Rey de reyes* writes, "So that the prime matter of all the things that we see with our eyes and of all these bodies are these liquors and, as I have said, what the philosophers call *first matter* belongs more to metaphysics or mathematics than to the nature of bodies, which is what Moses is here trying to teach us, and where what philosophers call the *elements* come together or fall apart with all their transmutations."⁶⁸

After the Vatican and the inquisitorial censors approved the publication of the Antwerp Polyglot, the king ordered Arias Montano to the Escorial to put the growing collection of books in order. During his time at the library, and much to his frustration, Arias Montano did little writing; in fact, he longed to rid himself of his duties at the Escorial and retreat to his hometown in Extremadura and his impressive personal library there to devote his life to his studies.⁶⁹ To what extent he promoted his biblical metaphysics or the philological approach to biblical exegesis during his stays at the Escorial is unclear. He did teach Hebrew and Greek at the seminary, as well as mathematics and cosmology, disciplines indispensable to the Montanian approach to the study of nature.⁷⁰ Unfortunately, we know very little about the content of these lectures. He left his most lasting and influential intellectual legacy at the Escorial in José de Sigüenza and a small group of his fellow friars.⁷¹

⁶⁷Valencia, 1896a, 131.

⁶⁸Sigüenza, 1916, 2:150: "De suerte que la materia prima de las cosas todas que con los ojos vemos, y de todos estos cuerpos son estos licores y, como dije, lo que los filósofos llaman *materia primera* más pertenece á metafísica ó á matemáticas que á la naturaleza de los cuerpos, que es lo que aquí no[s] va enseñando Moisés, y donde se van componiendo y en quien se van resolviendo con todas sus transmutaciones, lo que llaman los filósofos *elementos*."

⁶⁹Gil, 100. On his reticence to carry out the duties of librarian, see Flórez and Balsinde, 52–53, 515–62. On his work at the library, see López Guillanón, 976–77.

⁷⁰This is known from the transcripts of José de Sigüenza's inquisitorial trial: Andrés, 1975, 44–46; Rekers, 107.

⁷¹Montano's first visit to the Escorial took place from 1 March 1577 until January 1578. His second visit to the library was between 8 September 1579 and 10 March 1580. He was also there sometime in February 1583, then from January 1585 until April 1586, and finally from January until April 1592, when he taught at the school. It is possible he became acquainted with José de Sigüenza during a stay at the Escorial in 1585–86; the friendship was rekindled during Montano's final stay at the Escorial in early 1592: Andrés, 1975, 31–35.

6. THE DESCRIPTION OF THE ICONOGRAPHY

Sigüenza begins his description of the library by pointing to the location of the philosophy and theology allegories over the doors leading respectively to the school and monastery. The images that adorn the vaulted ceiling and that run the length of the library, he explains, suggest the trajectory man should follow in this life: from the worldly, exemplified by philosophy (fig. 4), to the divine, embodied by theology. This quest for knowledge had a very specific end. He explains, “From this mother common to all the natural sciences [philosophy] and that we attain through our diligence, we walk toward the perfection and conclusion of all that can be learned on earth of what has been revealed and of the divine, which goes by the name of theology, something so necessary that without knowing some of its mysteries it is impossible for man to reach the purpose for which he was created.”⁷² The purpose of all knowledge, whether philosophical or theological, was the same as the purpose of man himself. Sigüenza leaves this purpose unspoken, but if we turn to Arias Montano we find the answer. In his *Magnum opus*, Arias Montano asserts that true knowledge is knowledge of God: all else is ancillary, including knowledge of nature if it is pursued for its own sake. This hierarchy of knowledge is the necessary consequence of knowing that the final cause of man is to earn salvation, and this is only achieved by knowing God. The study of nature has a very important part in this quest, as Arias Montano states unequivocally: God exists, and this can be known from the contemplation of nature.⁷³ Sigüenza synthesizes these ideas into this terse equation: knowing the mysteries of theology is necessary for salvation, but this remains unattainable without the diligent study of philosophy. His position echoes the Augustinian stance that knowledge of philosophy is necessary for understanding man’s role in the world, as well as for interpreting scripture.

Sigüenza explains that this trajectory begins with philosophy, whose allegory appears in the form of a stately seated woman pointing to a globe and surrounded by Socrates, Plato, Aristotle, and Seneca. (This last one, Sigüenza explains, is included with such illustrious company for no better reason than that he was “a Latin and a Spaniard.”)⁷⁴ Not wanting to risk

⁷²Sigüenza, 2000, 2:610: “Desde esta madre común de las ciencias naturales y que se alcanzan con nuestra diligencia, se va caminando a la perfección y remate de lo que se puede saber en la tierra de lo revelado y divino, que se llama Teología, cosa tan de todo punto necesaria, que sin tener alguna noticia de sus misterios es imposible alcance el hombre el fin para que fue criado.”

⁷³Arias Montano, 2002, 107.

⁷⁴Sigüenza, 2000, 2:609.



FIGURE 4. *Allegory of Philosophy* and *The School of Athens*. Royal Library of San Lorenzo of the Escorial. Photo courtesy of Martin Gordon.

leaving others to define what he meant by philosophy, Sigüenza adds a simple definition: it encompasses the study of everything “from the shingles down, if we were to call heaven our roof.”⁷⁵ The trajectory through philosophy begins with its three rational parts of the *trivium*: grammar, rhetoric, and dialectic. The trajectory continues with the study of mathematics (arithmetic and music), geometry, and astrology. Astrology’s inclusion earns a special note from Sigüenza, “because its subject is more noble and elevated, because it discusses celestial bodies, their movements and aspects, mixing the natural and physical part with mathematics.”⁷⁶

The trajectory culminates with the study of theology, represented as a maiden in the fresco over the door to the monastery, “because she does not age or become corrupted, because what changes thus is not theology, but rather fantasies or the dreams of metaphysical commentators that spring forth from idle or lustful minds.”⁷⁷ Here again Sigüenza makes very clear what this entails: “true theology, which is the holy scripture, knowledge of which straightens all rules of theology, methodical or scholastic.”⁷⁸ But he makes the point that this knowledge program was not directed toward the study of a type of theology, methodical or scholastic, but rather toward the “true theology” found only in scripture. He notes that the maiden theology directs the gaze of the saints Jerome, Ambrose, Augustine, and Gregory to a book of the holy writ, as if telling them they must use their God-given talent to learn the doctrine contained therein and use it to strengthen and defend the Christian faith. Thus Sigüenza makes the study of the sacred scriptures the final purpose of a life trajectory that involves a laborious progression through the arts to acquire the philosophy that would permit the study of theology. This was for Sigüenza the library’s final cause.

Sigüenza was not making a statement in favor of the personal study of scripture: far from it. Such a Protestant stance, even if interpreted as a late Erasmian position, would have been inconceivable in this bastion of the

⁷⁵Ibid., 610: “abraza todo lo que los hombres estudian de la tejas abajo, llamando también tejado al cielo.”

⁷⁶Ibid., 615: “[P]usose, empero, en lugar de ella la Astrología, porque es más noble su sujeto y más levantando, por tratar de los cuerpos celestiales, de sus movimientos y aspectos, mezclando parte de lo natural y físico con lo matemático.”

⁷⁷Ibid., 616: “[P]orque no admite corrupción ni vejez, que la que padece estas mudanzas no es Teología, sino fantasías o sueños de opinantes metafísicos, que brotan de los ingenios ociosos o lujuriantes.”

⁷⁸Ibid., 615: “[L]a verdadera Teología, que es la Santa Escritura, a cuyo conocimiento se enderezan todas las reglas de la teología, Metódica o Escolástica.”

Counter-Reformation.⁷⁹ Instead, Sigüenza was echoing the approach to biblical scholarship of his mentor, Arias Montano. Since the only purpose for gaining knowledge of nature was to gain greater knowledge of God, natural philosophy could not be based on first principles thought up by pagan or Christian philosophers or on principles that relied on an arbitrary epistemology. The knowledge of nature that could ultimately lead to knowledge of God could only draw upon first principles that were known to be certain: those that had been spoken by God and that were coded in the biblical text. In the pursuit of the study of nature, whether gained by means of revelation or attained through study, Arias Montano cautions, “nothing can be considered correct or true if it challenges his word or cannot be deduced and corroborated with it.”⁸⁰ Montanian biblism sought to anchor all metaphysical and theological considerations directly to the sacred scriptures. Therefore it found little use for “the dreams of metaphysical commentators” or for scholasticism, a sentiment that Sigüenza also echoes throughout his description of the library. It is a shame, Sigüenza remarks, that so much of a man’s early life was spent on scholastic disputations. Yet the path of learning, despite its “bitter origins in disputes and schools,” leads man finally to arrive rested and mature to the enjoyment of theology.⁸¹

Having established the reason for studying philosophy, Sigüenza proceeds to explain how this study should be pursued. To set the tenor of his second argument, Sigüenza returns to the philosophy allegory and explains the history beneath it, the *School of Athens* (fig. 4). He explains that in the image, Stoics led by Zeno (of Citium) face off against Socrates and the Academics, whom Sigüenza describes as Skeptics. They are debating, he continues, whether man, chained as he is to the senses, has the means to determine what is true, so he can have the ability to understand the nature of things. Stoics, according to

⁷⁹Thompson, 79–81, has argued convincingly that it is inaccurate to characterize Sigüenza as an Erasmian. There is a developing consensus that seeks to dismiss the thesis of Rekers, 86–100, that Arias Montano had instituted at the Escorial a cell of followers of Hiël and adherents to the *Familia charitatis*. The 400-year anniversary of the death of the biblical scholar was a watershed for this historiography: see Ozaeta, 1990; Sanchez; Gómez Canseco, 1998; Martín; Martínez Ripoll.

⁸⁰Arias Montano, 2002, 345: “[N]i que se considere recto y veraz nada que se enfrente con su palabra, o no pueda ser deducida y compaginada con aquélla.”

⁸¹Sigüenza, 2000, 2:609: “Raíces amargas de las disputas y escuelas.” In this and other sections of the narrative, Sigüenza continues to espouse his antischolastic vitriol, which years earlier had earned him an inquisitorial trial. At issue in the trial was Sigüenza’s perhaps-imprudent admiration for Arias Montano and his approach to biblical exegesis. The accusations were raised against him by fellow friars soon after Arias Montano had departed from the Escorial in 1592: Andrés, 1975, 36–49.

Sigüenza, sought definitions and precepts based on sense experience, while Academics held that knowledge gained by the senses was false and “could fool you a thousand times.” Thus, the Academics inferred with much evidence that we can never affirm what such false witnesses attest. This, Sigüenza concludes, is what had been intended for the painting to signify.⁸²

Again, not wanting to let his reader be misguided by a personal understanding of the debate, and well aware of the various skeptical stances deriving from Academic and Pyrrhonian skepticism then circulating in Europe, Sigüenza refers the reader who might be interested in exploring further the philosophical postures depicted in the image to a book, the *Academica sive de iudicio erga verum*, by another of disciple of Arias Montano, Pedro de Valencia.⁸³ And in fact, in the very first page of that book we read that ancient philosophers can be divided into dogmatists and skeptics. Sigüenza might have been aware of Valencia’s work as early as 1590, but it is after its publication in 1594 that Valencia and Sigüenza exchanged correspondence on the subject.⁸⁴ In a letter dated August 1603 — just as Sigüenza was writing the description of the library — Valencia responds to the friar’s request to clarify the position of St. Augustine concerning the skeptical debate and refers him to the section in his book where he discusses the subject.⁸⁵ The section describes in detail the debate on the notion of cognitive impression between Zeno of Citium — who maintained the position of *non opinaturum sapientem*, that the wise should not opine about what is not perceived and that only the corporeal is known — and Arcesilaus — who countered with *nihil approbaturum sapientem*, because nothing can be perceived, man can assert nothing. In his book Valencia stages the debate as a “disputation between a pair of students,” and resolves the issue by citing St. Augustine’s sentence on the debate: Augustine sided with the Academics, preferring not to assert anything rather than agreeing with Zeno that only the corporeal exists in nature.⁸⁶

⁸²Sigüenza, 2000, 2:616–17.

⁸³Valencia, 1596, compares various ancient postures regarding the criteria of truth; he leans heavily on Cicero’s *Academica* but also discusses other skeptical philosophies. There are two Spanish translations: Valencia, 1987 and 2006. Valencia seems to share Arias Montano’s opinion on the futility of trying to find true knowledge through any philosophy concocted by man, since only God can grant access to true wisdom. For more on Valencia’s skepticism, see Suárez Dobarrio; Suárez Sanchez de León; Valencia, 2006, 3:52–63; Laursen, 118–23.

⁸⁴Valencia might have completed the *Academica* as early as 1590: Valencia, 2006, 3:93–100.

⁸⁵Valencia, 1896b. Two additional letters on a similar subject were published in Valencia, 1856.

⁸⁶Valencia, 2006, 3:207–13.

The tripartite relationship between the ancient authors and the fresco is patently clear — and yet not precisely so, for Sigüenza substitutes Socrates for Arcesilaus and somewhat mischaracterizes the debate. The reason for substituting philosophers is unknown: perhaps Socrates was better known and carried more authority. The mischaracterization of the debate comes from wanting to synthesize the two philosophical positions Valencia presented by reducing them to their simplest component: is man capable of learning the true nature of things? Sigüenza's answer is no, since we cannot trust what we learn via the senses or the speculations of the philosophers. This is the same skeptical posture at the heart of the Montanian program, since Arias Montano maintains the fallibility of speculative philosophy and sense experience. This skeptical posture, however, should not suggest a negative, dogmatic attitude about the possibility of asserting anything as true, as Academic and Pyrrhonian skeptics postulated.⁸⁷ Quite the contrary, the Montanian program never abandons hope of finding intractable truths. Its prescriptive methodology seeks to yield certain knowledge by maintaining that the only way to learn about nature was to anchor it in physical and metaphysical principles derived directly from sacred scripture. In the rest of the discourse Sigüenza uses the *historias* to explain how the arts give man the tools to achieve this goal.⁸⁸

For example, as the friar explains, the grammar depicted on the ceiling does not stand for a grammar that simply dealt with the congruence between words, but rather for one that is a perfect science that leads to the proper understanding and interpretation of everything the “inventors of the sciences” have written.⁸⁹ Among the illustrious men that accompany the allegory, Sigüenza singles out Elio Antonio de Nebrija, particularly his work as an author of a trilingual dictionary and as an exegete. In the *historias* that accompany the grammar allegory — the Tower of Babel and Daniel attending the Chaldean school of King Nebuchadnezzar — Sigüenza explains that the story of the Tower of Babel shows the importance of knowing grammar because it facilitates the study of the plurality of languages that appeared when God punished mankind for their temerity. He again refers the curious reader to another text, this time his *Life of Saint Jerome*. Sigüenza explains in that book that the saint maintained that Hebrew was the original language of mankind

⁸⁷Thorsrud, 36–58, 123–30. On the influence of these ancient philosophies in early modern Europe, see Popkin, 38, 64–79.

⁸⁸Sigüenza's skeptical critique has not gone unnoticed by historians. For example, Thompson notes Sigüenza's skepticism about the ability of human reason to ascertain truth purely by means of philosophy. Ramiro Flórez notes the affinity with Pedro de Valencia and traces its roots to the philosophical perspective of Arias Montano: Flórez and Balsinde, 223, 351–64.

⁸⁹Sigüenza, 2000, 2:611–12.

(and the language spoken during the construction of the tower) and therefore the original language through which God had spoken. Sigüenza portrays St. Jerome as convinced that understanding the etymologies of ancient languages was crucial for understanding and interpreting scripture.⁹⁰ The story of Daniel illustrates a similar point, this time referring to the ancient language of the Chaldeans. Just as students had learned the importance of grammar in that ancient school, Sigüenza notes, likewise students now were able to study the same discipline in the school founded by Philip II in the Escorial. Arias Montano would have been proud of the way his disciple had presented the importance of studying languages: in the Montanian program the philological arts were essential to the study of the Bible in what was then believed to have been its original languages, Hebrew and Chaldean.

When discussing the allegory of rhetoric, Sigüenza explains that the discipline goes beyond simply learning how to speak with eloquence and clarity, but stands for the art of saying what has to be said. Among the theoreticians flanking the allegory, he praises Demosthenes and Cicero the most, crowning them with Juvenal's tenth satire lamenting the tragic end of orators.⁹¹ The images that accompany rhetoric speak to the persuasive power of the art. One, Cicero in the defense of Caius, refers to the power of rhetoric to free; the other, Hercules Gallicus dragging his listeners by the ears with golden chains streaming from his mouth, of its power to bind.

In several parts of the text Sigüenza seems confounded by the selection of some of the illustrious men flanking the arts. This is most apparent in the case of those surrounding the allegory of dialectic. She is shown with outstretched arms, holding one hand open and the other in a fist. Sigüenza mentions having consulted Diogenes Laertius for information on Melissus (of Samos) and Protagoras, and yet not finding there any good reasons for including them among the great dialecticians. Of Origen, Sigüenza can only say he is not the Christian theologian. Cicero helps him locate Zeno (of Citium) among dialecticians and relate him to the open hand–closed fist gesture.⁹² Zeno of Elea, whom Aristotle named as the inventor of dialectic, is featured in a corresponding *historia*. It shows the philosopher leading a group of young men toward two doors, one marked VERITAS and the other FALSITAS. The other *historia* shows Saint Ambrose and Saint Augustine in a discussion; standing close by is a praying Saint Monica, whose prayers, according to Sigüenza, were in hope that her son's mastery of

⁹⁰Sigüenza, 1907, 170–74, 449–51.

⁹¹Juvenal, 64 (Satire 10): "Eloquio sed utrumque perit orator, utrumque largus et exundans leto dedit ingenii fons."

⁹²Cicero, 652–54 (*Academica* 2.145).

dialectic would not divert him from the true faith. Sigüenza's description of the dialectic series suggests ambivalence about the value of the discipline; it could be a powerful tool to help determine right from wrong, but could equally lead man astray.⁹³

Sigüenza qualifies the *historias* flanking the arithmetic allegory as the most difficult to explain. One shows King Solomon with the Queen of Sheba posing an enigma to the wisest of kings.⁹⁴ On the table in front of them is a scale, a ruler, and an abacus: written in Hebrew on the draped silk is the biblical phrase, "Everything has a number, a weight, and a measure."⁹⁵ Sigüenza comments that whoever could penetrate these profound words could solve any enigma, and if any mortal ever understood what this meant it was King Solomon, to whom God gave so much knowledge. Sigüenza again interrupts his discussion of the fresco, explaining that he would discuss elsewhere the nature of the knowledge God gave King Solomon and how suitable and sufficient it was to allow him to pronounce those words.

Indeed, he does so in the *Historia del Rey de los reyes*, in a section where he amply paraphrases the *Naturae historia*.⁹⁶ For Sigüenza, the phrase from the book of Wisdom describes the nature of all that came into being at the moment of Creation: their purpose in nature; their properties, virtues, and qualities; and their making, proportion, and correspondence. The phrase also signals what the study of nature following the Montanian program entails — understood, of course, as a pursuit derived from the new metaphysics gleaned from sacred scripture. Arias Montano also elaborates on Solomon's knowledge of nature in the first part of the *Magnum opus*, the *Liber generationi . . . Anima*. He explains that in a revelation God had granted Solomon great wisdom — not the wisdom that leads to knowledge of God but rather the external kind that lies within the limits of what a natural man should learn, as described by "everything has a number, a weight, and a measure." This wisdom was based on knowledge of "the kind that is useful for knowing the parts of the world and of things and for governing over people." It was knowledge of "what concerns the design of the worlds and the nature of things, that is to say, all the knowledge that wise men define with the name of philosophy."⁹⁷

⁹³Valencia, 2006, 3:302, is also suspicious of the art of dialectic, calling it "slippery and fallacious" ("lubrica est ac fallax").

⁹⁴Sigüenza, 2000, 2:618.

⁹⁵Vulgate, Wisdom 11:21: "Omnia in numero pondere & mensura."

⁹⁶Sigüenza, 1916, 2:149–50; Arias Montano, 2002, 281.

⁹⁷Arias Montano, 1999, 430–31: "[L]a que servía para conocer las partes del mundo y de las cosas y para reinar sobre grupos humanos. . . . [L]o que atañe al ornato del mundo y a la naturaleza de las cosas, es decir, todo el conocimiento que los sabios definen con el nombre de la filosofía."

In the Montanian program there are two ways of gaining knowledge about the natural world. One way is by means of direct revelation. Solomon was Arias Montano's favorite example of someone who had been the recipient of such a gift. (Arias Montano seems to have suggested to his followers that he had also been the recipient of some kind of revealed knowledge.)⁹⁸ The other way employs God-given human intelligence exercised through reason, the pursuit of which was guided by the cited phrase from the book of Wisdom.⁹⁹ Arias Montano adds a cautionary warning to those who disdained the study of nature: "[And] Isaiah severely reprimands those who, abandoning the contemplation of the heavens, the earth, and the machine of the world, of which for mortals no pleasure surpasses, spend their effort and time in wine, feasts and banquets, jokes and games."¹⁰⁰ Yet he also warns that knowledge of nature could never be for its own sake. He repeats the well-known Tertullian reference to Thales of Miletus, in what amounts to an admonition to philosophers who lose sight of what the purpose of this knowledge is in the divine scheme: "For it might happen (and has happened to those of our kind) that while someone pursues distant and unusual things they deviate too much from those that he should know well; avidly observing with fixed gaze celestial things, that are so far he barely notices the ground beneath his feet and falls into a well."¹⁰¹

Returning to Sigüenza's description of the frescoes of the library, the next *historia* of the arithmetic series depicts the Gymnosophists examining figures in the sand. The center of that image shows the sages examining a small pyramid with even and odd numbers in ratios inscribed along its side "with which they sought to signify the knowledge, conditions, and virtues of the soul."¹⁰² Sigüenza notes that Saint Jerome mentioned the sages in his epistles.¹⁰³ Again he refers the reader to his *Life of Saint Jerome*, where he explains what Plato meant when he said that the soul is number and what Pythagoras meant when he said the principles of all things were coded in numbers. These were not the numbers we use to count, but instead were symbols of another, greater secret. What this secret might have been

⁹⁸One of the charges brought against José de Sigüenza was that he had been overheard saying that all Arias Montano knew he learned by revelation: Andrés, 1975, 99, 150.

⁹⁹Arias Montano, 2002, 345.

¹⁰⁰Ibid., 281: "Y severamente Isaías reprende a los que, abandonada la contemplación del cielo, la tierra y la fábrica mundana, a la que para los mortales ningún placer supera, gastan su esfuerzo y tiempo en vino, fiestas y banquetes, bromas y juego. Is, 5:11–13."

¹⁰¹Arias Montano, 1999, 84: cited in Jorge López, 2002, 57.

¹⁰²Sigüenza, 2000, 2:618–19: "[C]on que querían significar la ciencia, afeciones y virtudes del alma."

¹⁰³Sigüenza might be referring to Saint Jerome's letter 53 to Paulinus: Schaff, 6:97.

Sigüenza leaves unsaid in the description of the library, but not so in his *Life of Saint Jerome*. The saint had begun his theological studies at age fifteen, a number that for Sigüenza symbolizes the power of the Pythagorean triangle:

To my mind this illustration fits the soul of our saint and is well founded coming from the school of Pythagoras; for, wishing to afford us a knowledge of the composition, being, parts, and offices of the soul, they symbolized it by figures and numbers. They set a triangle of equal parts, and at the one point or angle of the triangle they placed the first cipher, that of one; along the sides they placed even numbers on one side, and odd numbers on the other; on the one side beneath the number 1 they put 2, under 2 they put 4, and at the base 8, and on the other side the odd numbers. These even numbers added together make 14, with the one at the top 15; and in thus doing they seemed to think they revealed to us the rank, office, virtue, strength, and power of the soul. The soul is represented by the triangle with its three powers, defined by its three equal sides, or its three virtues or grades, viz. vital, animal, and rational.¹⁰⁴

The *historias* associated with the arithmetic allegory are about knowledge that is hidden from humans but can be learned through diligent study. One type of knowledge is coded in nature and can be unlocked by the phrase from the book of Wisdom. The other type is about the nature of the soul, which Pythagoreans taught was coded in numbers.

In the sacred and profane *historias* that accompany the allegory of music, Sigüenza identifies messages about things that impede man's smooth journey on his way to theology. He tells the reader that the image of David playing the harp for Saul symbolizes music's ability to quiet a tortured and restless soul and prepare it to receive the light of enlightenment. The story of Orpheus leading Eurydice out of hell is a message obscured by time, one that "[R]equires we enter into what is secret. Some day there will be time to discuss this and other fables through which they tried to sell to us at a very high price the truth of the good doctrine that God communicated to mankind so they would not have an excuse."¹⁰⁵ What Sigüenza understood to be the secret of the myth of Orpheus and Eurydice is unclear, but the lesson he wanted the reader to take away was one he delivers unabashedly: these ancient fables obscured the light of the original wisdom God had

¹⁰⁴Sigüenza, 1907, 75–76. The book, however, does not explain Plato's famous dictum: I have been unable to find where Sigüenza might have explained it.

¹⁰⁵Sigüenza, 2000, 2:619: "[P]ide se entre en lo secreto. Algún día habrá lugar para tratar de ésta y otras fábulas con que nos quisieron vender tan cara la verdad de la buena doctrina que Dios comunicó a las gentes para que no tuviesen excusa."

granted man, and they should not be used to illustrate anything about the gospel. In fact, it was one of the issues raised against him during an earlier brush with the Inquisition. Fellow friars accused him of saying that “Only the naked gospel should be preached, to the letter, everything is there.”¹⁰⁶ When asked what he meant by this phrase, Sigüenza explained to the Inquisition that he had been angered by the sermons of some of his fellow friars, who had loaded them up with poems and fables of profane authors and indiscreet allegories. This was simply superfluous, since to preach the gospel properly everything could be derived from scripture.

Earlier in the discourse and in his characteristic blunt style, Sigüenza defends the library from critics who complained about the use of pagan allegories and philosophers in the frescoes. He asks why, if all libraries in the world had the books of the ancient masters, should this library, simply because it was in a monastery, be kept from depicting them? Sigüenza notes that libraries are like pharmacies or shops where all sorts of men and intellects can come in search of sustenance. To definitively silence his critics (apparently there were many), he adds, “this is a royal library, and it should contain that which satisfies all manner of tastes just as a royal table has what best suits [the king].”¹⁰⁷ Furthermore, there was much to learn from these old masters, and the fathers of the Church had taught how they should be read so that much benefit could come from it. Sigüenza’s objections to the Orphean *historia* and to the preaching style of some of his fellow friars were not motivated by a desire to banish the ancients from the library, but rather by what he perceived to be the uncritical use of ancient philosophies and mythology by his contemporaries.

In his description of the two *historias* that accompany the geometry allegory, Sigüenza echoes what his Renaissance contemporaries thought was the principal virtue of that discipline: its capacity to state matters unequivocally. One image shows the priestly philosophers of Egypt resolving territorial disputes by drawing geometrical proofs in the sand, their mathematical reasoning pacifying those who thought the size of their land holdings had been diminished after the periodic flooding of the Nile. The other *historia* shows the tragic last moments of Archimedes’ life: so intent was the Syracusan on his mathematical computations that he failed to notice Roman soldiers threatening his life. The mathematician’s death, Sigüenza tells us, caused Marcellus, the leader of the attacking Romans, great

¹⁰⁶ Andrés, 1975, 116: “Que no se ha de predicar sino el Evangelio desnudo y construir la letra, que allí está todo.”

¹⁰⁷ Sigüenza, 2000, 2:614: “Esta librería es real, y han de hallar todos los gustos como en mesa real lo que les asienta.”

sorrow since he had ordered that neither Archimedes nor his property be harmed. The general had valued Archimedes' talent in geometry and the military arts more than he valued the city of Syracuse itself. In his description of these *historias* Sigüenza chooses to emphasize the utilitarian benefits derived from geometry and the esteem in which its practitioners were held.¹⁰⁸ But the story also reminds the viewer of the perils that can await someone too engrossed in study to take note of the world about him and lose sight of what is important, as in the case of the distracted Thales.

Sigüenza had much more to say about the *historias* that flank the astrology allegory.¹⁰⁹ One shows the solar eclipse at the time of Christ's death being witnessed from Athens by Dionysius the Areopagite, to whom Sigüenza attributes the phrase, "Either the God of nature suffers, or the mechanism of the universe is dissolved."¹¹⁰ Sigüenza seems aware of the debates in astrological circles about whether the solar eclipse at the time of the Passion occurred in the regular course of nature — Sacrobosco's stance and what appears in the Escorial iconography — or whether it had been a divine sign delivered by God precisely because the regular course of nature was altered — the Pseudo-Dionysius position. He is distressed that the focus had shifted to the physical nature of the event, complaining that the different opinions had muddled what, in his opinion, was perfectly clear. Given the position of empirical knowledge in the Montanian epistemic hierarchy, Sigüenza seems aggrieved here that focus had shifted away from what was truly important in the image — a divine sign by God testifying to the death of his son — to a discussion about the mechanics of solar eclipses. He again promises to elaborate on this point in another work.¹¹¹

The other *historia* of the astrology series shows the story of the aging King Hezekiah, whose repentance God rewarded by granting fifteen more

¹⁰⁸Ibid., 619–20.

¹⁰⁹Ibid., 620.

¹¹⁰"Aut Deus naturae patitur, aut mundi machina disoluitur." The quotation is the final sentence of Sacrobosco's *De sphaerae*. "On which account Dionysius the Areopagite is reported to have said during the same Passion, "Either the God of nature suffers, or the mechanism of the universe is dissolved." Thorndike, 142. Sigüenza fell into the traditional error of conflating the biblical Dionysius the Areopagite mentioned in Acts 17:43 with the Pseudo-Dionysius author of the sixth-century *Corpus Areopagiticum*. The authorship of the corpus was hotly debated in the sixteenth century, with Laurentius Valla and Erasmus challenging the association. Despite the debate, the remarks of Pseudo-Dionysius about witnessing the eclipse continued to be cited: Wear and Dillon, 1–6; Corrigan and Harrington.

¹¹¹Sigüenza does not mention the miracle in the surviving manuscript of the *Historia del Rey de los reyes*, which concludes with the birth of Christ, although it seems he had planned the book to extend to the Resurrection.

years of life. When asked by the prophet Isaiah what sign Hezekiah wanted from God to show that his prayers had been answered, he asked to see the hours marked by a sundial in his house turned back ten hours. And thus, Sigüenza tells us, God made the rays of the sun return to cast the shadow on a spot on the sundial that corresponded to ten hours earlier. The story of Hezekiah appears in the book of Isaiah, a commentary on which Arias Montano was working during his final stay at the Escorial in 1592, and in which he discusses the celestial mechanics of the miracle in some detail.¹¹²

The astrology *historias* show instances where God altered at will the natural movement of the heavens. Sigüenza interprets this as a message about God's absolute domain over nature, since "the Creator of the heavens and the only one who knows the names of all the stars (name means virtue and essence) does of them and with them what he pleases and how he pleases."¹¹³ This divine omnipotence means that man need fear neither the influence of the stars nor of the constellations, because God, in response to the death cry of Jesus on the cross or to the tears of King Hezekiah, can make the heavens move at his will. The second lesson went far beyond the expected condemnation of judiciary astrology. For Sigüenza, the Passion eclipse and the story of King Hezekiah showed that if man served and praised God, God could make the heavens serve man. Only then, he contended, will the famous, if a bit heretical, claim that "the wise man will be ruled by the stars" become true.¹¹⁴ Man's dominion over the stars will come only from the wisdom that is never empty or fleeting, Sigüenza notes, not like the one that comes from this world but rather that of the saints, which only comes from God. At this point Sigüenza takes ownership of the interpretation of the frescoes he has just put forth in the narrative: "I have spoken gladly of this because I have revealed the intentions I had when I put these *historias* here. Thus we have made from this astronomy a theology."¹¹⁵

The series of *historias* culminates with the depiction of the Council of Nicea placed beneath the theology allegory. Sigüenza points out two gestures that dominate the fresco: one is the banishment of the Arian heresy, and the other is King Constantine casting in the fire some grievances by his bishops and thus refusing to interfere in the running of the Church — a gesture that

¹¹²Arias Montano, 1599, 831–40.

¹¹³Sigüenza, 2000, 2:620–21: "[E]l Creador de los cielos y el que solo sabe los nombres de todas las estrellas (nombre quiere decir virtud y esencia) hace de ellas y con ellas lo que quiere y como quiere." Sigüenza, 1916, 2:65–66, also elaborates on the significance of the act of naming by both God and Adam.

¹¹⁴Sigüenza, 2000, 2:621: "Sapiens dominabitur astris."

¹¹⁵Ibid., 622–21: "He dicho esto de buena gana, porque descubro el intento que tuve cuando puse aquí estas historias. Y pues hicimos de esta Astronomía Teología."

brought much praise from Sigüenza. The image can be read as a proxy for the Council of Trent — which would have been perceived as immodest to depict — with Arius standing in for Luther and Constantine for Philip II. With this, Sigüenza concludes his description of the library and moves on to discuss the book and manuscript collection and other rooms associated with the library.

The description of the library is not the only place where Sigüenza publicly voiced his views about the relationship between philosophy and theology, or articulated a skeptical stance about knowledge derived from sense experience or philosophical speculation. The friar was a popular preacher, one of Philip II's favorites, and frequently articulated these ideas from the pulpit and in his other religious writings. His surviving sermons and commentaries show him immersed in Montanian metaphysics, voicing again and again the skeptical position of his preceptor and using a Montanian approach to natural philosophy as another exegetical tool at his disposal.¹¹⁶ In his commentary of the Ecclesiastes of Solomon, Sigüenza notes that after the Fall mankind would never lose the desire for knowledge it had once been granted. Instead, Adam's punishment meant that man's appetite for knowledge would grow "with insatiable thirst" and man would yearn "to be what he once had been and to understand what he once understood, and this search would cause him great labor, and he would have to beg for it from the deceptive senses and from weak and fallible experiences."¹¹⁷ Whether Sigüenza was able to effectively guide the natural-philosophical inquiries of the friars and of the students of the college down the biblist path traced by Arias Montano needs further study. It seems that at the monastery and with Sigüenza's successor at the library, Lucas de Alaejos, biblical scholarship along the lines of what Arias Montano proposed prospered briefly. Its influence, however, seems to have extended only modestly beyond the Escorial's massive stone walls.¹¹⁸

7. CONCLUSION

Once the architects and artists had left the Escorial, and after Arias Montano had retired to write his *Magnum opus* and Sigüenza had skillfully navigated an inquisitorial trial to remain as librarian and later become prior of the

¹¹⁶For Sigüenza's bibliography, see Campos y Fernández de Sevilla, 2006.

¹¹⁷Sigüenza, n.d. (A), 27–28: "[C]on insaciable sed le creciere el apetito de saber y ser lo que antes era y entender lo que antes entendía y que esto lo buscasse con sumo trabajo, y lo pidiese como limosna a los engañosos sentidos y a las flacas y falibles experiencias."

¹¹⁸Rekers, 127–30.

monastery, it was time for Sigüenza to write what he hoped would be the definitive interpretation of the iconography of the Royal Library. He wanted the description to be the ideological lens through which the frescoes would be interpreted, and to quiet the cacophony of approaches to the study of nature that resided within the microcosm of the Escorial. It is a text about an iconography that is chiefly informed by a small number of other texts, rather than by other images and the meanings these might have had in the context of the late Renaissance. In the text the iconography serves simply to capture the viewer's attention so that the narrator can — under the guise of explaining its meaning — deliver his own message. For Sigüenza the combination of image and discourse functioned as an extended illustrated manifesto of what he believed the relationship between natural philosophy and Montanian biblist theology should be. It is unclear whether the ideology Sigüenza voiced in his description influenced the design of the iconography: we simply lack the documentary records like the *libretto* and the memoranda that must have recorded the debate about it. Thus any attempt to identify a constituent iconology for the Royal Library is futile.

Sigüenza's description also suggests that coded into the frescoes of the Royal Library was an exhortation for others to undertake the Montanian program of supplanting scholastic and patristic authorities with a new approach to biblical interpretation that relied on the philological study of the Hebrew Bible. Yet for all the instances where Sigüenza's Castilian bluntness bursts through the text, the author was prudent and only promoted the Montanian program through veiled references. The stakes were high in Counter-Reformation Spain for the potential theological reorientation this implied, as Sigüenza had witnessed firsthand. Meanwhile, the reform of knowledge about the natural world that Arias Montano proposed garnered little attention. At this point the Inquisition had yet to show much interest in matters of natural philosophy.¹¹⁹ But for Arias Montano and his followers, epistemic reform was an intrinsic component of the program, since the very act of contemplating nature led to the acknowledgment of the existence of God and learning about the natural world fulfilled one of man's earthly duties. Therefore, the study of nature based on new biblist metaphysics and departing from biblical references had to be undertaken with as much fervor as other exegetical exercises.

¹¹⁹Jones, 1978 and 1995, has shown that when the Inquisition censored Arias Montano's works during the seventeenth century, they only took exception with his treatment of some theological issues, such as original sin and justification, and not with his approach to natural philosophy. For more on the censorship of science and the Spanish Inquisition, see Pardo Tomás.

This exegetical natural philosophy consisted of a knowledge program where empiricism was deployed, but never as the basis for new knowledge. Observation and empiricism were auxiliary tools — flawed tools, however, if they served to produce knowledge solely based on sense experience. They were just as unreliable as “the dreams of metaphysical commentators” that in their view served then as the basis of knowledge of the natural world. When Sigüenza wrote the description of the frescoes of the Royal Library at San Lorenzo of the Escorial, he followed in the footsteps of Arias Montano’s other disciple, Pedro de Valencia, in laying the groundwork for a skeptical stance about human knowledge that would prepare the way for Arias Montano’s new biblist metaphysics. The skepticism about empirical approaches that characterized Arias Montano’s approach reflected the deeply rooted epistemic crisis that had overtaken the understanding of the natural world during the sixteenth century, and that motivated so many thinkers to propose novel ways of understanding the natural world: a disquiet that seeped through the massive walls of San Lorenzo of the Escorial.

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