

## CHAPTER EIGHT

### APPEARANCE, ARTIFICE, AND REALITY: COLLECTING SECRETS IN A COURTLY CULTURE

WILLIAM EAMON

In October 1662, a “learned and serious cleric” supposedly arrived at the home of Don Vincencio Juan de Lastanosa in Huesca to visit the collector’s famous library and museum.<sup>1</sup> Like many others who visited Lastanosa, the cleric had come “from a faraway province” to see the remarkable collection of books, antiquities, and curiosities that Lastanosa had assembled over a period of more than twenty years. By 1662, Lastanosa’s collection had become famous throughout the European world, attracting visitors and travelers from all over Spain and Europe. Huesca was a little off the beaten track in seventeenth-century Spain. Nevertheless, Lastanosa’s celebrated collection could boast visitors such as the dukes of Orleans, Ferrara, and Mirandola, the Prince of Squilache in Italy, and a host of Spanish notables.<sup>2</sup> King Philip IV, on his way from Zaragoza to Madrid, is even said to have paid the virtuoso a visit.

Lastanosa wrote an account of the cleric’s visit in an unpublished work titled *Narración de lo que pasó a Don Vincencio Lastanosa con un religioso doctor y grave*. It is probable, as Ricardo del Arco suggests, that Lastanosa’s account of the visit was imaginary – that is, that the *Narración* was a fiction.<sup>3</sup> In fact, Lastanosa himself gives away the conceit when, in the dialogue reconstructing the visit, he informs the cleric that, since his health is poor, he will have to guide the tour from his chair: thus the visit becomes an imaginary tour and the catalogue that comprises the *Narración* substitutes for a real one.

Was it appearance, artifice, or reality that was uppermost in Lastanosa’s mind as he constructed this playful excursion into the nooks

and crannies of his collection? Probably it was a combination of all three, for the imaginary tour was a kind of literary trope, a composite account that represented the many guided tours that Lastanosa gave to virtuosi and savants who made their way to his home. Surely the conceit was deliberate, and it gives us our first clue to understanding the meaning and importance of collections in courtly culture. The itinerary is a reflection of reality, just as the collection itself mirrors a cosmic reality.

The imaginary tour that Lastanosa guides will serve to introduce the subject of my paper. My purpose in this paper is to understand Lastanosa's strategy as a collector of 'secrets.' The irony that underlies that concept – collector of secrets – is, perhaps, obvious to the reader. Indeed, it is one of the central ironies of baroque culture, and I shall address that topic in the course of my investigation. At once a patron, courtier, and 'curioso,' Lastanosa was deeply immersed in the culture of 'virtuosity' and its fascination with the wonders and secrets of nature. Secrets occupied an important place in the collecting strategies of the courts, as they did in Lastanosa's collecting.

*Appearance, artifice, and reality*, the key words in my title, were central concepts that guided the collection and display of 'secrets' in baroque culture. Underlying the extensive collections of objects exhibited in the courtly culture of early modern Europe was a key premise about the discovery and understanding of the 'secrets of nature,' and this assumption provided the curiosi with a strategy for collecting secrets. The premise was that through artifice (i.e., by artificial means), one is led to discover a reality that lies hidden beneath appearances.<sup>4</sup> For nature has a two-fold aspect: it displays itself to our senses in the rich variety of the things of the world and, at the same time, conceals itself behind appearances in its most essential part. As Pierre Hadot writes, "The great secret of nature is Nature herself, that is, the invisible reason or force, of which the visible world is only the external manifestation."<sup>5</sup> How are nature's secrets made known? That, in many ways, was the great question of natural philosophy in the West, and it has been answered in a variety of different ways. In the Age of the Baroque, natural philosophers asserted that artifice alone would enable humans to probe and query nature and discover its secrets. Thus to Lastanosa and his contemporaries, artifice was not just a way of making and doing but a way of discovering and knowing.<sup>6</sup>

Let us then continue with our conceit and, in the manner of the baroque scholars that we celebrate in this book, accompany Lastanosa and the learned cleric on their imaginary tour.

Lastanosa doesn't want to bore his guest, nor disappoint him. Before proceeding, he warns the cleric that his vast collection (more than 2,000

volumes) may be fatiguing for a man who is not, like he, a ‘curioso’ and therefore interested in everything.<sup>7</sup> By identifying himself as a ‘curioso,’ Lastanosa meant something quite specific.<sup>8</sup> He intended to situate himself within a community of individuals who constituted themselves as a cosmopolitan elite that spanned national and confessional boundaries. Although time and wealth were one mark of the curioso’s status, more distinctive was a painstaking attention trained on the novel, the rare, and the unusual events and objects of nature. The community of the curious, who also described themselves as the ‘virtuosi,’ was diverse, embracing physicians, clergymen, apothecaries, lawyers and merchants; but it was united in its preoccupation with the marvels of art and the secrets of nature. As Lorraine Daston and Katharine Park observe, “To count as one of the ‘curious’ was to combine a thirst to know with an appetite for marvels, which also came to be known as ‘curiosities’.”<sup>9</sup>

Collecting objects was deployed as a means of establishing one’s credentials as a member of this new elite – an elite of wealth, to be sure, but also one of taste and refinement.<sup>10</sup> In courtly culture, collecting was related to the harnessing of wonder as a social and political asset.<sup>11</sup> Objects deemed suitable for collecting were deliberately selected for their anomalousness – thus setting them apart from the ordinary. The juxtaposition of objects with strikingly different themes and aspects emphasized the unusual, novel, and rare. Like a breathtaking display of wit, the exhibition of physical objects in collections and curiosity cabinets was designed to elicit wonder, both in regard to the objects and in regard to the collector of them.

“Aunque la curiosidad es virtud,” Lastanosa modestly informs the cleric, “y prenda muy propia de los cavalleros que professan vivir retirados y empleados en algun honesto ejercicio, confieso que no la he afectado.”<sup>12</sup> In fact, his curiosity was voracious and, apparently, almost completely indiscriminate. Yet his eclectic tastes were entirely typical of collectors of his day. Historians have offered a number of different explanations for the sudden explosion of the passion for collecting in early modern Europe, in particular among the nobility and aspiring nobility. Some historians stress the importance of the commercial revolution and, in particular, the growth of international trade, which made exotic naturalia and artificialia more readily available to collectors, whether through contacts with apothecaries or merchants.<sup>13</sup> Others have emphasized the political importance of collections as expressions of power and dominion over nature and the world, and have argued that representational prestige was enmeshed in a web of patronage and gift-giving, which had many diplomatic aspects.<sup>14</sup> Still others have linked collecting to the shifting fortunes of the nobility,

arguing that the passion for collecting was a kind of pathology emanating from depression or *melancholia*, as the disease was known in the early modern period. Certainly intellectuals of the period across Europe thought that the disease was on the rise. Robert Burton, whose *Anatomy of Melancholy* (1621) became the defining treatise on the subject, detected an “epidemic” of melancholy in his time, particularly among the middling and upper classes.<sup>15</sup> In a recent article, Miguel López suggests that collecting was an aristocratic diversion aimed at alleviating melancholy, the malady of the baroque age, much in the manner described by Burton in his famous treatise.<sup>16</sup> It is an intriguing hypothesis, for it does seem that melancholy was a ‘fashionable’ disease and that certain writers cultivated aspects of the condition. Moreover, the tone of the *Narración* seems to portray a melancholic figure who isolates himself from a tense and troubled world and immerses himself in his collection of exotica. Clearly, more research needs to be done in order to properly assess the meaning of melancholy in the early modern period. What we can say is that the curiosi (or virtuosi, as they were also called) were, by and large, aristocrats and aspiring gentlemen (like Lastanosa) for whom collecting was an all-consuming passion and diversion.

Like most baroque collectors, Lastanosa made no firm distinction between the objects that he collected and the books that represented them. After all, texts were also collectible objects. Accompanying him on the tour of his house, passing from room to room, we encounter books, antiquities, medals, gems, scientific instruments, and strange and unusual ‘rarities’ all mingled in a free and playful assemblage of particulars. If anything gives this extraordinary collection unity – if there is any theme to be found in it – it is a preoccupation with rarity, novelty, the bizarre, and the wonderful. Disdaining the obvious and the merely useful, Lastanosa followed the convention of courtly collecting by riveting his curiosity on what was obscure, rare, and “marvelous.” Lastanosa’s entire collection is a testimony to a preoccupation with the marvelous, the only kind of objects that distinguished the virtuoso from the ‘vulgar sort.’ For this reason, ‘secrets’ – along with the books of secrets that represented and revealed them – occupy a central place in the collection.

It is not at all surprising that one of the first stops on Lastanosa’s virtual tour was his extensive collection of the writings of the Jesuit polymath Athanasius Kircher. Lastanosa owned no less than a fifteen books by the erudite Roman priest. The books had, in fact, been sent by Kircher himself, and the case containing them is as good a place as any to begin our tour of Lastanosa’s collection of ‘secrets’ and books of secrets.<sup>17</sup>

Here is not the place to try to decipher Kircher's dense and complex natural philosophy. However, I would like to call attention to one of Kircher's works, because it underscores a way of thinking about the 'secrets of nature' that was typical of baroque culture. The frontispiece to Kircher's *Magneticum Naturae Regnum* (Rome, 1667), one of his most famous works, proclaimed: "The world is bound with secret knots" (*Arcanus nodis ligantur mundus*).<sup>18</sup> For Kircher, magnetism was the chain that linked together all things in the universe. It explained phenomena that modern scientists would regard as quite unrelated – for instance, the sunflower's tendency to face the sun and the sexual life of animals. Magnetism was also the force that kept planets in their orbit, assuming the role that gravitation would later take in Newton's system. Friendship, love, hatred, chemical reactions, the qualities of medicinal plants and stones, the tides, and musical harmony were all governed by magnetism. Even the nature of God, whom Kircher called "the Central Magnet of the Universe," could be explained by magnetic force. Magnetism was to Kircher "the path to the treasure of the entire world" and a metaphor that stood for all the secret forces, sympathies, and antipathies that linked nature in an intricate web of correspondences.<sup>19</sup>

Most early modern cabinets of curiosities seem, on the surface, to have repudiated any concept of order. Lastanosa's is no exception. Carved gems, watches, antiques, mummies, and mechanical contrivances are displayed alongside fossils, shells, skeletons, giants' teeth, unicorns' horns, and exotic specimens from the New World, making up an encyclopedia of the bizarre and the marvelous. Full of strange and exotic *naturalia* and *mirabilia*, they seem intended only to delight spectators and to provoke wonder rather than to serve as museums for research. Yet, in fact, the bewildering variety of objects included in the collections, the deliberate blurring of the boundaries between art and nature, and the heightening of the experience of the anomalous, served to illustrate the baroque view that the multiformity of nature concealed a web of secret relations and forces: they are the 'secrets of nature' that natural philosophy was supposed to reveal.

The term, 'collector of secrets,' which I have used to describe Lastanosa, underscores a central irony about 'secrets' in the early modern era: On one hand, the possession of secrets distinguishes a virtuoso, setting him apart from the 'vulgar' who lack them. Yet if, on the other hand, the purpose of a courtly collection is to display one's virtuosity, then it must be open to a certain public. "[H]ay poco que ver en mi casa," Lastanosa assures the cleric.<sup>20</sup> Like almost all museums of the day, the collection was closed to all but a select few. Early modern collections

were situated on the border between the private and the public, at once the property of an individual and requiring a public to validate the noteworthy status of the collector.

This was exactly the irony that confronted the sixteenth-century ‘professors of secrets’ who created the immensely popular genre of the printed books of secrets.<sup>21</sup> How do you both have a secret and, at the same time, reveal it – an act that makes the secret public? The dilemma is illustrated in the preface to one of the most famous books of secrets of the period, Alessio Piemontese’s *Secreti*, which was first published in Italian in 1555 and appeared in over one hundred early modern editions and translations.<sup>22</sup> Lastanosa owned a 1624 Spanish translation of the work.<sup>23</sup> Alessio, the prototypical professor of secrets, hoarded up and jealously guarded his secrets, refusing to disclose them to anyone. “If everyone knew the secrets,” he reasoned, “they would no longer be called secrets, but would be public and common.”<sup>24</sup> Alessio paid the price for his vanity when his refusal to give away one of his secrets caused a man’s death. Gripped by remorse, he resolved to publish them all. What Alessio and many others discovered was that, in the age of printing, publicity could be a far more effective means to gain fame than secrecy.

One solution to the moral dilemma posed by Alessio’s preface was the catalogue. A peculiarly early modern literary genre, the catalogue was the result of the impulse not only to collect but to textualize collections. With the catalogue, one could claim ownership of secrets and even publicize them in tantalizing descriptions, and at the same time control access to them. The catalogue both represents a group of physical objects and is also, itself, an artifact – an object produced by a collector to demonstrate his propriety relationship to other objects.<sup>25</sup> By means of the catalogue (such as the one that Lastanosa had printed in 1647), the collector could both control access to his collection and ‘display’ them (virtually, of course) to a wider public. Hence, with the catalogue, the collection became an instrument of self-fashioning.<sup>26</sup>

Lastanosa had an impressive collection of books of secrets, both printed and manuscript. What did the “secrets of nature” mean to scholars and intellectuals of Lastanosa’s age? The metaphor, ubiquitous in the early modern period, played upon several different senses of the concept of secrecy. One variety of secrecy was essentially *social*, involving the intentional suppression of information in order to protect knowledge from outsiders who might corrupt or abuse it, or to preserve the power that is inherent in private knowledge. An important *locus classicus* for this tradition in the medieval West was the pseudo-Aristotelian *Secretum secretorum*, which took the form of a letter from Aristotle to Alexander

the Great.<sup>27</sup> The *Secretum* supposedly contained the wisdom that Aristotle reserved for his intimate disciples as opposed to the public doctrine that was studied in the schools.<sup>28</sup> The *Secretum* was thus a kind of manifesto of the doctrine of esotericism in medieval thought.<sup>29</sup>

Esotericism was also a characteristic of the ancient hermetic treatises, which attracted widespread interest in the Renaissance.<sup>30</sup> Lastanosa had several of the hermetic treatises in his library, and would also have been familiar with the tradition through his extensive collection of Kircher's *oeuvres*, where the ancient hermetic doctrine was well represented.<sup>31</sup> A fundamental ideological assumption behind this kind of esotericism is that knowledge is power, and that the concealment or control of knowledge is essential to the art of ruling. That, at least in part, explains Kircher's fascination with the art of secret communication, a theme that runs through all of his work. Whether magnetic, catoptric, musical, graphical, or numerical, all were tools to conceal secrets.

Another kind of secrecy was *epistemological*, implying that secrecy was a given in the order of nature, and that the "secrets of nature" are fundamentally unknowable: in other words, the conception of nature's secrets as *arcana naturae*. Central to it was the idea that nature is inherently arcane, and that the "veil" of nature's outer appearances conceals hidden qualities and virtues, the "secrets of nature" that lie within.<sup>32</sup> That concept was the core doctrine of the Hermetic occult sciences. In the Middle Ages, this was defined as the problem of occult qualities, and it had its classic expression in a work attributed to Albertus Magnus, the *Liber aggregationis*.<sup>33</sup> This work, very likely, was the "book of secrets" ascribed to Albert that is referred to in the *Narración*.<sup>34</sup> Ps-Albert's work described magical "experiments" that probed and manifested the occult qualities in nature, bringing to light nature's hidden secrets.

A third kind of secrecy implied by the "secrets of nature" metaphor was the one advanced in the Renaissance books of secrets, which are plentifully represented in Lastanosa's library. It might be called *epistemic* secrecy because it involved the recognition that the secrets of nature were not a given, not built into nature, but were an artifact of a way of looking at the world.<sup>35</sup> Craft secrets, for example, were secret only because few people knew them, while other secrets occurred purely by chance or, conversely, were the results of experiments aimed to tease out nature's *arcana*. One of the most famous works revealing such secrets was the immense encyclopedia of secrets by the German polymath Johann Jacob Wecker (1528-1586), *De secretis*, originally published in Latin in 1582

and reprinted many times thereafter. Lastanosa's edition of the work is not identified, but it was probably one of the Latin imprints.<sup>36</sup>

Wecker's *De secretis* was a hefty compilation of recipes, experiments, and observations extracted from classical, medieval, and contemporary authors. His list of 129 authorities was one of the most unusual assortments of authors ever assembled in the history of scholarship. In addition to familiar classical names such as Aristotle, Pliny, Galen, Ovid, and Virgil, it included several famous professors of secrets such as Alessio Piemontese, Leonardo Fioravanti, Gabriele Falloppio, and Giambattista Della Porta. The work took recipes from the German craft manuals called *Kunstabchlein* and from the magical books of Hermes and Zoroaster. Modern authors such as Levinus Lemnius, Girolamo Cardano, and Paracelsus appeared alongside the secrets of Democritus, Orpheus, and Apollo's oracle. In Wecker's list of authorities, history seemed to demonstrate that the revelation of natural secrets was an ongoing, never-ending process. "The treasury of nature is inexhaustible," he exclaimed, "and undoubtedly much that lies hidden will with the efforts of sagacious men of succeeding times be uprooted."<sup>37</sup>

These works do not exhaust Lastanosa's sizeable collection of books of secrets. His library also included works by Fioravanti, Falloppio, and Cardano, as well as several manuscript books of secrets.<sup>38</sup> Among the latter is a manuscript identified as a "libro de la naturaleza de las piedras, traducido de griego, . . . y muchos otros secretos," probably a work related to the Hellenistic *Kuranides*.<sup>39</sup> Then there were works on craft and technical secrets, including Antoine Mizauld's *Secrets of Agriculture*, a text of obvious interest to a man who took such pride in his garden as did Lastanosa.<sup>40</sup> The garden, like many others of the day designed in the form of a vast labyrinth, was itself a metaphor, among other things, of the great winding search for the secrets of nature.

Nor were books the only way in which a curious collector might investigate the secrets of nature. "Acompañan estos libros muchos instrumentos en que se ven raras maravillas," explains Lastanosa.<sup>41</sup> One of the rooms in his house contained books and instruments on the science of catoptrics, a branch of mathematical magic. Catoptrics, the science of mirrors and reflected images, has a history going back to Euclid, Archimedes, and Hero of Alexandria.<sup>42</sup> In the Renaissance, it was one of the subjects that made up the immense field of natural magic, still in Lastanosa's day considered to be a legitimate scientific discipline. Natural magic endeavored to harness nature's occult forces and use them to produce 'marvelous' effects, like the powerful burning mirror that Archimedes supposedly used to set fire to the Roman navy that besieged



Syracuse. In scientific terms, such effects were ‘marvelous’ because they do not occur by nature, but happen only with the assistance of artifice.<sup>43</sup> Optical illusions and ‘wondrous’ images created by mirrors and lenses were among the most impressive achievements of natural magic. Art, science, and wonder intermingled, producing the typically strange and distorted images characteristic of the Baroque.

Alchemy, too, could assist the investigator in exploring the secrets of nature. Lastanosa professed to be dubious about the inflated claims of the alchemists. The visiting padre informs him that he has heard that the virtuoso was an adept. Lastanosa demurs, explaining, “aviendo tenido grandes ocasiones de saber dessa prodigiosa arte, creiendo que el fin de ella era enriquecer el hombre, siempre lo dexé despreciando esse modo de tesoros”<sup>44</sup> Yet, for a doubter, he was certainly fascinated by the subject.<sup>45</sup> As Bruce Moran points out in his contribution to this volume, Lastanosa owned a number of alchemical books, some allegorical and mystical, others practical, and he seems to have had a pronounced preference for the latter. His son, Vicente Antonio, in an éloge of his father rather quaintly titled *Habitación de las Musas*, proudly reported that Lastanosa translated the French chemist Beguin’s *Elements of Chemistry* into Spanish.<sup>46</sup> The translation, evidently, was never published and the manuscript of the work (assuming that Vicente Antonio’s account is accurate) did not survive the dispersal of Lastanosa’s library and papers. Yet, whether or not the translation was completed, Vicente Antonio’s testimony is compelling evidence of Lastanosa’s alchemical interests. Beguin’s famous textbook was essentially a compilation of chemical formulas.<sup>47</sup> Beguin’s definition of alchemy – or, as he calls it, chemistry – as an art of making things aligned perfectly with Lastanosa’s conception of using artifice to explore the secrets of nature. Chemistry, Moran writes, “offered a means of entry into nature’s secrets because it described how to reduce things to their first principles.”<sup>48</sup>

Lastanosa also owned a copy of one of the most famous early modern works on distillation: *Thesaurus Euonymi Philiatri de remediis secretis*, a work attributed to ‘Euonymus Philiatrus’ but in fact by the Swiss naturalist Conrad Gesner.<sup>49</sup> Gesner’s great Latin work on distillation, originally published in 1552, was based on the idea that distillation enables the operator to separate the pure from the impure parts of a body and to extract the “secret arcana in order to make remedies known hitherto by very few persons, which empirics concealed as mysteries.”<sup>50</sup> The seriousness of Lastanosa’s interest in this subject can be gauged by the fact that, as we learn at the end of the *Narración*, some years prior to the learned cleric’s visit, he had hired an alchemist to make quintessences. The mysterious

Neapolitan alchemist Natale Baronio came to Lastanosa with promises of making miraculous cures, obviously hoping to benefit from Lastanosa's well-known generosity as a patron. Baronio's visit seems to have quickened Lastanosa's enthusiasm for alchemy. In any case, the Italian produced something that Lastanosa was convinced was potable gold, a mere four drops of which could cure a man taken for dead.<sup>51</sup> Well, Natale Baronio was not the first Italian alchemist to fool a curious Spaniard. As Mar Rey Bueno has shown, Philip II's court played host to numerous foreign alchemists, many of whom were Italians.<sup>52</sup> It's not for nothing that the word for charlatan – *ciarlatano* – was originally an Italian word.

The books of secrets that do not show up in Lastanosa's library catalogue are almost as telling as those that appear. For example, he did not, evidently, have a very representative collection of the writings of the Neapolitan magus Giambattista Della Porta, whose voluminous and authoritative works on natural magic were generally regarded as essential texts of the tradition.<sup>53</sup> Nor, evidently, did Lastanosa own a copy of the Flemish natural philosopher Levinus Lemnius's *Occulta naturae miracula*, another work that helped define the sixteenth-century approach to the science of occult qualities.<sup>54</sup> The absence of a copy of Lemnius's book might possibly be explained by the author's Protestant leanings – Lastanosa did not have any of Clusius's works either. In those days, it probably wasn't very prudent for a Spanish collector to own books by a Dutchman.

However, Della Porta's relative absence is a little more puzzling, considering that for a long time he was Europe's foremost authority on natural magic. A single reference to an unnamed Della Porta volume in the *Narración* probably refers to his famous book, *Magia naturalis*, but curiously, it is listed among a group of works devoted to "Tropelias [eutropelias] y Juegos de Manos," in other words, innocent amusements, sleight of hand, magic tricks, and so forth.<sup>55</sup> Does that mean that Lastanosa did not take Della Porta's brand of natural magic seriously? Certainly Della Porta's fascination with tricks and illusions has made it difficult for modern historians to take the *Magia naturalis* very seriously. The enthusiasm with which he described how to produce half-white, half-black figs, gigantic leeks, nuts without shells, sweet lemons, cucumbers shaped like dragons, to sire multicolored horses, counterfeit gemstones, or make an artificial egg as big as a man's head seems to result more from perverse curiosity than genuine scientific interest. But to Della Porta and his contemporaries, such amusements were not only prescribed by the rules of courtly discourse, they were also considered appropriate categories for the study of natural history. Nature's subtlety and

‘playfulness’ was thought to be an essential part of the architecture of the world.<sup>56</sup> Sometimes nature mimics itself, as in the seahorse or the mandrake, while at other times it contorts itself and exhibits monsters, giants, and dwarfs, or it demonstrates its cunning by creating artful imitations of human artifacts. So nature cloaks herself in masks, which it is the task of the naturalist to remove, thereby exposing nature’s secrets. The illusions and sleights-of-hand that Della Porta included in his book were imitations of nature hiding herself and were part of the unmasking of nature that natural magic aimed to accomplish. Once exposed, nature might be imitated by the art of natural magic. But if nature ‘plays’ for those who understand her secrets, she also deceives those ignorant of causes, just as a juggler, magician, or craftsman seems to create marvels in the eyes of amazed onlookers. Revealing the mechanism underlying cunning, whether human or of nature, was an essential part of Della Porta’s ‘science of secrets.’

Of course, Lastanosa had plenty of natural magic for anyone’s taste in his extensive collection of titles by Kircher and by his fellow Jesuit scholar Juan Eusebio Nieremberg – and perhaps therein lay the explanation for the apparent marginalization of Della Porta.<sup>57</sup> Perhaps it seemed to Lastanosa that the Jesuit natural philosophers, such as Kircher, Nieremberg, and the German Jesuit Gaspar Schott, propounded a deeper, more rigorous, and more orthodox form of natural magic than the playful and unstable version espoused by Della Porta. In the early seventeenth century, Della Porta’s famous book would have been obligatory reading for anyone interested in the subject, and might have been shelved among other works on the occult sciences instead of among books about magic tricks and illusions. However, his reputation was clouded by his brushes with the Inquisition and his books were suspect: Della Porta had been brought before the Holy Office at least twice, and one of his books had been listed on the Index.<sup>58</sup> According to the eighteenth-century historian Giuseppe Valletta, who had the Inquisitorial documents before him, Della Porta was charged with “having written about the marvels and secrets of nature.”<sup>59</sup>

Lastanosa’s catalogue may thus be a sign that natural magic had moved on to become a more serious pursuit. Yet Lastanosa had an impressive collection of philosophical toys of his own, including examples of nature’s sleights-of-hand in the form of figured stones that imitated a seemingly infinite variety of natural and artificial objects, as well as lodestones, amulets, mechanical marvels, magic mirrors, and all variety of scientific instruments.<sup>60</sup> Moreover, even in the dense Latin tomes of the Jesuits, the question of the boundaries of curiosity emerged as a central concern. Gaspar Schott wrote at the very beginning of his *Magia universalis* of

1657: “here the theatre where art and nature play is exposed to curiosity: but while they play for the learned, they deceive the ignorant,” demonstrating that the divide between the elite and the vulgar still lay at the heart of natural philosophy.<sup>61</sup>

What, finally, does all of this passionate concern, in this quasi-courtly culture, with ‘secrets’ and experiments signify? To some extent it attests to a keen interest in applied science. Many of the recipes in the books of secrets recorded experimental attempts to improve artistic or technological processes. All of these would have been of great interest to a collector like Lastanosa, whose assemblage of paintings, ceramics, armor, medallions, and jewelry was renowned. However, beyond expressing the tastes and pastimes of wealthy connoisseurs, there was also a more serious purpose in the pursuit of secrets through collecting. First of all, the nearly endless parade of natural and artificial wonders that filled Lastanosa’s house underscored the fact that the world was much vaster and more complex than Aristotle had ever imagined. So many secrets still awaited discovery. While the natural objects and marvels displayed what lay beyond traditional knowledge, antiquities, fossils, and figured stones illustrated what lay behind.

And so we return to appearance, artifice, and reality. In the rhythm of passing from one object to the next on our imaginary tour of Lastanosa’s museum, we can detect the emergence of a new way of investigating nature that was characteristic of early modern science. Elsewhere I have called this mode of inquiry the ‘epistemology of the hunt’ and have argued that it contrasted sharply with the kind of philosophical knowledge handed down in the medieval Scholastic tradition.<sup>62</sup> The metaphor of science as a hunt, which occurs repeatedly in the scientific discourse of the sixteenth and seventeenth centuries, testifies to the emergence of a new conception of the aims and methods of science. Instead of viewing natural philosophy as a sort of hermeneutics – “natural philosophy without nature,” as the historian John Murdoch aptly characterized late-medieval physics – intellectuals of the early modern period tended to think of science as a search for new and unknown facts, or of causes concealed beneath nature’s exterior appearance.<sup>63</sup> Such methods, they argued, offered few insights into the changing, shifting world of becoming. Experiments alone would enable investigators to penetrate the vast regions of unknown nature. The hunt metaphor was used increasingly as natural philosophers attempted to elucidate and to vindicate experimentalism.

The idea of science as a hunt seems particularly appropriate to describe the museum-science of the early modern era.<sup>64</sup> Collecting focused the attention upon individual instances as opposed to the ascent to lofty

principles. In amassing his immense collection of books and objects, Lastanosa did not aim principally to advance the cause of natural philosophy. His goals were more personal: to enhance his prestige and to project a self-image. Yet his museum and library, driven by a passionate dedication to collecting secrets, was a visual reminder that objects were clues that would lead to the discovery of nature's secrets.<sup>65</sup> Lastanosa was not, perhaps, a *novator*, and certainly no Baconian, but, like many other collectors of his day, in his own way he furthered the ideal of factuality that was of cardinal importance in the early stages of the Scientific Revolution.<sup>66</sup>

### Notes

1. Ricardo del Arco y Garay, *La erudición aragonesa del siglo XVII en torno a Lastanosa*, (Madrid, Cuerpo facultativo de archiveros, bibliotecarios y arqueólogos, 1934), 252-75. The account is also published in *Narración de lo que le pasó a Don Vincencio Lastanosa a 15 de octubre del año 1662 con un religioso docto y grave*. Hispanic Society of America (HSA), Ms. B-2424, 52r-79v<sup>o</sup>.
2. On Lastanosa's circle, see Miguel López Pérez's contribution to this volume.
3. Ricardo del Arco y Garay, "Don Vincencio Juan de Lastanosa: Apuntes bibliográficos," *Boletín de la Real Academia de la historia*, 56 (1910): 420-511.
4. On Lastanosa's fascination with the secrets of nature and art, see María Portuondo's contribution to this volume.
5. Pierre Hadot, *The Veil of Isis: An Essay on the History of the Idea of Nature*, (Cambridge, Harvard University Press, 2006), 34.
6. Antonio Pérez-Ramos, *Francis Bacon's Idea of Science and the Maker's Knowledge Tradition*, (Oxford, Oxford University Press, 1988). Pérez-Ramos calls this way of discovery 'maker's knowledge.' In addition, see Pamela Smith, *The Body of the Artisan: Art and Experience in the Scientific Revolution*, (Chicago, University of Chicago Press, 2004).
7. *Narración*, 52v.
8. Katie Whitaker, "The Culture of Curiosity," in: Nicholas Jardine, James A. Secord y Emma C. Spary, eds., *Cultures of Natural History*, (Cambridge, Cambridge University Press, 2000), 75-90; Krzysztof Pomian, *Collectors and Curiosities: Paris and Venice 1500-1800*, (Cambridge, Blackwell, 1990).
9. Lorraine Daston and Katharine Park, *Wonders and the Order of Nature 1150-1750*, (New York, Zone Books, 1998), 218.
10. Richard A. Goldthwaite, *Wealth and the Demand for Art in Italy, 1300-1600*, (Baltimore, Johns Hopkins University Press, 1993), 249.
11. Paula Findlen, "Courting Nature," in: Jardine, Secord & Spary, *Cultures of Natural History*, 57-74.
12. *Narración*, 52r.
13. Harold J. Cook, *Matters of Exchange: Commerce, Medicine, and Science in the Dutch Golden Age*, (New Haven, Yale University Press, 2007). On pharmacies as

sites for collecting, see Paula Findlen, *Possessing Nature: Museums, Collecting, and Scientific Culture in Early Modern Italy*, (Berkeley, University of California Press, 1994), 241-87.

14. Thomas DaCosta Kaufmann, "From Mastery of the World to Mastery of Nature: The Kunstkammer, Politics, and Science, in: *The Mastery of Nature: Aspects of Art, Science, and Humanism in the Renaissance*, (Princeton, Princeton University Press, 1993), 174-94.

15. Angus Rowland, "The Problem of Early Modern Melancholy," *Past and Present*, 191 (2006): 77-120 (p. 77).

16. Miguel López Pérez, "Anatomía del virtuoso: coleccionismo y melancolía en la figura de Vincencio Juan de Lastanosa," *Argensola*, 115 (2005): 143-66. In addition, see Lorraine Daston, "Curiosity and Early Modern Science," *Word and Image*, 11 (1995): 391-404.

17. Lastanosa had exchanged letters with Kircher since the 1650s; as a result, in 1660, Kircher sent him 15 of his books: Carlos Garcés Manau, "Diez cartas de Vincencio Juan de Lastanosa y Diego Vincencio Vidania a Athanasius Kircher, conservadas en la Universidad Pontificia Gregoriana de Roma," *Argensola*, 115 (2005): 187-99 (pp. 189-90).

18. Although this particular book does not appear in Lastanosa's library catalogue, he did own a copy of Kircher's *Magnes, sive de arte magnetica* (Rome, 1652), which contains similar ideas. On Kircher's *Magnes* and the centralism of magnetism in his natural philosophy, see Paula Findlen, "The Last Man Who Knew Everything...or Did He? Athanasius Kircher, S.J. (1602-80)", in: Paula FINDLEN, ed., *Athanasius Kircher: The Last Man Who Knew Everything*, (New York, Routledge, 2004), 1-48. The frontispiece to Kircher's *Magneticum Naturae Regnum* is pictured in Ingrid D. Rowland, *The Ecstatic Journey: Athanasius Kircher in Baroque Rome*, (Chicago, University of Chicago Press, 2000), 37.

19. Quoted in Findlen, *Possessing Nature*, 85.

20. *Narración*, 52r.

21. William Eamon, *Science and the Secrets of Nature: Books of Secrets in Medieval and Early Modern Culture*, (Princeton, Princeton University Press, 1994).

22. On this work, see Eamon, *Science and the Secrets of Nature*, 139-47.

23. *Catálogo de los libros. D. Vincencio Ioan Lastanosa. Por orden de alfabeto*. Stockholm Royal Library, *Sparvenfeldt* Catalogue (K. B. Sp. 10-U 379), 1v. According to the catalogue, Lastanosa's was the Madrid, 1624 edition. This edition was evidently unknown to Ferguson and is not listed in his bibliography of books of secrets or his article on Alessio: John K. Ferguson, *Bibliographical Notes on Histories of Inventions and Books of Secrets*, 2 vols., (London, Holland Press, 1959); idem "The Secrets of Alexis," *Proceedings of the Royal Society of Medicine, Section on the History of Medicine*, 24 (1931): 225-46.

24. PIEMONTESE, Alessio Piemontese, *Secreti*, (Venice, 1558), preface. The preface containing the story about Alessio's decision to publish the secrets is not contained in the Spanish translation, but does appear in most other translations, including the Latin, and was widely known throughout Europe. Given his extensive contacts, Lastanosa was undoubtedly familiar with the legend.

25. Marjorie Swann, *Curiosities and Texts: The Culture of Collecting in Early Modern England*, (Philadelphia, University of Pennsylvania Press, 2001), 7. In addition, see Lorraine Daston, "The Factual Sensibility," *Isis*, 79 (1988): 452-67 (pp. 459-60).
26. The historian Richard Lightbown reported that in 1647, Lastanosa had printed 2,000 copies of a verse description of his collection by Juan Francisco Andrés de Uztarroz to satisfy requests by those curious about his museum. However, I have not been able to discover any copies of the publication. Richard Lightbown, "Some Notes on Spanish Baroque Collectors," in: Oliver Impey and Arthur MacGregor, eds., *The Origins of Museums: The Cabinet of Curiosities in Sixteenth- and Seventeenth-Century Europe*, (Oxford, Clarendon Press, 1985), 136-46 (p. 144).
27. On the *Secretum*, see Steven J. Williams, *The Secret of Secrets. The Scholarly Career of a Pseudo-Aristotelian Text in the Latin Middle Ages*, (Ann Arbor, University of Michigan Press, 2003). In addition, see William Eamon, "The Secrets of Nature and the Moral Economy of Early Modern Science," In: *Il Segreto / The Secret*, A. Paravacini Bagliani (ed.), *Micrologus*, XIV (2006), Florence, SISMELE, 215-35.
28. The work's Arabic translator, Yahya ibn al-Batriq, claims he found the manuscript in a temple of Asclepius after wandering through Persia in search of secret wisdom Williams, *The Secret of Secrets*, 9.
29. On the esoteric tradition in medieval thought and the *libri secretorum*, see Eamon, *Science and the Secrets of Nature*, chap. 2.
30. There is a large literature on Renaissance hermeticism; see, in particular, Brian Copenhaver, "Natural Magic, Hermetism and Occultism in Early Modern Science," in: D.C. Lindberg y R.S. Westman, eds., *Reappraisals of the Scientific Revolution*, (Cambridge, Cambridge University Press, 1990), 261-301.
31. Noel Malcom, "Private and Public Knowledge", in: Findlen, *Athanasius Kircher*, 297-308. The work identified in Lastanosa's library catalog as a "libro de la naturaleza de las piedras, traducido de griego" was probably a treatise related to the Hellenistic *Kuranides*, a hermetic treatise on the virtues of natural objects (*Catálogo*, 117v). On the hermetic treatises, see Brian Copenhaver, *Hermetica*, (Cambridge, Cambridge University Press, 1992) (on *Kuranides*, pp. xxxiv-xxxv); and Garth Fowden, *The Egyptian Hermes: A Historical Approach to the Late Pagan Mind*, (Princeton, Princeton University Press, 1986).
32. The concept is treated in depth in Hadot, *The veil of Isis*.
33. On this work, see Eamon, *Science and the Secrets of Nature*, 71-74.
34. *Narración*, 59v.
35. I use the term "epistemic" in the sense elaborated by Michel Foucault, *The Order of Things*, (New York, Vintage Books, 1973).
36. *Narración*, 59v.
37. For additional information on Wecker and his *De secretis*, see Eamon, *Science and the Secrets of Nature*, 276-78.
38. *Narración*, 59v.
39. "Un libro de la naturaleza de las piedras, traducido de griego por un obispo de Rodas, y muchos otros secretos. En 4º." *Catálogo*, 105r.
40. *Catálogo*, 117v.

41. *Narración*, 55v.
42. For the scientific background to catoptrics in the Renaissance, see Sven Dupré, “The Dioptrics of Refractive Dials in the Sixteenth Century,” *Nuncius*, 18 (2203): 39-67.
43. Giambattista Della Porta, the principal Renaissance authority on natural magic, treated catoptrics in his famous work on natural magic: Giambattista Della Porta, *Magiae naturalis libri viginti*, (Naples, 1589), Book XVII, 259-86 (“De catoptrica imaginibus”). His ideas are discussed in Vasco Ronchi, *The Nature of Light*, (London, Heinemann, 1970), 78-87.
44. *Narración*, 78v-79r.
45. On Lastanosa’s alchemical interests, see Miguel López-Pérez, *Asclepio renovado: Alquimia y medicina en la España moderna (1500-1700)*, (Madrid, Ediciones Corona Borealis, 2003), 268-75.
46. *Habitación*, 2v.
47. On this work, see Bruce Moran, *Distilling Knowledge: Alchemy, Chemistry, and the Scientific Revolution*, (Cambridge, Harvard University Press, 2005), 112-14.
48. *Ibid.*, 117.
49. Identified in the *Narración* as ‘Filatro,’ meaning Euonymus Philiatrus, Gesner’s pseudonym.
50. On Gesner, see Lynn Thorndike, *History of Magic and Experimental Science*, vol. 5, (New York, Columbia University Press, 1941), 621.
51. *Narración*, 77v.
52. Mar Rey Bueno, *Los señores del fuego: Destiladores y espagíricos en la corte de los Austrias*, (Madrid, Ediciones Corona Borealis, 2002).
53. On Della Porta, see Eamon, *Science and the Secrets of Nature*, 194-233.
54. On this work, see Eamon, *Science and the Secrets of Nature*, 274-75.
55. There has been a considerable amount of attention to the word eutropelia in Cervantes; see, in particular Bruce W. Wardropper, “La eutropelia en las *Novelas ejemplares* of Cervantes,” in: *Actas del Séptimo Congreso Internacional de Hispanistas*, (Rome, Bulzoni, 1982), 153-69; Cory A. Reed, “Ludic Revelations in the Enchanted Head Episode in Don Quijote (II, 62),” *Cervantes: Bulletin of the Cervantes Society of America*, 24 (2004): 189-216; Joseph R. Jones, “Cervantes y la virtud de la eutropelia: la moralidad de la literatura de esparcimiento,” *Anales Cervantinos*, 23 (1985): 19-30.
56. Paula Findlen, “Jokes of Nature and Jokes of Knowledge: The Playfulness of Scientific Discourse in Early Modern Europe,” *Renaissance Quarterly*, 43 (1990): 292-331.
57. Lastanosa also did not have a copy of Girolamo Cardano’s famous *De subtilitate*, another key sixteenth-century text on occult qualities (although he had a copy of Cardano’s *De sapiente et consolatione*); but he did have several works by Nieremberg, including *Curiosa filosofía y tesoro de marauillas de la naturaleza examinadas en varias cuestiones naturalis*.
58. On Della Porta’s case before the Inquisition, see Giovanni Aquilecchia, “Appunti su G. B. Della Porta e l’inquisizione,” *Studi secenteschi* 9 (1968): 3-31;



Pasquale López, *Inquisizione stampa e censura nel regno di Napoli tra '500 e '600*, (Naples, Edizioni del Delfino, 1974), 153-59.

59. "per avere scritto intorno alle maraviglie et i segreti della natura," quoted in Aquilecchia, "Appunti", 6.

60. *Narración*, 72r-v.

61. Quoted in Rob Iliffe, "Lying Wonders and Juggling Tricks: Religion, Nature and Imposture in Early Modern England," en: James E. Force and David S. Katz, eds., *Everything Connects: In Conference with R.H. Popkin. Essays in His Honor*, (Leiden, Brill, 1999), 185-209 (p. 196).

62. Eamon, *Science and the Secrets of Nature*, 269-300; in addition, see William Eamon, "Science as a Hunt," *Physis* 31(1994): 393-432.

63. John Murdoch, "The Analytical Character of Medieval Learning: Natural Philosophy Without Nature," in *Approaches to Nature in the Middle Ages*, L. D. Roberts (ed.), *Medieval and Renaissance Texts and Studies*, 16 (1992), (Binghampton, N.Y., Center for Medieval and Renaissance Studies), 171-213. In addition, see Paolo Rossi, "The Aristotelians and the 'Moderns': Hypothesis and Nature," *Annali dell'Istituto e Museo di Storia della Scienza di Firenze*, (1982): 73-28.

64. I use the term 'museum science' in the sense coined by Ken Arnold, *Cabinets For The Curious: Looking Back At Early English Museums*, (London, Ashgate, 2006).

65. On Lastanosa's "afición a secretos," see José María López Piñero, *Ciencia y técnica en la sociedad española de los siglos XVI y XVII*, (Barcelona, Labor, 1979), 410-11.

66. Daston, "The Factual Sensibility," 464.