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Woven Theaters of Nature:
Flemish Tapestry and Natural History, 1550-1600

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ABSTRACT

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Chambers of Flemish tapestry served as prestigious, portable decoration for early modern courts across Europe. In the second half of the sixteenth century, a number of noble patrons commissioned tapestries that prominently featured highly naturalistic zoological and botanical imagery. Drawing upon zoological treatises, medical and physiognomic literature, fables, printed emblemata, accounts of staged animal combats, and a variety of other sources, this dissertation offers a new interpretation of three cycles of animal tapestries that survive relatively intact. The study explores how the production, export, and display of animal tapestries, a largely overlooked genre, coincides with the beginning of a fundamental transformation of European natural knowledge, and with a burgeoning interest among sixteenth-century rulers in practices of natural history (defined as the acquisition, study, and display of natural objects and representations of them).

The first chapter analyzes a set of ten grotesque *spalliere* commissioned by Cosimo de'Medici (1519-1574) from his own newly-founded workshops in Florence. The chapter reinterprets a puzzling band of naturalistic marine specimens found within the grotesques in light of an early modern discourse that cast nature as an artisan, and demonstrates that chambers of tapestry, like cabinets of rarities and illuminated albums of natural minutiae, could function as courtly theaters of nature. The second chapter examines the purchase by Polish king Sigismund II Augustus (1520-1572) of a massive unified series of Flemish tapestries, 138 of which survive at Wawel Castle in Cracow. As a large but seamless indoor garden, the series illustrates the most important account of the progress of natural knowledge in the early modern period: the biblical narrative of Creation. The third chapter takes up a set of seven tapestries now displayed at the Borromean palace of Isola Bella, which depict violent combats between feral predators and prey. The tapestries, which belonged to several prominent ecclesiastics before 1700, employ zoological imagery to illustrate the unruly presence of the humoral passions both in nature and within the postlapsarian human body.

Early modern natural history illustration is often equated with paper images of flora and fauna: species represented individually in woodcuts in printed catalogues, or in watercolors collected into albums. This dissertation demonstrates that chambers of fine Flemish tapestry – splendid moveable environments for courts – likewise served as a medium for aristocratic patronage of natural history in the period. The study is a re-examination of three cycles of sixteenth-century tapestry renowned for their zoological iconography, through the lens of recent scholarship on natural history patronage at European courts, scholarship which has clarified the uses and appeal of natural history in courtly settings yet ignored the medium of tapestry almost entirely.

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First of all, therefore, when in the beginning of the World God was about to create man, who was to use all things, and to behold them in this World as it were in a Theater, he created all kind of Beastes and creatures before man, that he might bring him into a house furnished and adorned with all things necessary and delectable: Afterward he brought into his presence all the creatures to be named by him, which the Scripture recordeth for excellency's sake, (for it is no doubt that he named all things that should continue to the Worlde's end) yet expressly there is no mention but of living creatures, as Fishes, Foules, Cattell, and creeping things; that so they might be submitted and vassalaged to his Empire, authority, and government: which thing, least it should seeme but a proud conjecture, it is againe repeated in the blessing that God pronounceth to man and all his posterity; and again after the floud unto to Noah and his Childeren: *Every beast saith God shall be afraid of you, both the Beastes of the earth, and all the Foules of heaven, and whatsoever is bred in the earth, or brought forth in the sea; all are yours...*¹

CONRAD GESNER, 1551

¹ Conrad Gesner, *Historia animalium... Liber I: De quadrupedibus viviparis* (Zurich 1551). Translated in Edward Topsell, "The First Epistle of Doct. Conradus Gesnerus before his History of Foure-footed-Beastes, concerning the utility of the Story," *The Historie of Four-Footed Beasts* (London, 1607) n.p.

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INTRODUCTION:
FLEMISH TAPESTRY AND NATURAL HISTORY, 1550-1600

A number of sixteenth-century European courts purchased sets of sumptuous Flemish tapestry featuring exotic and domestic birds and beasts, mythical and real, depicted within ornate tanks and cages or, more commonly, against a lush forest landscape. My dissertation examines three major examples of woven zoological imagery that survive relatively intact. The first was commissioned by Cosimo I de' Medici (1519-1574) from his own newly founded tapestry workshops in Florence; the ten *spalliere a grottesche* were designed to encircle the Audience Hall in the Palazzo Vecchio, and their iconography includes a mysterious band of realistic sea specimens within the fantastic grid of an antique grotesque (figs. 17-26). A set of 138 variously-sized tapestries commissioned by the Polish king Sigismund II Augustus (1548-1572) for Wawel Castle in Cracow comprises a veritable encyclopedia of mammal, bird and reptile species, and narrates the biblical story of Creation from Genesis (for examples, see figs. 50-68, 72-74, and 80-95). A smaller but equally lavish set, presumably purchased by or given to Cardinal Charles of Lorraine, Duke of Guise (1524-1574), depicts violent combats between dozens of feral predators and prey (figs. 107-113).

The naturalism of all three cycles is astonishing: carefully simulated textures of fur, feathers, variegated leaves, and moving water belie their real physical structure of knotted threads. These sets arguably mark the culmination of a century of effort on the part of weavers and designers to achieve maximal illusion in the representation of plants and animals; indeed, throughout the sixteenth century, demand for increasingly mimetic representations of nature in tapestry kept pace with painting and drawing. Yet it is paintings, drawings, and prints that define art historical narratives of the development of Renaissance naturalism and the novel interest in empirical observation shared by artists and naturalists. Early modern natural history illustration

is often defined by default as paper images of flora and fauna: species represented individually in woodcuts that animate printed catalogues of naturalia, or watercolors and drawings by artists such as Hans Verhagen (1540-c.1600), Jacopo Ligozzi (1547-1627), and Daniel Fröschl (1563-1613), intended for private study and/or field use. Historians of Renaissance art and science have focused overwhelmingly on these small-scale, portable images, collected in printed volumes such as the treatises of Leonhard Fuchs (1501-1566) and Ulisse Aldrovandi (1522-1605), and, in the case of drawings, albums such as the *Museum* of Rudolf II (before 1610, Österreichische Nationalbibliothek, Vienna) and the *Libri Picturati* (before 1641, Jagiellonian University Archive).² Recent scholarship on sixteenth- and seventeenth-century natural history illustration remains preoccupied with the naturalistic representation of plants and animals as the ostensible product of firsthand observation, and with the evolution of new standards of pictorial accuracy around the inscription *ad vivum*, drawn from life. The terms commonly used by art historians to discuss naturalism in early modern images still reflect historical figurations of production focused upon individual talent.³ A broadly collaborative medium such as tapestry, while it always began with a drawing, could never serve as a direct record of an empirical experience. The fact that tapestry designs were often pieced together from pattern books passed among workshops and commissioned in series further seems to disqualify the medium from current discussions about naturalistic representation. Scholarship that emphasizes the role of the printing press in the development of natural history illustration – the new availability of images

² For example, Fritz Koreny, *Albrecht Dürer and the Plant and Animal Studies of the Renaissance*, trans. Pamela Marwood and Yehuda Shapiro (Boston: Little, Brown and Company, 1988); Herbert Haupt, *Le Bestiaire de Rodolphe II: Cod. min. 129 et 130 de la Bibliothèque Nationale d'Autriche*, trans. Léa Marcou (Paris: Citadelles, 1990); (Marjorie) Lee Hendrix, "Natural History Illustration at the Court of Rudolf II," in Eliška Fučíková, ed., *Rudolf II and Prague* (London and New York: Thames and Hudson, 1997) pp. 157-171; Thomas DaCosta Kaufman, *Mastery of Nature: Aspects of Art, Science and Humanism in the Renaissance* (Princeton: Princeton UP, 1993).

³ An exception to this emphasis on individual talent can be found in David Landau and Peter Parshall's discussion of the division of labor within early modern printmaking in *The Renaissance Print: 1470-1550* (New Haven: Yale UP, 1994). For the claim *ad vivum*, see Claudia Swan, "Ad vivum, naer het leven, from the life: Considerations on a Mode of Representation," *Word and Image* 11 (October-December 1995) pp. 353-372.

that could be reproduced identically and circulated widely – likewise offers an imperfect model for considering zoological and botanical imagery in tapestry.⁴ Printed woodcuts of plants and animals were unprecedentedly accessible, often accompanied by copious text, and frequently intended to advertise the erudition of a naturalist author. In contrast, zoological and botanical imagery in tapestry, though it might be just as painstakingly speciated, connoted exclusivity through the medium's great cost and precious materials; tapestry was a reproductive medium but on a monumentally costly scale, and some patrons even sought to limit replication of designs they had commissioned or purchased. Zoological and botanical imagery in tapestry was frequently intended to demonstrate the authority of a patron, revealing his proximity to natural marvels and his exclusive power to command astonishing talent.

This study aims to broaden art historical definitions of sixteenth-century natural history illustration, usually regarded as a paper-based art and a precursor to the seventeenth century's secular, empiricist sciences of zoology and botany. I also aim to situate tapestry, too often studied in isolation or disdained as (in Aby Warburg's wry phrase) "a mere aristocratic fossil," in relation to other forms of artistic and scientific patronage at early modern courts.⁵ The dissertation is not a catalog of zoological imagery in sixteenth-century Flemish tapestry, or a concordance of animal representations found in tapestry and in illustrated zoological publications of the period, although I do discuss several examples of this kind of overlap between the imageries of early modern art and science.⁶ This study is a re-examination of three cycles of sixteenth-century tapestry renowned for their zoological iconography, through the lens of recent

⁴ Swan, "The Uses of Realism in Early Modern German Botany" in Jean Givens, Karen M. Reeds, and Alain Touwaide, eds, *Visualizing Medieval Medicine 1200-1550* (Aldershot, UK: Ashgate Press, 2006); Landau and Parshall, op. cit.; William Ivins, *Prints and Visual Communication* (Cambridge: The MIT Press, 1969).

⁵ Aby Warburg, "Peasants at Work in Burgundian Tapestries," *The Renewal of Pagan Antiquity: Contributions to the Cultural History of the European Renaissance*, trans. David Britt (Los Angeles: Getty Research Institute for the History of Art and the Humanities, 1999) p. 315.

⁶ In addition, in the footnotes, I have cited a number of previously unrecognized examples of animal images duplicated between different tapestry sets.

scholarship on natural history patronage at European courts, scholarship which has clarified the uses and appeal of natural history in courtly settings yet ignored the medium of tapestry almost entirely. The dissertation addresses the question: how might we understand certain chambers of Flemish weavings as examples of proto-scientific illustration, and at the same time, as moveable virtual environments of silk and gold? The sixteenth-century humanist's understanding of nature was inextricable from the idea of an ordered architecture into which all the particulars of plants, animals and minerals could be fitted. Princely patrons simulated this architecture, which was imagined as a "theater of nature" in numerous texts and images, in a variety of splendid ways, including natural history collections, botanic gardens, and as this study argues, chambers of woven tapestry.

Questions of style and attribution have dominated almost all previous scholarship on the three tapestry sets discussed here, but such questions play a much smaller role in my analysis.⁷ In large part, I have concentrated upon reception rather than production, opting to explore how the meaning of a tapestry series was constituted through the patron's motives for the commission and through the series' display and use, rather than by the hand of the artist or weaver. As tapestry historians repeatedly affirm, precious little documentation survives concerning the medium's production or reception in the sixteenth century. Yet a wealth of written and pictorial sources offer insight into the courtly patronage of natural history in the period, and these have not yet been brought to bear on surviving weavings.

⁷ For example, Candace Adelson, "The Tapestry Patronage of Cosimo I de' Medici," 2 vols., PhD dissertation, New York University, 1990; Marcel Roethlisberger, "La Tenture de la Licorne dans la collection Borromée," *Oud Holland* 82 (1967) pp. 85-115; Mercedes Ferrero Viale, "Quelques nouvelles données sur les tapisseries d'Isola Bella," *Bulletin des MRAH* 6:45 (1973) pp. 77-142; and Jerzy Szablowski, ed., *The Flemish Arrases, Royal Castle in Cracow* (Antwerp: Fonds Mercator and Warsaw: Arkady, 1994).

Since the 1980s, Giuseppe Olmi, Paula Findlen, Lorraine Daston, Katharine Park and others have produced compelling accounts of how the practices of natural history came to be seen as noble, pleasurable, and useful for aristocratic amateurs over the course of the sixteenth century.⁸ This literature, while bridging the histories of art and science, fails to take account of the period's most prestigious, costly, and labor-intensive pictorial art form, Flemish tapestry. This, despite the fact that nearly all of the major princely tapestry patrons of the sixteenth century were simultaneously engaged in assembling collections of precious man-made and natural marvels. The production and display of princely "animal tapestries," a largely overlooked genre, coincides with the beginning of a fundamental transformation of European natural knowledge, and with a burgeoning interest among sixteenth-century European rulers in practices of natural history (defined as the acquisition, study, and display of natural objects and representations of them). By the 1550s, studying nature had become an appropriate leisure activity for the privileged, and its paraphernalia (instruments or scientifica, lenses, globes, albums of drawings and watercolors, and cabinets of specimens) acquired a cachet that was greatly enhanced in made-to-order versions featuring lavish materials and exquisite workmanship. Ichthyologist Guillaume Rondelet (1507-1566) opens his 1554 treatise on marine creatures by inviting the noble reader to study the minutiae of nature, for "man has been placed in such a beautiful domicile, or even more, such a magnificent theater, to contemplate the sky, the stars, the air, the water, the earth, the animals, the plants, the whole fashioned with such great

⁸ For example, Giuseppe Olmi, "Science-Honour-Metaphor: Italian Cabinets of the Sixteenth and Seventeenth Centuries," in Oliver Impey and Arthur MacGregor, eds., *The Origins of Museums: The Cabinet of Curiosities in Sixteenth- and Seventeenth-Century Europe* (Oxford: 1985) pp. 1-17; Paula Findlen, "Courting Nature," in Nicholas Jardine, Anne Secord, and Emma Spary, eds., *Cultures of Natural History* (Cambridge and New York: Cambridge UP, 1996) pp. 57-74; and Lorraine Daston and Katharine Park, *Wonders and the Order of Nature, 1150-1750* (New York: Zone Books, 1998).

artifice.”⁹ European elites across the continent signaled their agreement by establishing museums, cultivating botanical gardens, and sponsoring the translation and publication of luxurious illustrated compendia of plants, minerals, and animals. Woven cycles of tapestry were more than pictures: they functioned as courtly theaters, splendid virtual environments marked by increasingly concerted illusionism, temporary chambers that enveloped their viewers on a magnificent scale. Thus the medium was brilliantly suited to representing the natural world, that theater of nature described so enthusiastically by the authors of sixteenth-century zoological and botanical treatises.

Courtly patronage of botany and zoology was above all an exercise in connoisseurship, and an opportunity for patrons to enjoy “a vast continuous spectacle placed in front of them by the humanists who revived the empirical study of nature.”¹⁰ Although, as Findlen has pointed out, the delights it offered were above all tactile and visual, requiring no specialized knowledge, this spectacular brand of natural knowledge, of course, did more than entertain.¹¹ A patron’s proximity to marvels and rarities testified to his wealth and reach. Marvelously mimetic representations of plants and animals, like the real coral, minerals, crystals, teeth, and antlers displayed in a *Wunderkammer*, served to demonstrate the breadth of the collector’s territories and their economic potential.¹²

⁹ “Pource l’home estant mis en ce beau domicile, ou plus tost en ce tres magnifique theatre, doit contempler le ciel: les estoiles, l’aer, l’eau, la terre, les animaux, les plantes, le tout fait de si grand artifice, orné de si excellente beauté, assemblé é composé de si grande harmonie, doué de si grande vertu, tant bien ordonné qu’il n’est possible de plus.” Guillaume Rondelet, “Preface sur tout l’oeuvre,” *L’Histoire Entière des Poissons* (Lyon 1558), n.p. Facsimile ed. by François J. Meunier (Paris: Comité des Travaux Historiques et Scientifiques, 2002).

¹⁰ Findlen, “Courting Nature,” p. 69.

¹¹ Findlen, “Courting Nature,” p. 60. As Daston and Park have observed, “This emphasis on connoisseurship and virtuosity formed part of an aristocratic model of knowledge” marked by “the exclusive nature of its material, which it identified with the exclusive nature of its audience, an elite at once social and intellectual.” See Daston and Park, p. 167.

¹² Dirk Syndram and Antje Scherner, eds., *Princely Splendor: The Dresden Court 1580-1620* (Metropolitan Museum of Art and Staatliche Kunstsammlungen Dresden, 2004) p. 55.

The production, export, and initial display of Flemish “animal tapestries” clearly reflect the taste among sixteenth-century princes for zoological marvels. Exotic animals known from bestiaries or brought from the New World to court menageries were, in tapestry, re-imagined as luxury objects. Both the dragon and panther depicted in one of the large verdurees purchased in the 1550s by the Polish king Sigismund Augustus, for example, appear bejeweled – the panther’s hide has been transformed into a pattern of feathery peacock-like tufts that seem held to his body with hundreds of precious pins (fig. 81).¹³ In grotesque tapestries commissioned by Cosimo I de’Medici a few years before (figs. 17-26), a variety of realistic marine creatures are exhibited in a row of sealed tanks, which form part of a complicated arrangement of pedestals, masks, figurines, precious gems, wrought gold, and antique armor. Furthermore, live animals sent as royal gifts could be commemorated in tapestry, as was a rhinoceros shipped to Don Manuel I of Portugal (1469-1521) by the Portuguese governor of India in 1515. The Indian rhinoceros was drawn (though not seen) by Albrecht Dürer in the same year, and his rendering became, through frequent copying, an iconic image in natural history illustration. Dürer’s illustration was duplicated in Flemish tapestries of varying quality for over a hundred years.¹⁴ It appears in a model for an animal tapestry attributed to Pieter Coeck Van Aelst (1502-1556), parts of which were reshuffled and rewoven in tapestry workshops as late as the 1610s (fig. 155).¹⁵ Quite apart

¹³ Very similar depictions of a bejeweled panther appear in a tapestry entitled *The Leopard Chase* (La Chasse au Guépard) attributed to Frans Geubels and published by R. Huyghe, L. Huyghe, and J. Boccara, *Les Fastes de la Tapisserie XVe au XVIIIe siècle* (Paris: Musée Jacquemart-André, 1984) and in a tapestry now in the collection of the Belgian Senate, in the Palais de la Nation, Brussels.

¹⁴ See Pamela H. Smith and Paula Findlen, “Commerce and the Representation of Nature in Art and Science,” in Smith and Findlen, eds., *Merchants and Marvels: Commerce Science, and Art in Early Modern Europe* (New York and London: Routledge, 2002) pp. 1-25. For Dürer’s interest in natural history, including his documentation and collection of exotic animals, see Dagmar Eichberger, “Naturalia and Artefacta: Dürer’s Nature Drawings and Early Collecting,” in Eichberger and Charles Zika, eds., *Dürer and His Culture* (Cambridge, UK and New York: Cambridge UP, 1998) pp. 15-6. See also T. H. Clarke, *The Rhino from Dürer to Stubbs, 1515-1799* (London: Sotheby’s Publications, 1986).

¹⁵ The model for an animal tapestry has been published several times, most recently in Maria Hennel-Bernasikowa, *Arrasy Zygmunt Augusta; The Tapestries of Sigismund Augustus* (Cracow: Wawel Royal Castle, 2002) p. 17. See also Giulia Bartrum, ed., *Albrecht Dürer and His Legacy* (London: British Museum, 2002). The drawing bears the

from the animal's symbolic connotations, such a grand image of a rhinoceros enhanced the prestige of its owner, for a patron's proximity to (and knowledge of) such an unusual and valuable creature was largely measured by the naturalism of the artist's depiction. Consequently, tapestry patrons at the highest level commissioned illustrations of flora and fauna from specialists, whose depictions were then loaned to cartoon painters for inclusion in finished tapestry. Philip II (1527-1598) alarmed the head of one of Brussels' leading tapestry workshops when he demanded innovative and complicated borders for a re-edition of a set of tapestries illustrating the *Story of Noah* in the early 1560s (fig. 75). The king appears to have sent specially commissioned, anatomically precise drawings of animals for these borders to the weaver, Willem de Pannemaker (active 1535-1578).¹⁶ Philip's borders organized the zoological world by element (air, water, fire, earth), and would prove enormously popular for tapestry well into the seventeenth century.

To restrict our definition of early modern natural history illustration to studious miniatures on paper would be to leave out many other representations of plants and animals designed and appraised with equal concern for naturalism, in media such as wall painting, gold- and silverwork, ceramics, and tapestry. We would also fail to acknowledge the spectacular function of much zoological and botanical imagery created for a courtly setting. With their

inscription "P. V. Aelst f. 1549," though British Museum curator Martin Royalton-Kisch maintains that the hand is from the seventeenth century (correspondence with Royalton-Kisch, October 11, 2004). The Dürer rhino appears in, among other examples, a large-leaf verdure in a private collection in Ghent (photograph in the tapestry image archive of the Musées Royaux d'Art et d'Histoire, MRAH 1550.497-500); one of three unpublished animal tapestries in the Chateau de Puyguilhem, France; an undated large-leaf verdure in the collection of Kronborg Castle, in Elsinore, Denmark (which was, incidentally, the setting for Shakespeare's *Hamlet*, in which an "arras" plays a crucial part in the murder of Polonius); and in a series of animal tapestries, very similar to the Isola Bella set, produced by the workshops of Jan II Raes and Catherine van den Eynde for Cardinal Alessandro Peretti Montalto (1571-1623) and completed before 1617, reproduced in Marcel Roethlisberger, "La tenture de la Licorne dans la collection Borromée," *Oud Holland* 82 (1967) fig. 11, p. 96. Dürer's rhino was also reproduced as a woodcut in Conrad Gesner's *Historia animalium... Liber I: De quadrupedibus viviparis* (Zurich 1551).

¹⁶ Iain Buchanan, "The Tapestries Acquired by King Philip II in the Netherlands in 1549-50 and 1555-59: New Documentation," *Gazette des Beaux-Arts* ser. 6, 134 (October 1999) pp. 144-145, and idem, "The Contract for King Philip II's Tapestries of the 'History of Noah,'" *Burlington Magazine* 148:1239 (June 2006) p. 414.

combination of verisimilitude and opulence, the animal tapestries discussed in this study recall a variety of other luxury objects produced for early modern courts in diverse media: *pietre dure* furniture covered with images of flora and fauna, made famous by the Medici court; magnificent cups and ewers fashioned from exotic fragments such as Seychelles nuts and nautilus shells; or silver caskets and fountains featuring live animal casts by Nuremberg workshops such as that of Wenzel Jamnitzer (fig. 41), objects which were staple components of many aristocratic *Kunstkammern*. Like certain cycles of tapestry, these objects celebrated the close observation of nature, both embodying and commanding new forms of attention to flora and fauna. They were meant to impress viewers by virtue of their costly materials, fine craftsmanship, and astonishing naturalism. Like tapestry, they were frequently the product of anonymous collaborative work, and thus today they are often lumped together under the rubric of the decorative or “applied” arts. Though they shared the same ceremonial spaces at court, Flemish tapestries have not yet been adequately studied in relation to such luxury objects, which bridged the domains of art and science by combining the painstaking imitation of nature with an aura of magnificence. By considering select animal tapestries in relation to some of these luxury objects, my dissertation is intended to help shed some light on the apparently close but largely unexplored relationship between the so-called minor arts and the investigation of nature in early modern Europe.

It is a commonplace that verdure tapestries served as “winter gardens” during winter months spent indoors, but in the case of the finest Flemish verdure tapestries, it is instructive to probe this analogy by reconsidering the function of the sixteenth-century courtly garden. Sizeable gardens were nearly always conceived as sites for the restoration of lost learning, both Adam’s perfect understanding of the natural world and the medical plant lore of antiquity.¹⁷

¹⁷ John Prest, *The Garden of Eden: The Botanic Garden and the Re-creation of Paradise* (New Haven: Yale UP, 1981); Monique Mosser and Georges Teyssot, eds., *The Architecture of Western Gardens: A Design History from*

Within this cultural framework, early modern courtly gardens were cultivated and enjoyed as living catalogues of Creation. The botanic garden, like the biblical prototype on which it was modeled, was a life-sized encyclopedia, the Book of Nature condensed into one space.¹⁸ The conspicuous variety of species and the concern for naturalistic detail evident in tapestry cycles like that commissioned by Polish king Sigismund August for Wawel Castle in the late 1540s suggests an investment in this uniquely early modern quest. Indeed, the Polish king's tapestries illustrate the very series of events that structures all early modern accounts of the progress of natural knowledge: the biblical narrative of Creation found in the book of Genesis. Together the Wawel weavings form an extremely large yet visually unified winter garden.

From its inception, the botanic garden was a site where academic and courtly interests intersected: Cosimo I de' Medici founded one of the first gardens in Europe at Pisa in 1545, and presided over the simultaneous development of botanical science at the university and the construction and study of lavish pleasure gardens of exotic plants at his palazzi.¹⁹ Aristocratic patrons from Florence and Fontainebleau to the much chillier climate of Cracow had numerous incentives for participating in the culture of gardens. The garden was traditionally the space of the philosopher (as well as the medic) and sixteenth-century gardens could serve as demonstrations of humanistic erudition, designed to reflect the cosmological harmony of Platonic philosophy and the neo-Aristotelian conception of the garden as a locus of study.²⁰ Gardens were also designed, of course, as backdrops for courtly pageantry and performance,

the Renaissance to the Present Day (Cambridge: The MIT Press, 1991); Claudia Lazzaro, *The Italian Renaissance Garden* (New Haven: Yale UP, 1990). See also the historical survey provided by Richard Drayton at the beginning of *Nature's Government: Science, Imperial Britain, and the 'Improvement' of the World* (New Haven: Yale UP, 2000) pp. 3-19.

¹⁸ Prest p. 6.

¹⁹ Lucia Tongiorgi Tomasi and Gretchen A. Hirschauer, *The Flowering of Florence: Botanical Art for the Medici* (Washington DC: The National Gallery of Art, 2002).

²⁰ Andrew Cunningham, "The Culture of Gardens," in Jardine, *Cultures of Natural History*, p. 42; Terry Comito, "The Humanist Garden," in *The Architecture of Western Gardens*, pp. 37-45.

testimony to the magnificence of their patrons. “It was a novel thing in early modern Western Europe,” observes historian Andrew Cunningham, “to use a garden in the game of social and political power.”²¹ Chambers of tapestry, on the other hand, were frequently deployed for exactly this purpose.

The 1550s and 1560s saw a flurry of production of extremely lavish Brussels tapestries simulating garden views. As artists and weavers developed new illusionistic techniques for simulating both the perspectival vistas of grand parterres and the minutiae of plants, elements of the Renaissance garden’s courtly functions were brought indoors, so to speak, transferred to tapestries in their role as winter gardens. A number of sixteenth- and seventeenth-century tapestry series depicting gardens have been well studied. Cardinal Antoine Perrenot de Granvelle (1517-1586), for example, commissioned a famous series of garden views from Willem de Pannemaker between 1561 and 1574 (several survive in Vienna).²² Each tapestry in the series features one or several precisely rendered animals in the extreme foreground, some drawn from the cardinal’s own Brussels aviary (fig. 1), in a composition that foreshadows the much later Gobelins Manufactory’s set, the *Maisons Royales* (1668-1713), featuring animals painted by Pieter Boel (1622-1674) directly from the Versailles zoo (fig. 2).²³

The Gobelins Manufactory, purchased by Louis XIV to produce woven decorations for the French crown, would cultivate the use of zoological and ethnographic imagery in tapestry

²¹ Cunningham p. 43. French naturalist Pierre Belon (1517-1564) touts this function for gardens in his *Remonstrances sur le default du labour et culture des plantes* (1558); see Danièle Duport, *Le Jardin et La Nature: Order et Variété dans la Littérature de la Renaissance* (Geneva: Librairie Droz, 2002) pp. 57-63

²² Kunsthistorisches Museum, Vienna, set 66. See Ludwig Baldass, *Die Wiener Gobelinssammlung* (Vienna: E. Hölzel and Company, 1920), nos. 140-145, and Guy Delmarcel, *Flemish Tapestry* (New York: Harry N. Abrams, 1999) p. 139.

²³ Delmarcel p. 131, 283 and 287. On the *Maisons Royales*, see Maurice Fenaille, *État général des tapisseries de la Manufacture des Gobelins depuis son origine jusqu’à jours 1600-1900*, vol. 2 of 6 (Paris: Imprimerie nationale, Hachette, 1903-1923) and Charissa Bremer-David, *French Tapestries and Textiles in the J. Paul Getty Museum* (Los Angeles: The Museum, 1997) pp. 20-27; on Pieter Boel, see Elisabeth Foucart-Walter, *Pieter Boel, 1622-1674, peintre des animaux de Louis XIV, les finis des études peintes des Gobelins* (Paris: Réunion des musées nationaux, 2001).

throughout the seventeenth century. The extremely popular Gobelins sets, the *Anciens Indes* (woven eight times between 1687 and 1730, fig. 3) and *Nouveaux Indes* (fourteen complete sets woven between 1737 and 1800), were designed from natural history illustrations made in Brazil by Frans Post (1612-1680) and Albert Eckhout (1610-1665) for the Dutch governor, Prince Johan Maurits of Nassau (1604-1679).²⁴ Yet the commemoration in tapestry of exotic beasts and peoples was not a seventeenth-century innovation. The twenty-six piece *Voyage to Calicut* (Tournai, c. 1504) was commissioned by King Manuel of Portugal (1469-1521) to advertise the success of recent Portugese expeditions (sponsored by the throne) to India and the New World, led by Vasco da Gama (1469-1524) and Pedro Álvarez Cabral (1467-1520). The *Calicut* tapestries brim with exotic beasts, including camels and giraffes (fig. 4), and served to glorify the king's new territories and the rich natural resources they contained.²⁵ Copies of the set proved greatly popular; within a few years adaptations were made for Emperor Maximilian (the *Savage Peoples and Animals* series, 1510) and for Henry VIII.

Early moderns inherited and invented a variety of symbolic and moralized meanings for animals, and these are expressed in differing degrees in monumental scenes of animal life produced in tapestry during the latter half of the sixteenth century. Lavishly designed animal tapestries featuring gold and silver thread began to be woven for princely patrons such as Sigismund II Augustus in the 1550s, precisely the same decade in which the first printed illustrated zoological encyclopedias appeared in a veritable rush of publications. Fifteen illustrated zoological treatises were published in Europe between 1551 and 1558, including translations, reflecting a burgeoning curiosity about the bodies and habits of the beasts, and a

²⁴ Bremer-David, pp. 10-19. See also Rebecca Parker Brien, "Art and Natural History at a Colonial Court: Albert Eckhout and Georg Marcgraf in Seventeenth-Century Dutch Brazil," PhD dissertation, Northwestern University, 2002.

²⁵ Lisa Jardine, *Worldly Goods* (London: Macmillan, 1996) pp. 397-399; Jardine and Jerry Brotton, *Global Interests: Renaissance Art Between East and West* (Ithaca: Cornell UP, 2000) pp. 117-119.

reconsideration of their relationship to human beings within the larger natural world.²⁶ Through anatomical dissection, early attempts at systematic taxonomy and morphology, and the revived science of physiognomy, a “similitude of body and affections” between humans and animals (as zoologist Conrad Gesner would put it) increasingly preoccupied early modern naturalists, moralists, physicians, and other humanists.²⁷ Moreover, beginning with the Dutch fable book *De warachtighe fabulen der dieren* (1567), illustrated by Marcus Gheeraerts the Elder (1516-1604), printed collections of zoological emblems and Aesopian moral tales enjoyed growing popularity through the second half of the sixteenth century.²⁸ The expanding list of affinities between man and beast caused some writers to elevate four-footed creatures as moral exemplars for man, since the basic passions could be “read” upon their unselfconscious bodies most legibly.²⁹ For other writers, suggestions of man’s bestiality posed a threat to his scripturally mandated superiority over all nature. Consequently, the later sixteenth and early seventeenth century saw intense debates over the status of animals in relation to man, beginning with Michel de Montaigne’s theriophilist writings and culminating in René Descartes’ assertion that animals are “pure

²⁶ Philippe Glardon, “Survivances médiévales et renouveau dans l’illustration zoologique du XVI siècle,” in *Micrologus* 8:2 (2000), special issue: *Il Mondo Animale (World of Animals)*, vol. 2, p. 641. Paul Delaunay, *La zoologie au XVIe siècle* (Paris: Hermann, 1962); Pierre Mesnard, “L’Horizon zoologique de la Renaissance,” in *Sciences de la Renaissance, VIIIe Congrès de Tours, 1964* (Paris: Librairie Philosophique J. Vrin, 1973) pp. 197-220; Anne Bäumer, *Zoologie der Renaissance—Renaissance der Biologie* (Frankfurt: Peter Lang Verlag, 1991).

²⁷ Conrad Gesner, “Amplissimus et magnificis viris...,” *Historia animalium... Liber I: De quadrupedibus viviparis* (Zurich 1551). Translated in Edward Topsell, “The First Epistle of Doct. Conradus Gesnerus before his History of Four-footed-Beastes, concerning the Utility of the Story,” *The Historie of Four-Footed Beasts* (London, 1607) n.p. All subsequent references to Gesner will be to this translation and edition; for an alternative translation of Gesner’s prefatory material, see the appendices to Caroline Aleid Gmelig-Nijboer, *Conrad Gessner’s “Historia animalium: An Inventory of Renaissance Zoology* (Meppel: Krips Repro B.V., 1977) pp. 143-173. See also the comparative illustration of a human skeleton and a bird skeleton drawn by Pierre Belon for the *Histoire de la nature des oiseaux* (Paris, 1555), p. 37.

²⁸ D. Geirnaert and Paul J. Smith, “Tussen fabel en emblem: *De warachtighe fabulen der dieren* (1567),” *Literatuur* 9 (1992) pp. 22-33. Paul J. Smith, “Fable and Emblem in the *Fall of Man* (1592) by Cornelius van Haarlem,” 283-4. See also Richard Barnes’ introduction to *A Moral Fable Talk*, Arthur Golding’s 1586 translation of Arnold Freitag’s *Mythologia ethica* of 1579 (San Francisco: Arion Press, 1988).

²⁹ Peter Harrison, “Reading the Passions: The Fall, the Passions, and Dominion Over Nature” in Stephen Gaukroger, ed., *The Soft Underbelly of Reason* (London: Routledge, 1998) pp. 49-78; Gail Kern Paster, “Melancholy Cats, Lugged Bears, and Early Modern Cosmology: Reading Shakespeare’s Psychological Materialism Across the Species Barrier,” in Paster, Katherine Rowe and Mary Floyd-Wilson, eds., *Reading the Early Modern Passions: Essays in the Cultural History of Emotion* (Philadelphia: University of Pennsylvania Press, 2004) p. 124.

physiology” and thus lack any moral significance.³⁰ These wide-ranging publications and practices form a necessary context for understanding how animal tapestries were perceived by their first viewers, but such literature has received scant attention in previous scholarship on the tapestries, which, while gradually moving beyond problems of style and attribution, tends to consider the tapestries’ iconography only within the context of other weavings from the period.

Though distinct disciplines, early modern moral and natural philosophy shared a number of strategies for representing, classifying, and investigating the kingdom of beasts, including scriptural exegesis, emblematics, fable and allegory, physiognomy, and, since the four humors comprised the building blocks of both man and the rest of the natural landscape, Galenic theories about the tumult of the humoral passions.³¹ A viewer of sufficient means to encounter animal tapestries at court would have approached them with some combination of these interpretive strategies. A chamber hung with massive woven scenes of wild beasts wandering through a rich forest, and featuring precious metals, such as the Wawel verdure or the Isola Bella tapestries, was designed to overwhelm viewers: in the tapestries, the fantastic anatomies of exotic animal species and the spectacular violence of animal predations loom, huge and even threatening, while the variegated foliage of the forest and underbrush are simulated in seemingly impossible detail. Unlike the somewhat humbler “greenwork” weavings produced by Flemish workshops in quantity as staple wall-hangings, such princely animal tapestries were not self-effacing

³⁰ Michel de Montaigne, *Apologie de Raimond Sebond* (1573), published in *The Complete Essays*, trans. M. A. Screech (New York and London: Penguin Books, 1993); René Descartes, *Les Passions de l’Ame* (1649), published as *The Passions of the Soul*, trans. Stephen Voss (Indianapolis: Hackett Publishing, 1989). See also George Boas, *The Happy Beast in French Thought of the Seventeenth Century* (New York: Octagon Books, 1966) and Harrison, “Descartes on Animals,” *The Philosophical Quarterly*, 42: 167 (April 1992) pp. 219-227.

³¹ In addition to Paster, op cit, see Wolfgang Harms, “On Natural History and Emblematics in the Sixteenth Century,” in Allan Ellenius, ed. *The Natural Sciences and the Arts*, Acta Universitatis Upsaliensis, Figura Nova, vol. 22 (Uppsala: Almqvist & Wiksell, 1985), pp. 67-83. On the emblematic character of zoology in the sixteenth century, see three articles by William Ashworth: “The Persistent Beast: Recurring Images in Early Zoological Illustration,” in Ellenius, ed., pp. 44-66; “Natural History and the Emblematic World View,” in *Reappraisals of the Scientific Revolution*, ed. by David C. Lindberg and Robert S. Westman (New York: Cambridge University Press, 1990) pp. 303-332; and “Emblematic Natural History of the Renaissance,” in *Cultures of Natural History*, ed. N. Jardine et al (Cambridge: Cambridge Univ. Pr., 1995) pp. 17-37.

decoration, nor mere backcloths.³² They commanded attention on account of their size and precious materials. Moreover, the complete absence of human figures in such tapestries demanded some interpretive work from the viewer. In this respect, animal tapestries provide a reminder of the need for renewed consideration of Renaissance tapestry's intellectual and social context. This study draws upon a broad range of sources, including early modern zoological and botanical publications, religious commentaries and treatises on moral philosophy, literary works, representations of animals in a variety of pictorial media, and several forms of courtly spectacle, all of which arguably have something to tell us about the reception of princely animal tapestries by their first viewers.

The three tapestry series discussed here form a coherent group for several reasons. First, they represent the finest surviving Flemish sets featuring zoological imagery created during the third quarter of the sixteenth century, concurrent with the publication of the first illustrated zoological treatises and with a growing vogue for natural history patronage at princely courts. Moreover, together these three sets demonstrate how the pursuit of natural history was understood in the period as a multifaceted endeavor. Certainly, it was inextricable from activities we regard as scientific, such as assembling, cataloguing, and classifying natural objects. Yet, as the Wawel tapestry collection most explicitly reveals, pursuing natural history was also seen as biblically mandated work, as a vehicle for salvation. For many patrons, including Cosimo I de' Medici, patronage of natural history also seems to have represented an opportunity for aesthetic enjoyment, for the demonstration of taste, and for political self-aggrandizement. Cosimo's *spalliere a grottesche* little resemble the lush forests depicted in King Sigismund's tapestries at Wawel. If the *spalliere* arguably reflect the naturalist's fascination with the finely

³² For examples, see Ingrid De Meûter, Martine Vanwelden et al, *Tapisseries d'Audenarde du XVIe au XVIIIe siècle* (Tielt: Lannoo, 1999) and David Franses and Simon Franses, *Giant Leaf Tapestries of the Renaissance 1500-1600: Inaugural Exhibition 21st October - 25th November, 2005* (London: S. Franses, 2005).

crafted and the miniature, isolating and displaying zoological minutiae in ornate aquaria and gilt cages, the Wawel tapestries function on a very different principle: they subsumed the palace interiors they occupied, simulating a complete natural landscape with its rich diversity of species and its connection to the occult. Yet both tapestry cycles represent the deployment of the imagery of natural history in a courtly context. In the case of the slightly later *Isola Bella* tapestries, the scrutiny of nature served as an analogy for scrutiny of the self; the *Isola Bella* verdure arguably represent a uniquely early modern search for moral guidance in the natural landscape.

While I have taken into account the historical background and political exigencies of the first courts these three tapestry sets adorned (insofar as the original patrons and dates are known), I have not restricted my discussion to these courts. The vast majority of high-quality weavings produced by sixteenth-century Flemish workshops were created for export, and all were designed to be “legible” across the European continent. Tapestry in its golden age was a princely commodity with an international market: materials were imported to the Southern Netherlands from across the continent, production was financed by bankers and speculators of various nationalities, and the completed weavings were transported to courts as far away as Italy, Spain, even Constantinople. Emissaries traveling between Madrid and London, or between Budapest and Cracow, would have recognized the same narratives, even the same weavers’ marks, in the Flemish tapestries inevitably displayed inside royal halls. This pan-European legibility and circulability, which has led historians such as Lisa Jardine to regard the medium as a form of exchangeable currency between courts, was not unique to tapestry but characterized many other luxury objects produced for wealthy patrons, such as portrait medals, bronzes, musical

instruments, and elaborately wrought parade armor and weaponry as well.³³ Analyzing the Medici, Wawel and Isola Bella series in these terms allows us then to ask: what uses might princely courts have had for the carefully speciated animals depicted in the tapestries? Why were such carefully observed beasts – turtles and eels, finches and falcons, exotic specimens from the New World, corals and insects, unicorns and panthers – painstakingly rendered in silk and precious metal threads, and considered appropriate decoration for courtly ceremonies?

The answer is, not surprisingly, different for each tapestry commission. For Cosimo I, highly naturalistic images of marine creatures – images that resembled a form of illustration just emerging in printed zoological monographs of the 1550s, a form which would come to be readily recognizable as “scientific” – showcased his status as a collector and his erudition. They also provided visual evidence of the skill of the grand duke’s newly established tapestry workshops in Florence. With his tapestry purchases of the late 1540s and 1550s, the Polish king Sigismund Augustus was bidding for membership in an elite circle of European rulers who, in emulation of the Habsburg court, advertised their authority and means through the display of magnificent Flemish weavings. Since, at the same time, many such elites signaled both their piety and their erudition through patronage of natural history in the form of gardens, collections of rarities, or sponsorship of lavish treatises and encyclopedias, Sigismund’s zoological tapestries can be understood as his conflation of these two areas of patronage into one massive purchase and one medium. Sigismund’s tapestries give splendid pictorial form to the familiar Old Testament narrative of the garden, ark, tower and temple – that is, the preeminent framework for the pursuit of natural history in early modern Europe. Finally, though less is known about the circumstances surrounding the production and original purchase of the Isola Bella tapestries, the series’

³³ Jardine, *Worldly Goods*, esp. pp. 379-424; Marina Belozerskaya, *Luxury Arts of the Renaissance* (Los Angeles: J. Paul Getty Museum, 2005) p. 4.

association with several prominent ecclesiastical patrons in the sixteenth and seventeenth centuries provides an excellent opportunity to consider how the passions – imagined as wild beasts – provided a link between moral and natural philosophy in the period.

Thus, by positioning three quite different sets of animal tapestries produced in the latter half of the sixteenth century within the broad contexts of early modern science and of visual culture, this dissertation brings to light a previously unacknowledged form of natural history patronage at early modern courts. This study also attempts to shed new light upon the uses of monumental zoological imagery within a courtly setting, a question that is often hastily dispensed with by art historians with an allusion to a patron's enthusiasm for the hunt. Before taking up, as the subject of the first chapter, the *spalliere a grottesche* commissioned by Cosimo I de' Medici, I provide a general introduction to early modern tapestry, including its mode of production and its forms of appreciation in the period, since the medium is frequently marginalized within art historical scholarship and left out of scholarship on early modern natural history illustration entirely.

A tapestry is made by wrapping colored weft threads around undyed warp threads which have been strung parallel on a loom (figs. 5-6). In this way, the image visible in a tapestry is integral to the weave, rather than applied (as in embroidery) to the surface of a length of fabric. Generally, the more warp threads per inch, the denser the weave, and the finer a tapestry's pictorial detail.

In the Renaissance, a series or chamber of tapestries began with sketches, produced either by an artist specializing in tapestry design, or perhaps by a painter already in the employ of the commissioning patron. These sketches were enlarged and transferred to sheets of paper that had been glued together to create a full-sized color cartoon. The cartoon then would be cut into long strips and laid beneath the loom near the feet of the weavers, who (looking down, for example, through a low warp loom at the cartoon) would replicate the painted image in innumerable small knots to form a tapestry. Figure 7 demonstrates how delicately Flemish weavers could represent variations of texture and color – the winter stubble of distant wheat fields, brass fittings on a harness, the individual tufts of an ostrich plume – compared to the rather cursory information initially provided by the designer. Three or four weavers could sit together at one low-warp loom and, working only during daylight, each man might complete just eight square meters in a year. Wool and silk are the traditional materials for tapestry, but the finest examples also feature copious amounts of gold and silver thread.

Thus tapestry is exceptionally expensive and time-consuming to produce. (“To tell the truth, this is an extremely slow applied art,” confessed Cardinal Guido Bentivoglio, papal nuncio to the Spanish Netherlands in 1610, “[E]nough to make the most impatient man in the world

phlegmatic. An art extremely appropriate to Flemish phlegm!”)³⁴ Because they consumed extraordinary time and effort and required exorbitant sums, tapestries were valued more highly than many other pictorial media, and were ubiquitous features of European court life from the fifteenth century through much of the eighteenth century. They were not merely backcloths for court pageants; on the contrary, tapestries were scrutinized as a direct index of a patron’s power and means. Political authority in the sixteenth century, Lisa Jardine and Jerry Brotton have observed, “was increasingly measured through the conspicuous purchasing power required to commission, transport and repeatedly display massive, visually overpowering tapestry cycles.”³⁵ Minor nobility and wealthy merchants also purchased tapestries, of course, but generally of inferior weave and on a smaller scale than princes and magnates. This dissertation will be concerned with the highest quality Flemish weavings and their function in a courtly setting.

Because they could be rolled up and borne in wagons, tapestries served as large-scale, portable environments for itinerant courts. They served as lavish temporary decoration for feasts, and as winter gardens during long months spent indoors. Historian Gilbert Gadoffre grasped the function and ubiquity of tapestries in sixteenth-century court life. To modern eyes, he observed, the massive quantity of weavings in a typical princely wardrobe

might seem stupefying, if one did not understand the role they played in the life of a king who was constantly displaced, accompanied by a great number of tapestries which would be unceasingly packed into coffers, unrolled, hung, and repacked again. They represented permanent decoration in an existence of chronic instability.³⁶

³⁴ Quoted in Guy Delmarcel, *Flemish Tapestry*, p. 18.

³⁵ Lisa Jardine and Jerry Brotton, *Global Interests: Renaissance Art Between East and West* (University of Chicago Press, 2005) p. 70

³⁶ Gilbert Gadoffre, *La révolution culturelle dans la France des humanistes: Guillaume Budé et François Ier* (Geneva: Librairie Droz S. A., 1991) p. 245.

The display of woven tapestries signified the presence of the court itself. One imagines a prince reassured once another bare and foreign hall had been transformed with familiar woven scenes of ancient rulers or the hunt. His subjects and visitors, too, would not have felt the same respect for his authority until the requisite backdrop of magnificent weavings had been erected around his person. Indeed, it is the medium's uniquely portable *grandezza* that Giorgio Vasari singled out for special praise in his preface to the *Lives of the Painters, Sculptors and Architects* (1568): "that most beautiful invention, woven tapestries, that are both convenient and magnificent, being able to carry painting into every place, whether savage or civilized."³⁷

The finest sixteenth-century tapestries were produced by Flemish workshops for such patrons as Henry VIII of England; Francis I of France; Pope Leo X; prominent Italian families such as the Medici, Este, and Gonzaga; many German and Central European princes; and of course innumerable members of the Habsburg family. The education of princes and allegories of wise rule were perennially popular themes, though tapestries illustrated many subjects and their designs could be adapted from a variety sources, including altarpieces, prints, and other tapestries.³⁸ Workshops retained and reused the models for the tapestries they wove, unless a patron, wishing to secure exclusive ownership of a series, purchased the cartoons.

Recent scholarship on tapestry patronage and production during the Renaissance highlights the medium's supremacy, in terms of cost and popular esteem, over every other pictorial art form, including fresco, panel painting, and sculpture. Early modern inventories, which often list objects in descending order according to their value, routinely place tapestries at

³⁷ Vasari, *Lives of the Painters, Sculptors and Architects*, trans. Gaston du C. de Vere, 2 vols. (New York and Toronto: Alfred A. Knopf, 1996), vol. 1, p. 17.

³⁸ See for example Elizabeth Cleland, "More than Woven Paintings: The Reappearance of Rogier van der Weyden's Designs in Tapestry," PhD dissertation, Courtauld Institute of Art, 2003.

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or near the top among jewels, gold, and silver.³⁹ “Give a painter a few yards of linen,” as art historian Jonathan Brown put it, “a pot of glue, some cheap home-made pigments and a brush or two, and in a few hours or days, you could have a picture. To produce a tapestry required miles of thread, a team of skilled workers, a large site for production and months if not years of labor.”⁴⁰

However, it is often difficult for modern viewers to appreciate these large and often faded woven pictures with the same excitement and awe experienced by sixteenth-century viewers. First, tapestries physically transformed the halls they occupied. The finest sets were hung only for special occasions, marking out ceremonial and festive spaces within the familiar interior of a palace or cathedral (fig. 8). Engravings by Frédéric Brentel (1580-1651) of the funeral and lying-in-state of Charles, third duke of Lorraine (figs. 9-10) depict the interior of the same room on two occasions (different wall hangings were chosen for each). On both occasions, enormous tapestries dominate the great room, dwarfing the mourners and even augmenting their number: in *The Deathbed* (fig. 9), ecclesiastical figures depicted on the immense tapestry on the right appear to mingle with the real monks and courtiers in attendance.

Though massive in size and laden with silver and gold threads, tapestries swelled and buckled with the stirring of air in crowded rooms (fig. 11).⁴¹ Torchlight enhanced their glittering surfaces and lent an illusion of motion to the figures and scenes they depicted. Tapestries might conceal or frame windows, balustrades, and doors, radically changing the acoustics of a chamber and insulating it from outside noise, cold, and light. Indeed, at least one architect, Philibert de L’Orme (1510-1570), remarked on the futility of designing ornate features for palace interiors, as

³⁹ Guy Delmarcel, p. 17.

⁴⁰ Jonathan Brown, *Kings and Connoisseurs: Collecting Art in Seventeenth-Century Europe* (Princeton, N.J.: Princeton UP, 1995) pp. 228-9.

⁴¹ Belozerskaya p. 95.

they would be completely covered by tapestries anyway.⁴² Moreover, candles made the
sixteenth-century viewer's experience of tapestries quite unlike our experience today: after
sunset the upper portions would have remained engulfed in darkness, while the flicker of many
small flames animated the faces of goddesses, warriors, and the paler silk of foliage, water, and
sky. Displayed in complete sets, tapestries surrounded – indeed, enveloped – their viewers,
offering a 360-degree simulation of a battlefield, a sea voyage, a hunt, or even the passing of
months through the calendar year. Animal-themed tapestries were no less imposing. Woven
forests full of predators like those at the Borromean palace of Isola Bella, which feature both
minute botanical detail and broad expanse, would have appeared splendid by day and
mysterious, if not rather frightening, at night (fig. 107).

A written account of Sigismund Augustus' Old Testament tapestries reveals the
impression a grand tapestry cycle could make on viewers. A courtier who attended the king's
third wedding in 1553, at which his *Story of Noah* tapestries (among others) were displayed,
described the overwhelming impact upon viewers made by the massive weaving depicting the
Flood (fig. 60):

[O]ne could see the heavenly barriers breaking and the skies let loose, the storm with the violent
lightning and thunder. From fear the whole impious generation fell to the ground; one could see
the disgraceful flight of Cain's offspring, testifying to their sinful conscience. How some of them
are climbing trees as the waters rise, how others are clinging to high rocks, how others still are
fleeing to the high mountains. This wall hanging was so full of confusion and so frightened the

⁴² Thomas P. Campbell, *Tapestry in the Renaissance: Art and Magnificence* (New York: Metropolitan Museum of Art and New Haven: Yale UP, 2002) p. 271; Edith Standen, "Tapestries in Use: Indoors," *Apollo* 114:233 (July 1981) pp. 12-13.

viewer that he himself, afraid of such a terrible view, feared the Deluge for himself and thought of an ark.⁴³

The scale and visual power of the medium made it almost a kind of spectacle, which could clearly be marshaled for didactic purposes. “Contemporaries were trained to perceive tapestries as a world into which they were summoned as participants,” Marina Belozerskaya has observed, and this summoning took several forms.⁴⁴ Raphael’s designs for the *Acts of the Apostles* tapestries for the Sistine Chapel (c. 1516, fig. 12) mark the introduction of recently developed painterly techniques of pictorial illusion into tapestry: three-dimensional modeling, unified perspective, and careful attention to anatomy heightened the immediacy of woven scenes. A viewer’s entry into the fictional world of a tapestry might also be guided by inscriptions. Belozerskaya cites directions woven into *Landing off the Cape of Carthage*, one of the *Conquest of Tunis* tapestries completed for Charles V in 1551: “One has to imagine that one looks from the fleet, which is coasting from the port of Farno to its anchorage at the Cape of Carthage, with the north to the side, over the left shoulder.”⁴⁵ Tapestry inscriptions might also summon their viewers through direct address of another, moralized kind. The *Isola Bella* tapestries, for example, visually position the viewer low in the foreground brush among a variety of creeping animals. An inscription on one of these tapestries reads, “God put the fear of man in all living beings, and gave him dominion over beasts and birds. Man, look and see what benefit you have received” (fig. 107). The viewer is commanded to look and reflect on the teeming natural world over which man was granted mastery.

⁴³ Stanisław Orzechowski (1513-1566), *Panegyricus nuptiarum Sigismundi Augusti Poloniae Regis* (Cracow 1553), translated in full in Jerzy Szablowski, ed., *The Flemish Arrases, Royal Castle in Cracow* (Antwerp: Fonds Mercator and Warsaw: Arkady, 1994) pp. 43-50.

⁴⁴ Belozerskaya p. 92.

⁴⁵ Belozerskaya p. 92.

When a patron purchased a set of tapestries, he acquired not a series of two-dimensional pictures but a complete artificial environment. In the case of royal patronage, the tapestry environment was designed to optimally frame the patron's own person and activities, a kind of portable backdrop which articulated his status through scale, expensive materials, and carefully chosen iconography. For example, the emperor Charles V selected an eight-piece set illustrating the *Story of Gideon* as the backdrop for his abdication ceremony in 1555 in Brussels; the set, now lost, had been created for Philip the Good, Duke of Burgundy, a century before. It was the best known and most opulent art work commissioned by Charles' forebears. Measuring almost one hundred square meters, the *Gideon* tapestries dwarfed their audience as they extolled Habsburg rule; both the provenance and iconography of the set (the biblical figure of Gideon was a conqueror and wise ruler of the Israelites) announced the success of Charles' reign.⁴⁶

Tapestry's aura of magnificence was perhaps most potent in an enclosed room, dwarfing the inhabitants, (fig. 13), but sixteenth-century rulers also deployed great quantities of fine weavings to advertise their power across spaces as wide as a city or battlefield. For an important procession such as a joyful entry or the observance of a religious feast, the streets would be lined with tapestries and precious textiles of all kinds, suspended from windows and balconies, covering fences and the facades of buildings (fig. 14). For Charles V's visit to London in 1520, for example, not only the interiors of English palaces but "all the stretes were richely hanged with clothes of golde, silver, velvet and Arras."⁴⁷

Elite patrons' appreciation of tapestry included a sophisticated technical understanding of the materials and weave. In February of 1548, Mary of Austria, the sister of Charles V, finalized a contract with Brussels weaver Willem de Pannemaker for a twelve-piece set illustrating the

⁴⁶ Belozerskaya pp. 100-102.

⁴⁷ Campbell pp. 263-4; see also Standen, "Tapestries In Use: Outdoors," *Apollo* 114:233 (July 1981) pp. 16-19.

Conquest of Tunis (Patrimonio Nacional, Madrid). Her stipulations reveal the primary function of tapestry as a signifier of wealth, and anticipate a very high level of connoisseurship on the part of viewers of the *Conquest of Tunis*:

The warp of each of the said tapestries is to be made from the best and finest Lyons thread that is manufactured there, and if possible to make a finer selection still, whatever the cost... Not to economize on the said Granada silks for the said tapestries, or any color whatsoever, which is needed. For the borders, when the pattern specifies that gold or silver thread should be used, the said gold or silver thread should be used together with a silk thread, then two other layers of silk should be applied, before getting to the fine sayette. And as for the figures, landscapes, trees, and greenery, here also in the same way, after the gold or silver thread, two, three, four or five different silks should be used before getting to the said sayette.

To account carefully for the silver and gold thread which her Majesty will provide, and to use that and no other in the said tapestry, and not to economize on silver and gold thread in any way unless absolutely necessary.⁴⁸

Tapestry was not only greatly esteemed in early modern courts, it was omnipresent. Members of a courtly audience could expertly evaluate the quantity of precious metal used in a weaving as well as its representational naturalism. Moreover, new contracts between patrons and weavers would sometimes cite an earlier series by name, as an exemplar of quality; in this way, princely patrons vied with each other to acquire the finest woven monuments. For example, in 1562, Philip II of Spain stipulated that the second set of *Story of Noah* tapestries he ordered from weaver Willem de Pannemaker must include gold and silver thread “of the same (or better)

⁴⁸ Hendrik J. Horn, *Jan Corneliusz Vermeyen, Painter of Charles V and His Conquest of Tunis: Paintings, Etchings, Drawings, Cartoons and Tapestries*, 2 vols. (Doornspijk: Davaco, 1989) vol. 2, p. 348. “Sayette” indicates a mixed thread of silk and cotton.

quality as that used in the *Vertumnus and Pomona* tapestries which Mary of Hungary had recently bought from Antwerp merchant Geroges Vezeleer.”⁴⁹

Tapestries were displayed and exchanged as markers of wealth, political power and ambition by every European monarch of the sixteenth century, as well as the courtiers and clergy who could afford to do so.⁵⁰ As a result, at its height in the mid-sixteenth century, the tapestry industry was an international network of merchant-weavers, with production centered in the city of Brussels and to a lesser extent Antwerp. The Habsburgs cultivated and protected the growth of workshops in Flanders in the early years of the sixteenth century, as they themselves amassed great collections of tapestries in emulation of the legendary opulence of the fifteenth-century Burgundian court. By the 1530s, a few Brussels workshops dominated the narrow but lucrative European market for very fine tapestries, including those run by the Van Aelst, Ghiteels, Kempeneer, Pannemaker, and Dermoyen families. Yet Flemish weaving centers also produced great numbers of readymade hangings to be sold “off the rack.” Tapestry weaving was truly an industry in the modern sense, and the *Tapissierspand* or Tapestry-Makers Hall in Antwerp, opened in 1554, was the center of a far-reaching trading and financing network (fig. 15). In the mid-1540s, an estimated fifteen thousand residents of Brussels, or one third of the city’s population, were employed in the production of tapestries.⁵¹ Their products, whose borders featured the prestigious quality sign “BB” (for “Brabant Brussels,” following a 1528 city ordinance), were exported to courts all around the continent, even as some noble patrons attempted to establish competing manufactories in Paris, Florence, Mantua, and other cities. Because the industry was so important to the economy of the Southern Netherlands, it was

⁴⁹ Iain Buchanan, “The Contract for King Philip II’s Tapestries of the ‘History of Noah,’” *Burlington Magazine* 148:1239 (June 2006) p. 409.

⁵⁰ Wolfgang Brassat, *Tapissieren und Politik: Funktionen, Kontexte, und Rezeption eines repräsentativen Mediums* (Berlin: Mann, 1992) pp. 82-95.

⁵¹ Campbell p. 279.

closely regulated. To protect the quality and reputation of Brussels' most famous export, and to ensure fair competition among the major workshops, detailed laws governed the apprenticeships, pay, and working hours of the weavers.⁵² Severe fines were levied and the threat of banishment was raised against weavers who enhanced their tapestries with the application of paint.⁵³ Brussels and its environs continued to serve as the center of tapestry production until the Spanish Fury of 1576 destroyed the *Tapissierspand* and prompted the emigration of many Flemish weavers.⁵⁴

Tapestry series produced for royal patrons routinely cost as much as a battleship or the construction of a church.⁵⁵ Consequently, financing their production was a formidable undertaking, particularly for patrons whose coffers were strained by almost constant war. Banking families such as the Medici and the Fuggers maintained agents in the Southern Netherlands to procure tapestries for resale and to loan princely patrons the funds required to pay for their commissions. Running one of Brussels' major tapestry workshops required not only mastery of the art of weaving but a combination of talents as an entrepreneur, manager, and merchant. To undertake a new commission required a tremendous initial outlay of funds on the part of the workshop, not only for materials but for the designs and cartoons. Once a newly woven series had been inspected by a committee of local weavers and approved by the patron's agent, delivering it might require careful transport across hundreds of miles. In some cases weavers were amply rewarded for their efforts; the emperor Charles V granted Willem de Pannemaker a lifetime annual pension of two hundred Flemish pounds upon the delivery of the *Conquest of Tunis* tapestries in 1554, over and above the stupendous cost of the weavings, whose

⁵² For the 1528 mandate and other laws governing the weaving industry in sixteenth-century Flemish cities, see Alphonse Wauters, *Les Tapisseries Bruxellois* (Brussels 1878) pp. 125-158.

⁵³ Wauters pp. 133-140.

⁵⁴ Guy Delmarcel, ed., *Flemish Tapestry Weavers Abroad: Emigration and the Founding of Manufactories in Europe* (Leuven: KUL, 2002).

⁵⁵ Belozerskaya p. 109.

silk and metallic threads alone cost an estimated 8,500 Flemish pounds.⁵⁶ Other royal patrons were not so forthcoming; surviving correspondence between merchant-weavers and patrons in this period includes frequent pleas for payments long delayed.

If purchasing a set of princely tapestries was invariably an international cooperative effort, the weaving of a tapestry likewise required money, people, and resources from around Europe. Silks came to Flemish workshops from Tuscany, wool from England and Spain, and gold and silver thread from Venice.⁵⁷ The better known the artist engaged to provide the cartoons, the more likely the work would be delegated among many assistants in his workshop. The looms might be manned by as many as ten or twelve weavers. At every stage, the patron(s) and his or her agents might intercept progress and call for changes to the designs.

All of the highly dispersed and heavily delegated activity required to produce a princely tapestry cycle had to be carefully coordinated by the patron and his or her agents. Moreover, as a luxury export product, Flemish tapestry cycles were designed to be universally legible at disparate courts across Europe. Jardine and Brotton have argued that, by the middle of the sixteenth century, Flemish tapestries were so universally understood to signify power and magnificence (even among non-European rulers) that they constituted a form of internationally recognized coin in their own right, a “global currency in the transacting of cultural and imperial identity.”⁵⁸ As suggested in the Introduction, I have followed Jardine and Brotton and numerous tapestry scholars in approaching Flemish tapestries as art works designed to be legible to an international and humanist-educated audience in a variety of far-flung courts. This, and the fact that all three of the tapestry sets I discuss were likely woven within the relatively short span of

⁵⁶ Horn, doc. 4, pp. 348-351 and doc. 12, p. 360; Belozerskaya p. 97.

⁵⁷ Belozerskaya p. 121.

⁵⁸ Jardine and Brotton, *Global Interests*, pp. 63, 118-9.

fifteen or twenty years in the middle of the sixteenth century, make it possible to attempt a discussion of patronage at three different European courts within a single dissertation.

CHAPTER ONE

“THE WHOLE FASHIONED WITH SUCH GREAT ARTIFICE”:

NATURALIA AND CONNOISSEURSHIP IN THE MEDICI *SPALLIERE A GROTTESCHE* (1545-1553)

Among the natural curiosities housed in the *guardaroba* of grand duke Cosimo I de' Medici (1519-1574) were the delicate skeletons of tiny animals, including the bones of fish, mounted in gold and silver. Such hybrid objects, combining naturalia like bits of bone, horn, or shell with carved gems and highly wrought metals, implicitly celebrated the exquisite workmanship to be found in nature's lowliest creatures. They were staple components of medieval church treasuries and later of sixteenth-century princely collections, incorporating natural minutiae from the sea such as shark's teeth, coral, and nautilus shells, and blurring the boundaries between divine Creation and human artifice.⁵⁹ Similarly, in illustrated zoological publications of the 1550s, naturalists such as Guillaume Rondelet and Conrad Gesner invited their noble readers to participate in natural history by approaching nature's great variety of small animals as connoisseurs, in search of ingenuity of design, exemplary craftsmanship, and precious materials.

This chapter takes up a puzzling set of tapestries commissioned by Cosimo I in precisely the same years, a series of ten elaborate grotesques that feature strangely scientific images of fish. By placing the tapestries within an early modern discourse that cast nature as an artisan, the chapter attempts to make sense of their zoological imagery and to demonstrate that chambers of tapestry, like cabinets of rarities and illuminated albums of natural minutiae, could function as courtly theaters of nature.

⁵⁹ Daston and Park pp. 272-3; Martin Kemp, “‘Wrought by No Artist's Hand’: The Natural, the Artificial, the Exotic, and the Scientific in Some Artifacts from the Renaissance,” *Reframing the Renaissance* pp. 176-196.

In May of 1540, three years after assuming control of the city's government, Cosimo I de'Medici moved his expanding household, including his new wife Eleanor of Toledo and her retinue, into the Palazzo della Signoria, the largest palace in Florence.⁶⁰ The duke immediately began an ambitious refurbishment of the palace's rooms. Though in poor condition, the building would be reshaped to house a splendid court on the imperial Habsburg model. It also would provide Cosimo with significant symbolic power, for the palace had been constructed as the seat of the city's government.

Within the palace, the Sala dell'Udienza or Audience Hall had long served as the place where justice was administered in the city. Records reveal that Cosimo I also hosted banquets there.⁶¹ He enlisted Francesco Salviati (1510-1563) to fresco the hall with scenes of Roman statesman Marcus Furius Camillus. To further enhance the sumptuous impression the room made on visitors, Cosimo commissioned a set of ten grotesque tapestries (known today as the *spalliere a grottesche*) to fully enclose the great room, covering Salviati's frescoed dado to a height of approximately two meters (fig. 16).⁶²

The tapestries depict a complicated scaffolding of masks, hybrid creatures, baldachins, drapery, swags of fruit and flowers, puffing censers, animals, birds, and insects against a bright gold ground (figs. 17-26). They were designed by Francesco Ubertini, called Bachiacca (1494-

⁶⁰ Candace Adelson, "The Tapestry Patronage of Cosimo I de'Medici," 2 vols., PhD dissertation, New York University, 1990, pp. 13-18. After Cosimo relocated his court again, to the Palazzo Pitti (purchased by Eleanor of Toledo in 1549), the Palazzo della Signoria was renamed the Palazzo Vecchio, or "old palace."

⁶¹ Adelson p. 46-8.

⁶² *Spalliera* denotes a horizontal wall-hanging (one wider than it is tall). *Spalliere* were originally provided for the comfort of guests around a banquet table: when they leaned back against the wall, their shoulders (Italian *spalle*) touched the cloth. It seems unlikely, however, that the Medici grotesques were used so roughly. See Peter Thornton, *The Italian Renaissance Interior* (New York: Harry Abrams, 1991) p. 48. See Lucia Meoni, "Charity," catalog entry in Campbell, p. 514, and Meoni, *Gli arazzi nei musei fiorentini: La collezione medicea. Catalogo completo. Vol. I: La manifattura da Cosimo I a Cosimo II (1545-1621)* (Livorno: Sillabe, 1998) for a complete bibliography on the *spalliere a grottesche*.

1557), possibly following a comprehensive design for the room laid down by Salviati. To a limited extent, the *spalliere* echo Salviati's heroic frescoes above: the colors are complementary, and motifs such as rams' heads and sphinxes appear in both the frescoes and the weavings.⁶³ Cosimo, eager to invoke his illustrious Medici forebears, may have demanded a unified scheme similar to the Sala di Constantino at the Vatican, whose decorative program similarly combined frescoes and grotesque tapestries replete with animal imagery, created for Pope Leo X by the workshop of Raphael.⁶⁴ Bachiacca was apparently selected as the designer of the *spalliere* because of his reputation as a skilled animal painter.⁶⁵

The *spalliere* were not woven in Brussels but in Florence, in the duke's own newly-founded tapestry workshops, between 1546 and 1553. Cosimo spent the first half of the 1540s transforming the interior of the Palazzo della Signoria into a celebration of his renewal of the Florentine state in painting, sculpture, stained glass, and other media. To match the splendor of contemporary courts elsewhere in Europe, however, his palace required tapestries more precious than those he had inherited or previously purchased, with iconography developed for the glorification of his rule and bloodline.⁶⁶ (In the 1530s and 1540s, the Habsburg court had established itself as a model of magnificence through the commission and display of spectacular tapestry series.⁶⁷ Two of the three tapestry series discussed in this dissertation, Cosimo's grotesques and the large collection of weavings purchased by the Polish king Sigismund II Augustus in the late 1540s and 1550s, represent efforts to emulate Habsburg splendor.) At the suggestion of a local silk merchant, the grand duke invited Flemish émigrés Jan Rost and Nicolas

⁶³ Adelson p. 243.

⁶⁴ Adelson pp. 255-262. Salviati would have seen the pope's grotesque tapestries during his visit to Rome in the early 1540s.

⁶⁵ Adelson p. 259.

⁶⁶ Campbell p. 493

⁶⁷ Jardine and Brotton, *Global Interests*, pp. 63-131.

Karcher to establish their own competing workshops in the sculpture garden at San Marco, which already housed a collection of antiquities and had previously served as a school for artists (including the young Michelangelo).⁶⁸ The enterprise promised to be profitable; it was hoped that Florence, “so full of fine talents,” might eventually supply many other Italian courts with tapestries that “would not cost more than those of Flanders but would be just as perfect in design, which each man might take on most willingly.”⁶⁹ Both Rost’s and Karcher’s workshops participated in the weaving of the *spalliere*, which were among the first products of the ducal workshops in Florence.⁷⁰

The *spalliere a grottesche* were woven primarily of delicate silk and were only intended for rare display: sixteenth- and seventeenth-century Medici inventories almost invariably locate them in storage.⁷¹ It was not unusual for fine tapestry sets to remain packed away for months and even years at a stretch. Though the medium’s appeal derived in part from its portability and adaptability to a variety of spaces, the finest weavings were usually made to measure for specific rooms and hung only on special feasts and occasions. (Tapestries could become legendary without being seen. As with works of art in other media, the value of a tapestry series was perhaps enhanced through the imposition of a kind of artificial scarcity.) The Medici *spalliere* demonstrate how carefully the period’s finest weavings could be designed to occupy a specific space. Their borders are narrow, purely functional dark bands, which protect the pictorial center and are designed to be turned under when the weavings are hung end to end, so that the design

⁶⁸ Campbell p. 494-5.

⁶⁹ Letter from Florentine silk merchant Bernardo Saliti to Cosimo’s ambassador Bongianni Gianfigliuzzi, April 1, 1545. Quoted in Adelson, p. 24-25, 499-501; English translation in Campbell p. 494.

⁷⁰ Rost’s workshop proved more successful than that headed by Karcher, who departed for Mantua in 1554, leaving his atelier and looms to be run by Italian weavers whom he had trained. From 1555 until Cosimo’s death in 1574, under the supervision of Giorgio Vasari (1511-1574), the Medici tapestry workshops produced many chambers of tapestry of varying quality, primarily for the decoration of the Palazzo Vecchio, though a few commissions were completed for other patrons. Although the Medici tapestry workshops continued to function until the mid-eighteenth century, they never proved to be the lucrative transplanted luxury goods industry that Cosimo I had envisioned.

⁷¹ Adelson p. 172.

continues uninterrupted around the room. In this way, the half-baldachins sheltering putti at either end of the larger *spalliere* come together to form symmetrical wholes (figs. 17-21 and 26).⁷² The *spalliere* are of unequal widths, but they accommodate exactly the placement of doorways in the Audience Hall.⁷³

The term “grotesque” refers in this case to the tapestries’ format and eclectic iconography. At the turn of the sixteenth century, the rediscovery of antique wall decoration at the Domus Aurea in Rome and other archeological sites had inspired new interpretations of classical grotesque ornament, most notably in Raphael’s decoration for the Vatican Loggia (1518-19) and the designs realized by his students at the Villa Madama in Rome (1525).⁷⁴ In tapestry no less than in wall painting and prints, the compartmentalized fantastic imagery of the “grotesque” became desirable, both for tapestries’ central panels (for example, a seven-piece *Triumphs of the Gods* designed around 1520 by Giovanni da Udine, of which editions were made for Pope Leo X, Henry VIII, and other princely patrons) and for tapestry borders (as in the entire tapestry collection produced for Polish king Sigismund II Augustus’ Wawel castle, c.1550-1560, with borders based upon the designs of Cornelius Floris and Cornelius Bos). Cosimo’s *spalliere a grottesche* are early examples of what shortly became a popular tapestry genre.

Despite its popularity, the grotesque has proved quite difficult to define. The classical grotesque was revived in the sixteenth century in the context of large-scale decorative programs, encompassing walls, ceilings, whole galleries in Italian palaces. Yet no matter how large the decorative scheme, a grotesque remains, in some sense, a composite of miniatures. A grotesque

⁷² Adelson pp. 240-3. Adelson points out that the *spalliere* may have had self-fringes around all four sides, further enhancing their impression of opulence.

⁷³ Adelson p. 207 and 868-871, figs. 140-145.

⁷⁴ N. Dacos, *La Découverte de la Domus Aurea et la formation des grotesques à la Renaissance* (London: Studies of the Warburg Institute v. XXI, and Leiden: E. J. Brill, 1969). See also Andre Chastel, *La Grottesque. Essai sur “l’ornement sans nom”* (Paris: Le Promeneur, 1988).

program is designed to astonish with its surfeit of distracting detail – lush fruits, hieroglyphs, wreaths, swags, candelabra, disembodied heads, musical instruments, weaponry – but at the same time, the importance of any one of these elements is minimized by the overpowering grid-like structure of the whole. The heterogeneous imagery of the grotesque, whether zoological and botanical or mythological, is usually segmented into discrete compartments, firmly contained within boxes or frames. Individual objects are juxtaposed to highlight contrasts of texture, or extremes of scale. Populated with many sorts of hybrid creatures, the grotesque clearly reveals a fascination with the monstrous.⁷⁵ Qualities such as these make the Renaissance grotesque, as Philippe Morel has observed, kin to the princely natural history collection.⁷⁶

The iconography of the grotesque *spalliere* remains unique and somewhat mysterious. While some of the imagery seems to allude to the Medici family (a goat for Cosimo's ascendant sign of Capricorn, and personifications of the virtues he ostensibly possessed), the *spalliere* do not form a composite portrait of their patron.⁷⁷ Their overarching themes appear to be more general: splendor and caprice.

⁷⁵ J. Baltrušaitis, *Réveils et prodiges. Les metamorphoses du gothique* (Paris: A. Colin, 1960).

⁷⁶ Philippe Morel, *Les Grotesques. Les figures de l'imaginaire dans la peinture italienne de la fin de la Renaissance* (Paris: Flammarion, 1997).

⁷⁷ Meoni in Campbell pp. 514-5.

Bachiacca's tapestry designs could have resulted in visual chaos, for the Audience Hall assignment was a challenging one. Due to the odd placement of doorways in the room, all of the *spalliere* had to be different sizes. Furthermore, each tapestry features its own singular menagerie of motifs, from porcupines to insects to hoofed satyrs. Yet the artist made sure that a calculated balance of idiosyncrasy and repetition creates visual harmony throughout the ten tapestries. Putti taking shelter beneath ornate canopies, certain large reclining mammals, and spherical aquaria (framed like monstrances) reappear in many of the tapestries. Each *spalliera* contains many unique creatures and forms, but most share the same basic composition: they are anchored in the center by a substantial medallion or baldachin that is tightly surrounded by framing devices such as drapery, metal filigree, trellises, and curling plant fronds, and may sit atop an ornate pedestal. Flanking these anchor elements in the larger tapestries are domestic and exotic beasts such as a pair of spotted stags. Decorative objects of lighter weight (flowering vines, silk tassels, diadems and censers puffing smoke) hang suspended on either side of each central cluster. Here, symmetry imposes a kind of order on nature, which comes represented in its most bizarre forms.

There is a mechanics to these woven grotesques, as with all grotesques. At first glance, the *spalliere* seem to depict a variety of flat images pasted symmetrically against a flat gold ground. On closer inspection, however, one sees that all of the objects are modeled in a consistent scheme of light and shadow, and their whole scaffolding of masks and medallions advances outward from the golden wall into the room and into three dimensions. Then the tapestries' complicated iconography resolves into an unsteady assembly of lighter and denser objects, some rooted to the floor and others hanging precariously from above. The viewer is

surprised to discover that not a single (wingless) object floats in midair. In the largest *spalliera* (fig. 17), delicately wrought “arms” extend out from the lozenges containing birds, supporting the one-legged satyrs balanced above, who in turn serve as anchors for drapery of various kinds. The baldachin fabric in the tapestries is pinned back on the sides to a pair of tiny podia or dishes supporting a snail and a miniscule bird; each of these round-bottomed dishes also secures the end of a fruited swag with loops of string (for example, fig. 22). It seems that the designer Bachiacca was (perhaps ironically) careful to provide some support, however flimsy, for every perched creature, dangling mirror, and mounted glass orb. The whole unlikely construction of pedestals, golden chains, and ribbons occupies a unified space and is calculated to be just barely possible, possible in theory, perhaps possible for only a moment. The beautiful moths and grasshoppers balanced on tiny legs throughout the composition highlight its precariousness.

Of course, this realism – Bachiacca’s mock-scrupulous adherence to the laws of physics – is subverted by the tapestries’ unlikely population of fantastic hybrid creatures. Yet every object and animal in the grotesques, no matter how bizarre, seems positioned with precision. Each one is shown balanced atop another, or dangling beneath another, and they all divide neatly, grid-like, into symmetrical pairs and into horizontal strata. All Renaissance grotesques divide up geometrically, or are comprised of framed compartments, but not all purport to exist in three dimensions. Bachiacca’s medallions, masks, and swags occupy space but do not levitate; they are all hoisted and carefully balanced, rather like a pyramid of acrobats, in temporary equilibrium. The subtle emphasis on mechanics in the *spalliere* suggests ornate clockwork, or some gigantic, finely-tuned instrument.

Moreover, Bachiacca (whose father was a goldsmith) seems to have gilded as many of the objects as possible.⁷⁸ The unusual gold ground of the tapestries works as a kind of mirage, sometimes signifying receding space and sometimes appearing glitteringly opaque. Its primary function, though, surely was to create an impression of magnificence. Hung all together, the weavings must have resembled a monumental jewel box or an elaborate work of goldsmithery. In the largest tapestry especially (fig. 17), suggestions of princely treasure abound. Above the central medallion featuring an image of Charity, hermaphrodite busts flank a gem-encrusted Toledo-Medici crest. Below are symmetrically placed seashells and the oversized heads of whiskered hounds with gold bells on their collars. The whole cluster seems to be mounted in a frame of polished gold that curls forward at its scalloped edges, while behind, a pale blue drapery is artfully bunched into swags. Along the tapestry's upper edge, ornate antique weaponry surrounds the head of Medusa, seemingly executed in gold relief and set against a bejeweled crimson cloth.

Bachiacca distinguished between different precious materials and kinds of metalwork, and the weavers were able to translate these distinctions brilliantly into tapestry. On the right side of the largest *spalliera*, for example, a female figure with a snake (possibly Cleopatra) executed in gold relief rests against a bright blue oval stone (lapis lazuli?); they are framed in gold and suspended by a small gold chain from the red shield above. This object's pendant on the tapestry's left side is similarly shaped and likewise features an (unidentified) female figure; it appears to represent a cameo or perhaps a carved piece of rock crystal, which was especially prized at the Medici court of the cinquecento.⁷⁹ Likewise, the other pair of ornate clusters shown suspended from the tapestry's upper border, nearer to the putti, resemble decorative metalwork;

⁷⁸ Arthur McComb, "Francesco Ubertini (Bachiacca)," *Art Bulletin*, Vol. 8, No. 3 (Mar., 1926), pp. 140.

⁷⁹ Suzanne B. Butters, *The Triumph of Vulcan: Sculptor's Tools, Porphyry and the Prince in Ducal Florence*, 2 vols. (Florence: Olschki, 1996)

the left one has been rather daringly left blank, to suggest a mirror. It is perhaps significant that during the 1550s, Cosimo I was engaged in augmenting the Medici collection of gems, in emulation of the famed glyptic collection of his predecessor Lorenzo the Magnificent. At the time of the production of the *spalliere*, the *guardaroba* at the Palazzo della Signoria housed this expanding collection of cameos, intaglios, seals, and a variety of engraved and embellished stones.⁸⁰ Cameos and carved hardstones were prized at the Medici court both as demonstrations of technical virtuosity and as links to Roman antiquity.⁸¹ The tiniest of these worked gems were the most admired, as Anton Francesco Doni observes in his *Disegno* of 1549, and as we will see, small, intricately engraved gems were repeatedly compared in early modern natural histories to the very tiniest creatures, from crustaceans to insects, nature's humblest but also most ingenious works.⁸²

The predominance of precious metalwork and gems in the iconography of the *spalliere* is striking, and unique. Much of the tapestries' mythological and antique imagery, and even some of the representations of animals, upon closer inspection turn out to be depictions of gemstones and goldsmithery, which in turn bear the mythological or fantastical imagery (for example, fig. 27). As if to alert the viewer to these dual levels of representation, in a further display of virtuoso illusionism, Bachiacca cleverly included two representations of a lobster in the largest tapestry. The lobster in the seashell-shaped aquarium in the lower left appears "real" and seems intended to be compared with the heavily contoured "representation" of the same animal in the tapestry's upper right corner (fig. 28).

⁸⁰ Martha McCrory, "The Symbolism of Stones: Engraved Gems at the Medici Grand-Ducal Court (1537-1609)," *Studies in the History of Art* 54 (date?) pp. 158-179.

⁸¹ McCrory pp. 159-160, 167-9.

⁸² For Doni, see McCrory 166.

As Candace Adelson has observed, the *spalliere* were designed just before Benedetto Varchi's (1503-1565) provocative lectures of 1547, when debates about the superiority of painting or sculpture would have already begun at the Accademia Fiorentina. With their flamboyant illusionism, the *spalliere* may well represent a *paragone*, an argument for the superiority of painting (in whose camp Flemish tapestry weavers fell, since they were required to demonstrate mastery of draftsmanship and use of color).⁸³ The *spalliere* also would have served as a compelling advertisement for the duke's newly formed Florentine weaving workshops. Indeed, the tapestries must have been partly intended as a demonstration or catalog of their medium's visual effects. They depict an impressive range of textures and surfaces: reflective mirrors, both square and round; the plumage of birds; the scales of snakes and fish; relief sculpture decorating the side of the censers; tiny flames and wafting smoke; cracked fruit and spilling seeds; knotted string weighted with shells or jeweled baubles (fig. 29).

Some of the iconographic elements in the *spalliere* recall grotesque prints by artists associated with the school of Fontainebleau, and many resemble the wall paintings produced by the school of Raphael for papal patrons.⁸⁴ However, no precedent from the Vatican or the French court can account for what is certainly the strangest feature of Cosimo's *spalliere a grottesche*: a band of astonishingly naturalistic, life-sized sea creatures set into lozenges, extending the full length of each tapestry's lower edge and, in one of the weavings, occupying a privileged central place (fig. 22). An arrangement of different fish appears in each of the ten tapestries, forming a complete ring of marine specimens around the room. Images of fish and lobsters did appear

⁸³ Adelson p. 178. Giorgio Vasari is explicit about this in his preface to the *Lives of the Painters, Sculptors and Architects* (1550 and 1568), which recounts the *paragone* or disagreement between painters and sculptors. Among the arts "related and subordinate to painting" is "that most beautiful invention, woven tapestries, that are both convenient and magnificent, being able to carry painting into every place, whether savage or civilized." Vasari, *Lives*, vol. 1, pp. 16-17. Moreover, in a description of the Polish king Sigismund II Augustus' Old Testament tapestries published in 1553 by the humanist Stanislaw Orzechowski, tapestries are described as "painted in the weaver's craft." See Szablowski, pp. **

⁸⁴ Adelson p. 251

frequently in sixteenth-century grotesque decorative programs, beginning with the pilasters designed for the pontifical palace by Giovanni da Udine (fig. 30). However, such fish – strung up vertically with ribbons and in symmetrical pairs – are clearly ornamental props, obedient to the form of the grotesque whole, and undistinguished by anatomical individuality. Fish of this generic type appear in the *spalliere* too, above the heads of the putti, their identical mannered bodies bent into a serpentine curve to conform to the shape of the baldachin behind. They are unrelated to the specimens along the lower edge.

Interestingly, in the Medici *spalliere*, the crust of gilt that adheres to almost everything above seems to stop at the colored bands the woven naturalistic fish inhabit. These animals are not embellished: they are not fish made of cast silver or etched into gold, simulacra like so many of the other figures pictured in the *spalliere*. They are striking for their rather monstrous anatomies alone. The fish along the tapestries' lower edges are alive in their tanks, as the barely visible bubbles and the tiny ripples of water surrounding some of their bodies show. Moreover, unlike the goat daintily dangling one hoof below its dais or the bowing swine with its rippling musculature, the fish have not had their peculiar features smoothed over or prettified. Some are even slightly off center (a serious transgression within the regular grid of a grotesque), as if achieving a precise rendering of their strange bodies claimed both Bachiacca's and the weavers' full attention. What purpose could such studious images of fish have served within the exuberant, shimmering grotesque chamber?

It has been suggested that Bachiacca included fish in the tapestries' design because the Audience Hall was used by the grand duke for banquets.⁸⁵ This explanation seems too literal and thus incomplete. The anatomy of each fish in the tapestries is painstakingly detailed: peculiarities such as antennae, patterns of scales, the size and shape of the gills and fins, all seem drawn from

⁸⁵ Meoni in Campbell p. 517.

life. Indeed, they were certainly a product of careful study, perhaps the study of marine specimens selected by the duke himself. On July 25, 1553, Bachiacca returned to the duke a cartoon “di una pescagione, per tesser (of a fishing haul, to be woven),” and also “[i]l libri di ritratti di varii pasci et animali et dua fogli grandi et 2 pesci et 2 animali ritratti (two books of portraits of various fishes and animals and two large sheets and two fishes and two portraits of animals).”⁸⁶ Both of the first Medici grand dukes, Cosimo I and his successor Francesco I (1541-1587), would commission multiple grotesque wall paintings within their palazzi, such as Cosimo’s *studiolo* on the mezzanine of the Palazzo Vecchio (c. 1550), and Francesco’s oriental corridor (1579-1600).⁸⁷ Not surprisingly, the vocabulary of all of these room-sized grotesques, including the *spalliere*, overlaps to a certain extent. However, no other surviving grotesque decorative program created for the Medici in the sixteenth century features fish (or any animals) so deliberately isolated within the composition as *specimens*. The *spalliere* also comprise the only woven grotesque decorative scheme produced for the Medici grand dukes.

Because of their morphological detail, as well as the bright flatness of the bands into which they are set, the fish appear disjointed from the rest of the fantastic composition. To modern eyes there seems to be a clash of pictorial modes here: how can images so straightforward, so empirical, that they recall an illustrated scientific treatise, exist within the world of the grotesque? What role might they have been intended to play within the antique decorative program of the Audience Hall? The exceptionally flexible format of the grotesque, bounded only by fantasy, impervious to gravity, and elastic enough to accommodate one-legged satyrs and disembodied heads, seems interrupted along the tapestry’s lower edge by the careful

⁸⁶ Meoni 172; English translation in Campbell, p. 517.

⁸⁷ On Francesco’s Offices see Morel, pp. 63-74.

naturalism of the fish. Why would the tapestry designer want to create a sense of unease, inserting imagery associated with natural history within a fantastic decorative scheme *all'antica*?

Answers to these questions can be found by examining several of Cosimo's other major patronage activities from the same years, projects that bridged the areas of science and art, and of natural knowledge and monumental decoration. In this chapter, I argue that the seemingly out-of-place fish specimens in the Medici grotesque tapestries can be seen to make more sense within a sixteenth-century discourse casting nature as an artisan, a discourse that was designed to elicit aristocratic patronage for naturalists. My discussion of the *spalliere a grottesche* is intended to shed light on broader issues, such as the appeal that the imagery and artifacts of natural history held for princely patrons in the mid-sixteenth century. The *spalliere* (and later sixteenth-century tapestries that feature precise zoological imagery) demonstrate that aristocratic patrons like Cosimo I approached plants and animals in search of ingenuity, precious materials, and fine craftsmanship. To an extent they shared this approach with the naturalists who sought their favor. As Paula Findlen and others have suggested, in an early modern courtly setting, the nascent sciences of zoology and botany constituted exercises in connoisseurship. Therefore it is from the viewpoint of the connoisseur that one should examine the courtly spaces where assemblages of precious rarities, real or simulated, were displayed: princely collections or *Kunstammern*, menageries and aviaries, grottoes, botanic gardens, and, I will argue, the chamber of *spalliere* created for the Sala dell'Udienza.

Previous scholarship on the *spalliere* has not acknowledged that it was in Italy, and in the same years in which the tapestries were designed and woven (the 1540s and early 1550s), that natural history became codified as an academic discipline and established as an appropriate leisure activity for aristocrats. The herbalists, academics, physicians, and humanists who shared an interest in describing and classifying the objects and phenomena of the natural world relied upon princely patrons for support. By the middle of the sixteenth century, they had become very skilled in promoting their scientific pursuits to the urban patriciate and the nobility. Findlen recalls the inaugural lecture given in 1543 by Giuseppe Gabrieli (1494-1553), first professor of natural history at the University of Ferrara. Natural history was suitable “not only for humble and lowly men, but people coming from every social class conspicuous for political power, wealth, nobility, and knowledge such as kings, emperors, princes, heroes, poets, philosophers, and similar men... This is the only science with divine origins,” Gabrieli declared, “the only one given to men by the gods.”⁸⁸ Over the course of the sixteenth century, European elites across the continent signaled their agreement by establishing collections of rarities, cultivating botanical gardens, and sponsoring the translation and publication of luxurious illustrated compendia of plants, minerals, and animals.⁸⁹

Cosimo I de' Medici's passion for natural history was repeatedly remarked upon by his contemporaries, and the duke's pursuit of greater knowledge of flora and fauna took a wide variety of forms.⁹⁰ Translations of the first pharmacopeia, the *De Materia Medica* of

⁸⁸ Findlen, “Courting Natural History,” pp. 58-9. See also Findlen, *Possessing Nature: Museums, Collecting, and Scientific Culture in Early Modern Italy* (Berkeley: University of California Press, 1994) and Olmi, op. cit.

⁸⁹ See for example Roland Schauer, ed., *Tous les Savoirs du Monde: Encyclopédies et Bibliothèques de Sumer au XXI^e siècle* (Paris: Flammarion and Bibliothèque Nationale de France, 1996), esp. the overview contributed by Giuseppe Olmi, “Théâtres du Monde: Les Collections Européennes des XVI^e et XVII^e siècles,” pp. 272-277.

⁹⁰ See for example Baccio Baldini's *Vita di Cosimo Medici, Gran Duca di Toscana* (Florence 1578), pp. 86-7, and Vosilla p. 391.

Dioscorides, and of Pliny's *Naturalis Historiae* were completed for the duke during the 1540s. At Pisa, he established one of the first botanical gardens in Europe in 1545; he then presided over the simultaneous development of botanical science at the university and the construction of lavish gardens of exotic plants at his *palazzi*.⁹¹ In emulation of the emperors of ancient Rome, whose affinity for monsters and exotic animals was well recorded, he displayed zoological specimens in the Palazzo della Signoria. On February 5, 1549, for example, the duke ordered that the carcass of a sperm whale be brought and displayed on the palace's loggia for several months; one observer wrote that the whale's spine occupied half of the loggia.⁹² The grand duke's *guardaroba*, and later an additional space known as the *scrittoio*, contained an extensive collection of naturalia, including the tiny bones of sea creatures, precious shells, feathers from New World birds, a crocodile, the jaw of an elephant, dried exotic fish, and the monstrous head of a calf.⁹³ Some of these fragments, such as the skeletons and teeth of fish and very small animals, were mounted in gold and silver like gemstones.⁹⁴

Cosimo enthusiastically collected live animals as well; in addition to an aviary of rare and native Tuscan birds, by 1550 he had assembled a sizeable menagerie of lions, tigers, wolves, and bears in an enclosure at the Casino di San Marco.⁹⁵ Some of these creatures were used in the combats or *caccie* periodically staged in Florence and attended by crowds of up to 40,000

⁹¹ Tomasi, "The Study of the Natural Sciences and Botanical and Zoological Illustration in Tuscany under the Medicis from the Sixteenth to the Eighteenth Centuries," *Archives of Natural History* 28:2 (2001) pp. 179-193.

⁹² Vosilla pp. 381-2

⁹³ Vosilla p. 390. See also Acidini Lucinat, "Treasures of the Medici," in *Treasures of Florence* (1997) pp. 9-29. Morel also elaborates on the contents of the Medici collections, pp. 64-5. Cosimo's collections were continuously expanded and repeatedly reorganized during his reign. The duke's *guardaroba* and *scrittoio* (completed in 1559) in the Palazzo Vecchio gave way, under his successors, to a complex of exhibition rooms and workshops located in the Uffizi. See Adriana Turpin, esp. fns. 15-16.

⁹⁴ Vosilla p. 390. See also E. Müntz, "Les collections de Cosme I de' Medici," *Revue Archeologique* 1 (1895) pp. 336-46.

⁹⁵ Vosilla p. 382; E. Allegri and A. Cecchi, *Palazzo Vecchio e I Medici* (Florence 1980) pp. 80-3, 303-13.

people.⁹⁶ It is interesting to recall that the animals shared space at San Marco with the duke's⁶⁶ collection of antiquities and the newly established Medici tapestry workshops. Cosimo's patronage of art and of science would have been seamless in such a place.⁹⁷ In fact, a North American turkey appears in the center of the very first tapestry produced for Cosimo by the newly emigrated weaver Jan Rost, who presented it to the duke in December of 1545 (fig. 31).⁹⁸ This portiere, after a cartoon by Bronzino, features other rare plant and animals specimens as well, in a likely allusion to Cosimo's patronage of natural history.

Furthermore, Cosimo was a keen collector of exotica from the East and West Indies. The duke's *guardaroba* contained, for example, manuscripts and gold and silverwork from the New World, feathered ceremonial cloaks and objects decorated in so-called feather mosaic, carved hardstone animal heads, textiles, and masks of hardstone and turquoise.⁹⁹ Yet it appears that these completely unknown objects were not valued primarily as representatives of faraway lands or exotic cultures. Recent scholarship on Cosimo as a collector has demonstrated that under his reign, as in princely collections across Europe, "New World objects were frequently classified and understood according to the ingenuity of their manufacture (and hence that of their makers),

⁹⁶ Claudia Lazzaro, "Animals as Cultural Signs: A Medici Menagerie in the Grotto at Castello," *Reframing the Renaissance* esp. 203-8. See also Belozerskaya, *The Medici Giraffe and Other Tales of Exotic Animals and Power* (New York: Little, Brown and Company, 2006).

⁹⁷ Since Julius von Schlosser's 1908 monograph on early modern European collecting, art historians have insisted upon fundamental differences between the Italian aristocratic collection and the Kunst- or Wunderkammer of the north. Yet the complex established by Cosimo at San Marco, which encompassed a foundry, multiple artisanal workshops, a museum of antiquities, a menagerie, and an art academy, satisfies, to a remarkable degree, recommendations made by Samuel Quiccheberg, author of the first manual for princely collecting, the *Inscriptiones vel tituli theatri amplissimi* (Munich 1565), written for Duke Albrecht V of Bavaria. The ideal princely collection, Quiccheberg advised, should be located within a much larger complex of *officina* or workshops, sites for experimentation, collaboration, and the production of knowledge. See Mark A. Meadow, "Quiccheberg and the Copious Object," in Stephen Melville, ed., *The Lure of the Object* (New Haven: Yale UP, 2006) pp. 48-9.

⁹⁸ Campbell p. 495. On the North American turkey in Flemish tapestries of the mid-sixteenth century (for a surprising number of examples survive), see Jerzy Szablowski, "Z Badań nad Flamandzkimi Tapiseriami Krajobrazowo-Zwierzęcymi z w. XVI (Arras w zamku Osthause koło Kolmaru)," *Folia Historiae Artium* 16 (1980) pp. 117-140.

⁹⁹ Detlef Heikamp, *Mexico and the Medici* (Florence: Editrice Edam, 1972).

or their unusual materials, and not necessarily according to their inherent foreignness.”¹⁰⁰ ⁶⁷ The bewildering turquoise-covered masks and carved heads sent from the New World were assigned new meanings upon their arrival. A 1553 inventory of the duke’s collections classed the masks and the carved hardstone animal heads as jewelry (*goia*).¹⁰¹ Like the monstrous creatures whose bones and dried bodies formed the duke’s collection of naturalia, as well as the curious marine animals painstakingly depicted in the *spalliere*, the feathered headdresses and finely wrought silver that Cosimo obtained from Aztec Mexico were appreciated by viewers at the Palazzo Vecchio for their bizarre, even clever forms and strange workmanship: the ingenuity of their making aroused wonder. Some of these foreign objects were embellished with gems and metal mounts and frames after they reached European shores, to better appeal to princely collectors like Cosimo, who sought fine craft and precious materials, rather than what we would call anthropological information, in pieces of exotica.¹⁰²

Inventories of the Medici collections made during the reign of Cosimo I reveal similarities between the exotica and naturalia found in his *guardaroba* and the iconography of the *spalliere a grottesche*.¹⁰³ The tapestries, like the contents of the duke’s *guardaroba*, mixed naturalia and exotica freely, serving up an eclectic array of objects primarily intended to convey an impression of bounty and magnificence. The 1553 inventory of the grand duke’s collections, for example, includes a crocodile, a globe, an elephant’s jaw and several teeth, a chessboard inlaid with mother of pearl, a complete fish skeleton and some fish teeth in a box, bamboo stalks,

¹⁰⁰ Turpin p. 65. See also Anthony Pagden, *European Encounters with the New World: From Renaissance to Romanticism* (New Haven: Yale UP, 1993).

¹⁰¹ Turpin p. 71.

¹⁰² For example, see Heitkamp, catalog numbers 43 and 61: Aztec greenstone masks which were mounted in precious metals and inset with gemstone eyes before or shortly after entering the Medici collections. Within Cosimo’s lifetime, this emphasis on fine workmanship and artisanal skill is characteristic of the Italian studiolo tradition of collecting, evident also in the Este collections in Mantua, in contrast to the northern European *Kunstammer*. See Turpin pp. 80 and 84, and Julius von Schlosser.

¹⁰³ Inventories were made in 1539, 1553, 1560 and 1564; these are discussed by Turpin and by Heitkamp.

horns mounted in precious metal, and a spherical watch. There are also numerous objects for which a direct parallel can be found in the grotesque tapestries, which were completed the same year: perfume burners; exotic masks; small ornate weapons; glass, hardstone, silver, and porcelain objects; oyster shells; small figurines *all'antica* made of bronze and terra cotta; and seven heads of small animals from the New World, carved from hardstones such as amethyst, agate and onyx. Three of these are dog's heads (fig. 32).¹⁰⁴ While these carved dogs' heads do not precisely match the dogs' heads that are featured (so far inexplicably) in several of the *spalliere* (for example, fig. 17), historian Adriana Turpin notes that the 1553 inventory records that the carved heads were given to Benvenuto Cellini (1500-1571) to be worked on or perhaps mounted.¹⁰⁵ The inventory note is not clear about the nature of Cellini's work on the heads. Perhaps one of these dog's heads, adapted by Cellini (who shared with Bachiacca a background in goldsmithery, and whose famously delicate castings and carvings are recalled by the tapestries' iconography), was the inspiration for the gold-collared dog heads in the *spalliere*, which are otherwise hard to account for. Alternatively, the dogs' heads in the tapestries may have been inspired by a popular form of personal ornament known as *zibellini*, luxurious fur pelts to which small animal heads cast in gold or silver and lavishly encrusted with gems were attached (fig. 33).¹⁰⁶ In both cases, the dogs' heads in the tapestries would allude, like so many other iconographic elements in the set, to highly embellished trinkets crafted of precious materials.

The proliferation of masks throughout the ten *spalliere* is also striking. Large masks appear before red and blue shields among the heavy swags of fruit and flowers along the

¹⁰⁴ Turpin pp. 71 and 74.

¹⁰⁵ Turpin p. 71, fn. 28. The entry reads "otto teste di varii animali grandi come noccioule di varie pietre et goioe di mano di Benvenuto Cellini."

¹⁰⁶ Belozerskaya, *Luxury Arts*, pp. 86-7.

tapestries' upper edges. Smaller masks appear in profile, their beards curling into arabesques of foliage, below each of the pedestal tables. Caryatids balance atop small masks mounted on shields (fig. 19). Masks surmount two miniature pavilions in one of the larger weavings (fig. 18). A row of smirking masks balanced upon slender gold stems sits atop the tanks of fish in one of the tapestries (fig. 22). In another (fig. 24), a pair of blank masks lie on the lower dias facing upward, symmetrically flanking the whole composition. Not all of the masks resemble Cosimo's New World examples, but nevertheless there are similarities. An Aztec greenstone mask in Cosimo's *guardaroba* (fig. 34) was mounted in gilt copper and given ruby insets for eyes after arriving from the New World, an example of how pieces of exotica were embellished for princely collectors. This bejeweled and lavishly framed artifact recalls many of the strange but ornate masks featured in the *spalliere*, which are replete with suggestions of the goldsmith's craft, such as carving and filigree. Admittedly, many of the masks in the *spalliere* more closely resemble the plumed and bearded satyrs' faces that were staple features of classical grotesques, found throughout wall paintings by the school of Raphael (fig. 35). Yet, as a number of scholars have observed, New World artifacts of many kinds commonly underwent a kind of habilitation by sixteenth-century European collectors who wished to view them within the classical tradition.¹⁰⁷ Cosimo's collection of New World masks, too, may have been appropriated by the designer of the *spalliere* and then adapted to better suggest the antique.¹⁰⁸ The appreciation and

¹⁰⁷ See for example Anthony Alan Shelton, "Cabinets of Transgression: renaissance Collections and the Incorporation of the New World," in John Elsner and Roger Cardinal, eds., *The Cultures of Collecting* (Melbourne: Melbourne University Press, 1994) and Peter Mason, "Classical Ethnography and Its Influence on the European Perception of the Peoples of the New World," in W. Haase and M. Rheinhold (eds), *The Classical Tradition and the Americas* (Berlin and New York, 1994).

¹⁰⁸ Perhaps the dogs' heads represent the same process of assimilation. As Turpin notes, the grand duke's *scrittoio* or private study, completed in 1559, was designed to serve as a showcase for Florence's Etruscan past. It is interesting that the hardstone dogs' heads were the only pieces of exotica moved from the *guardaroba* to the *scrittoio*, along with approximately fifty other objects, all suggestive (to sixteenth-century viewers) of the antique: small bronze and terracotta figures and torsos, for example. Consequently, Turpin argues that the carved dog's heads

organization of exotica in the Medici collections, much like the appreciation of certain forms of naturalia, had more to do with “precious, high status materials and associations with antiquity,” as Turpin writes. These qualities “appear to have taken precedence over origins.”¹⁰⁹ As we will see, the same values informed the appreciation of naturalia at Cosimo’s court.

The bizarre imagery of the *spalliere*, which were designed for the Sala d’Udienza in the late 1540s and produced by the duke’s weaving workshops between 1547 and 1553, seem to overlap with the duke’s own natural history collections. Interestingly, Cosimo’s collection of tapestries was stored in the *guardaroba* alongside the other precious textiles (the *spalliere* themselves are almost invariably located in that room in Medici inventories). At this point, we cannot know for certain whether the *spalliere a grottesche* make reference to Cosimo’s eclectic collections, or if they perhaps represent an effort to associate the duke’s extensive collecting activity with ancient Rome, an allusion made repeatedly throughout the renovated Palazzo Vecchio. Certainly the *spalliere* confirm Philippe Morel’s observation that the development of the grotesque form in the sixteenth century was related to the growing vogue for collecting.¹¹⁰

In addition to the impressive collection of exotica and naturalia that filled the numbered cabinets of the grand ducal *guardaroba*, Cosimo and his successors assembled a collection of botanical and zoological illustrations renowned for their unprecedented naturalism.¹¹¹ Vasari states that Cosimo owned a book, now lost, of “very beautiful and bizarre animals drawn in pen and ink” by Piero de Cosimo (1461/2-1521).¹¹² The grand duke’s son, Francesco de’Medici,

may not have connoted the Americas so much as imperial Rome, for carved hardstone was associated with Roman antiquity.

¹⁰⁹ Turpin p. 73.

¹¹⁰ Indeed, New World birds and Mexican warriors in exotic dress populate grotesque murals commissioned by the Medici in 1586 of Ludovico Buti for a former Armory, a space which was used to display the Medici collections of New World exotica as well as weaponry and works of art beginning with the reign of Cosimo’s successor Francesco. See Heikamp figs. 28-34 for illustrations.

¹¹¹ Tomasi and Hirschauer, *The Flowering of Florence*, op. cit.

¹¹² Tomasi, “The Study of the Natural Sciences,” p. 181; Vosilla p. 383.

succeeded him in 1574, and expanded his father's collection of plant and animal paintings on paper with contributions from his own court artists, notably Jacopo Ligozzi (1547-1627). A sampling of exotic finch species arrayed on a fig branch (fig. 49) demonstrates how Ligozzi produced images of nature that simultaneously convey a great deal of information (for example, the fig is shown in various stages of maturity) and emphasize the elegance and variety of the minutiae of the natural world. The artist's delicate gouache paintings on paper could be assembled into albums and contemplated for study or pleasure. James Ackerman has identified practical reasons for the rising interest among elites in zoological and botanical imagery before the sixteenth century. "[I]t was in secular, mostly courtly, imagery between 1250 and 1400 that the close investigation of natural objects and phenomena for their own sake made its first reappearance since antiquity, encouraged by the interest among feudal patrons in the birds and animals of the hunt and the flora of which an agricultural society would be more aware than city dwellers."¹¹³ It was also true that the extraordinary realism of these illustrations of plants and animals reflected well upon their patron before his subjects and visitors. They demonstrated his authority and his erudition, revealing his proximity to natural marvels and his power to command astonishing talent.

As the written record of Bachiacca's loan of a notebook of fish studies reveals, each botanical and zoological illustration in the Medici collection was valued (perhaps as much as the live specimen depicted) and carefully accounted for. Over the course of the sixteenth century, at courts across the continent, such albums of natural history illustration became highly sought after among collectors. Two albums of fish and birds painted by Ligozzi, for example, were purchased by Emperor Rudolf II for his Prague *Kunstammer*. The emperor's collection of zoological and

¹¹³ James Ackerman, "Early Renaissance 'Naturalism' and Scientific Illustration," orig. published 1985, reprinted in *Distance Points: Studies in Theory and Renaissance Art and Architecture* (Cambridge: The MIT Press, 1991) p. 186.

botanical illustrations was the preeminent one assembled during the sixteenth century. It contained stunningly realistic images of natural minutiae by artists such as Hans Bol (1534-93), Hans Hoffmann (1550-91), Joris Hoefnagel (1452-c.1600), and Jacques de Gheyn (1532-82).¹¹⁴ Each of these noted animal painters emulated the oeuvre of Albrecht Dürer (1471-1528), who was known for isolating a single species or grouping of species against a blank white ground, and cultivating a secret technique of virtuoso naturalism in watercolor or oil. Zoological illustration as we know it grew from their body of work. The marvelous realism of these artists' illustrations testified to a collector's power and erudition.

Cosimo, too, kept a noted animal painter in his service at court: Bachiacca, the designer of the *spalliere*. Very shortly before beginning work on the tapestries for the Sala del'Udienza, Bachiacca was commissioned to decorate the grand duke's studiolo, a smaller space for study and reflection located on the mezzanine of the palace. Unfortunately, little remains today of the grotesques with which Bachiacca completely covered the room's interior. Vasari records that Bachiacca was selected for the job because of his skill in painting animals, and that he filled the studiolo with "rare animals and plants, taken from nature," which were "painted in oil in a divine manner."¹¹⁵ Like the *spalliere*, Bachiacca's paintings in the studiolo may have been inspired by Giovanni da Udine's lost decoration for the Vatican Loggia, which featured "fish, all animals of the water, and marine monsters."¹¹⁶ However, in a space as intimate as the studiolo, precise botanical and zoological imagery would have served a different purpose. Historian Francesco Vosilla has suggested that, while the realism of Bachiacca's paintings startled their initial viewers and made the studiolo famous in the sixteenth century, the paintings also made the room

¹¹⁴ Hendrix in Fučíková, pp. 157-171. See also Ernst Kris, "Georg Hoefnagel und der wissenschaftliche Naturalismus," in Arpad Weixlgartner and Leo Planiscig, eds., *Festschrift für Julius Schlosser zum 60. Geburtstag herausgegeben...* (Zurich: Amalthea verlag, 1927) pp. 243-253.

¹¹⁵ Vosilla p. 385

¹¹⁶ "pesci e tutti animali dell'acqua e mostri marini," Vasari quoted in Vosilla, p. 390.

a place of retreat analogous to a garden: a place of refreshment as well as learning. Vosilla suggests that naturalia from the duke's collection may have been kept in the studiolo, as well as medicinal simples derived from the many plants carefully depicted on the walls.¹¹⁷ In this way, the room's decoration (which originally occupied every inch of wall space, with a *horror vacui* typical for the period) could have served as a chamber-sized mnemonic device for its patron, a three-dimensional catalogue of species that, like a garden, offered both visual pleasure and natural knowledge. Cosimo's efforts to learn as much as possible about both native and exotic flora and fauna is well recorded by his contemporaries, and a functional decorative program like this certainly would have appealed to him.

Cosimo's patronage of natural history illustration was intended to serve a combination of epistemological, self-aggrandizing, and decorative functions. Indeed, it arguably would not have made sense to his contemporaries to try to distinguish among these functions. The decaying sperm whale on view at Cosimo's palazzo demonstrated to the people of Florence that wonders came to the city at his behest. Yet the whale on the grand duke's loggia also appears in the ichthyological encyclopedia published by Guillaume Rondelet, the *Libri de piscibus marinis* of 1554.¹¹⁸ The whale, like any unusual animal, could serve as spectacle or specimen, or both.¹¹⁹ In a similar way, exceptionally naturalistic images of plants and animals held potential scientific

¹¹⁷ Vosilla pp. 386-7.

¹¹⁸ Rondelet wrote, "Aliam in Italiam captam vidimus, quam exsiccata[m] Florentinorum dux ante palatium collocaverat, sed ob diuturnum et gravissimum foetorem auferri oportuit" (We saw another [whale] taken into Italy, which the leader of the Florentines placed in front of the palace, but which, because of the heavy and long-lasting stench, had to be removed), *Libri de piscibus marinis* (1554), p. 486. French 1558 edition pp. 351-5.

¹¹⁹ *The Whale Book*, an illustrated manuscript created by Dutch beachcomber and amateur naturalist Adriaen Coenen (1514-1587), further demonstrates the coexistence or conflation of the categories "specimen" and "spectacle" in the period. Coenen recorded in words and pictures the marvelous fish that washed up onto the Dutch coast near his home, or in some cases, reached him only through word of mouth. His descriptions combine a good deal of anatomical and behavioral information on various marine species with biblical stories and anecdotal observations about the invariably spectacular beaching and/or capture of exotic sea creatures. Coenen, Florike Egmond, Kees Lankester and Peter Mason, *The Whale Book: Whales and Other Marine Animals Described by Adriaen Coenen in 1585* (London: Reaktion Books, 2003).

value for early modern viewers, regardless of their medium. So painstaking were Ligozzi's watercolors of flora and fauna for grand duke Francesco that famed naturalist Ulisse Aldrovandi (1522-1605), who described them as lacking "nothing but the breath of life itself," adapted many for inclusion in his monumental treatise, the *Ornithologiae, hoc est de avibus historia libri XII* (1599).¹²⁰ Images understood to capture true information about an animal or species moved back and forth between artists and naturalists at the Medici court in the sixteenth century: Ligozzi's watercolors, prized for their delicate workmanship, served as illustrations in a scientific encyclopedia, while Bachiacca borrowed notebooks of zoological studies from the duke's collection, for use in tapestry design. Indeed, as Lucia Tongiorgi Tomasi and Gretchen Hirschauer have demonstrated, illustrations of plant and animal specimens by Ligozzi and others, isolated scientifically on the page and often drawn from life, were used in the design of *pietre dure* mosaics, embroidery, and other decorative arts for use at the Medici court, and may have even been created for this purpose.

It is therefore not surprising that several of the animal images found in Cosimo's grotesque tapestries reappeared in more obviously scientific contexts within a few years of the tapestries' completion. For example, the strange porcupine in the largest tapestry, which also appears in Bachiacca's painting *The Gathering of Manna* (1540-1555, National Gallery of Art) is very similar to the woodcut illustration provided by Gesner in his chapter on the species in the *Historia animalium* (1551-8).¹²¹ After entering the service of Cosimo's successor Francesco I de' Medici, Jacopo Ligozzi completed a celebrated painting of a hazel hen; his painting bears a

¹²⁰ Tomasi, "The Study of the Natural Sciences," p. 182; also Tomasi and Hirschauer, *Flowering of Florence*, p. 38-9.

¹²¹ Either the weaving or the printing process could account for the image being reversed. Interestingly, the earliest appearance of this idiosyncratic representation of a porcupine, as far as I know, occurs in a tapestry. The animal occupies the central place in a tapestry entitled *Stephen's Soul Rises, Gamaliel Approaches*, from the French series depicting *The Life of Stephen*, ca. 1500 (Museum of the Middle Ages, Cluny); see Laura Weigert, *Weaving Sacred Stories: French Choir Tapestries and the Performance of Clerical Identity* (Ithaca: Cornell UP, 2004) p. 87. The same representation also appears in one of the Wawel tapestries (1550-1560); see Szablowski fig. 88, p. 341.

striking resemblance to the one depicted at the bottom of the largest grotesque tapestry. Finally, several of the fish pictured along the lower edge of the *spalliere* closely resemble the illustrations included in Rondelet's marine encyclopedia, published one year after the weaving of the *spalliere* was completed. Bachiacca need not be the original source of these images. The point is that zoological images that were deemed skillful and convincing circulated freely between artistic and scientific projects, to be deployed as needed.

Bachiacca's work, in particular, seems to demonstrate how broadly "natural history illustration" was understood. In 1546, the year that weaving was begun on the *spalliere a grottesche*, Benedetto Varchi compared the realism of Bachiacca's wall paintings in the grand duke's studiolo to the illustrations produced for the *De historia stirpium commentarii insignes* (Basel 1542), the herbal published by German physician Leonhart Fuchs (1501-1566), which had established a new standard for naturalism in printed botanical illustration. Varchi praised Bachiacca's paintings for their loyalty to nature, and suggested that they, just like Fuchs' herbal, may have "great utility to science."¹²² It did not occur to Varchi that the decorative function of Bachiacca's paintings might compromise their scientific value, nor did he hesitate to compare the colorful three-dimensional environment of the studiolo with small-scale woodcuts published in a book, on the basis of representational naturalism.

We have seen that the *spalliere a grottesche* were commissioned for the Palazzo della Signoria amid a host of other projects undertaken by Cosimo with the dual aim of glorifying his own name and family, and furthering scientific knowledge of the natural world. At the Medici court (as at princely courts around Europe from the mid-sixteenth century on), the investigation

¹²² "Tra'sene ancora grandissima utilità nella scienze," Varchi, *Lezione nella quale si disputa della maggioranza della arti e quale sia la più nobile, la scultura o la pittura*, Dispute II (Firenze 1546) in Paola Barocchi, ed., *Trattati d'arte del Cinquecento* (Bari: Giuseppe Laterza & Figli, 1960), vol. 1, p. 39; see also Tomasi, "The Study of the Natural Sciences," p. 181 and Vosilla p. 386.

of natural history was an activity designed to appeal to the senses and to generate not only knowledge but prestige. It was also driven by a demand for novelty (particularly from the New World) and a fascination with nature's aberrations, the marvelous and the monstrous. "Natural history was tactile and visual, requiring no specialized knowledge to participate," Paula Findlen has observed, and many of its aristocratic patrons "were patricians who viewed nature as a continuous spectacle placed in front of them by the humanists who revived the empirical study of nature."¹²³ These humanists included the authors of the first illustrated zoological encyclopedias, such as Conrad Gesner and Guillaume Rondelet, whose treatises were published during the 1550s, the same years in which the *spalliere* were completed and first displayed. In the next section, I argue that natural history was successfully marketed by academics to princely patrons in these years because both groups participated in a discourse positioning nature as an artisan, and increasingly approached the natural world in search of exemplary and peculiar workmanship. I will examine this conception of nature as it appears in zoological treatises of the 1550s and in examples of courtly patronage of natural history, including the Medici *spalliere*.

¹²³ Findlen, "Courting Natural History," pp. 60 and 69.

Natural history before the sixteenth century was an exegetical activity focused upon a few canonical texts, such as the classification system and anatomical description proposed by Aristotle, the works of Pliny and Aelian, and the commentaries of Albertus Magnus. Illustrations, when they appeared in natural histories at all, were not expected to be naturalistic; that is, they were not expected to replicate the experience of looking at a real specimen, with its particular arrangement of limbs, or its unique leaf structure.¹²⁴ In the early decades of the sixteenth century, botanists such as Fuchs and his predecessor Otto Brunfels (*Herbarium vivae icones*, Strasbourg 1530) took an interest in images as conveyors of what we would call scientific information, and they were the first to insist upon (and advertise) highly naturalistic representations of species in their treatises.¹²⁵ Importantly, the advent of printing had made such illustrations exactly reproducible and easier to disseminate.¹²⁶ The 1550s brought the publication of the first illustrated zoological encyclopedia, the *Historia animalium* of Conrad Gesner (Zurich 1551-8), as well as the first illustrated zoological monographs.¹²⁷ These works, whose illustrations were frequently characterized as “drawn from life,” demonstrated an expansion in the understanding of what made an image true: many of the authors claimed to have personally examined the specimens they described. What might be called the “history” of a species – its description and name in the texts of antiquity – now mattered only as much as a modern author’s claim to eyewitness.

¹²⁴ Claudia Swan, “The Uses of Realism,” op. cit.

¹²⁵ Agnes Arber, *Herbals, Their Origin and Evolution, A Chapter in the History of Botany, 1470-1670* (Cambridge: Cambridge University Press, 1986; orig. 1912); Sachiko Kusukawa, “Leonhart Fuchs on the Importance of Pictures,” *Journal of the History of Ideas* 58 (1997) pp. 403-27.

¹²⁶ Ivins, *Prints and Visual Communication*, op. cit.

¹²⁷ Delaunay, *La zoologie*; Mesnard, “L’Horizon zoologique de la Renaissance”; Bäumer, *Zoologie der Renaissance*, all op. cit.

The 1550s, the same decade in which the *spalliere a grottesche* were woven for Cosimo I, proved to be the “decade of fish” as far as illustrated natural history publications are concerned. The rush of illustrated ichthyological treatises in these years reveals a growing fascination with marine animals’ strange anatomy, not only among scientists but in the powerful circles where they found sponsorship and support. No fewer than fifteen illustrated zoological treatises were published between 1551 and 1558, including translations.¹²⁸ Publishing one’s encyclopedia (and illustrations) *first* brought a naturalist much acclaim, and interestingly, it is in the field of ichthyology that the tightest race for precedence (and the fiercest recriminations among authors) took place. French naturalist Pierre Belon (1517-64), who enjoyed extensive aristocratic patronage, managed to collect hitherto unknown marine specimens on his travels through Greece, Asia Minor, Egypt, and Palestine (1546-9). His *L’histoire naturelle des estranges poissons marins* (1551 Paris) includes precise woodcuts of each species and descriptions of skeletal structure, reproduction, and habitat. Belon’s encyclopedia appeared first, followed by his *De aquatilibus Libri duo* (Paris) in 1553, which was translated in 1555. Guillaume Rondelet (1507-66) expanded upon this work in the *Libri de Piscibus marinis* (1554-5 Lyon) several years later, adding many new woodcuts, the names of nearly 250 animals in various languages, and information about their medicinal properties and culinary potential.¹²⁹ Conrad Gesner’s encyclopedia of *Aquatilia* (the fourth volume of the *Historia animalium*)

¹²⁸ Glardon p. 641.

¹²⁹ Georges Reverdy (dates unknown) executed the woodcuts for Rondelet’s ichthyological treatise. See Katharina Kolb, *Graveurs Artistes et Hommes de Science: Essai sur les Traités de Poissons de la Renaissance* (Paris: Éditions des Cendres and Institut d’Étude du Livre, 1996). Reverdy was an artist of some renown in Lyon; the previous year, for example, he had completed over eight hundred illustrations of the obverse faces of coins for one of the first numismatic treatises, the *Promptuaire des Medailles* published by Guillaume Rouillé in 1553. See John Cunnally, *Images of the Illustrious: The Numismatic Presence in the Renaissance* (Princeton, New Jersey: Princeton University Press, 1999).

appeared in 1558, as did a translation of Rondelet's work.¹³⁰ Later, the illustrations from some of these encyclopedias would be published alone (as with Gesner's treatise), while Flemish artists such as Adriaen Collaert (1560-1610) engraved series of birds, fish, and mammals, called *vivae icones* or "living icons," for wider consumption.¹³¹ Indeed, simultaneous with the French translation of Rondelet's treatise on fish, François Boussuet published the *De nature aqualtilium carmen, in universam Gulielmi Rondeleti* (1558), which replicates all of the French physician's ichthyological illustrations but substitutes a lighthearted poem for each species description, juxtaposing scientific imagery with playful verse.¹³² It was papal physician Ippolito Salviani (1514-72), however, who published the most lavishly illustrated ichthyological monograph of the sixteenth century (though it only describes about 100 species). The copper engravings in his *Aquatilium animalium historiae* (1554 Rome) dispense with individual fish scales and fin ridges; instead, creatures such as a moonfish (fig. 36) are modeled with nuanced cross-hatching and all the techniques of pictorial illusionism available. Forty years before, the botanist Fuchs had admonished his illustrators not to indulge in conspicuously artistic representations of plant specimens; Salviani's encyclopedia demonstrated that such fears had largely receded. The *Aquatilium historiae* demonstrates that sophisticated artifice on the part of the illustrator was, by the end of the decade, an acceptable method for highlighting the divine craftsmanship found in tiny and unusual animal specimens.

¹³⁰ Glardon 642. See also *Fish: Still Lives by Dutch and Flemish Masters 1550-1700* (Utrecht: Centraal Museum, 2004) pp. 347-69

¹³¹ F.W.H. Hollstein, *Dutch and Flemish Etchings, Engravings and Woodcuts, 1450-1700*, vol. IV, nrs. 596-678, p. 207.

¹³² F. Boussuet, *De nature aqualtilium carmen, in universam Gulielmi Rondeleti* (Lugdini: Apud Mattiam Bonhomme, 1558), 2 vols. See Jane M Oppenheimer, "Guillaume Rondelet," *Bulletin of the Institute of the History of Medicine* 4 (1936) pp. 826-7.

Of course, the zoological encyclopedias and monographs were hefty tomes.⁸⁰¹³³

Collections of rare objects and botanical gardens fitted more readily into court culture, reinforcing aristocrats' predilection for luxury and for aesthetic experience. "In contrast," as Findlen observes, "lengthy humanist encyclopedias of nature served the community of professional naturalists more than the interests of their patrons." However, she acknowledges, "[b]oth the culture of display and the culture of erudition shaped natural history as a discipline."¹³⁴ In the mid-sixteenth century, spectacle and knowledge coexisted in the texts and imagery of natural history, especially at court. As we will see, interest in both erudition and display lay behind the growing fascination, articulated in the new zoological encyclopedias and equally apparent in certain works of art produced for courts, in nature's tiniest and rarest creatures, particularly creatures of the sea.

Naturalists such as Gesner and Rondelet instructed their readers to approach nature's oddest and smallest creations as works of marvelous craftsmanship, and in each case to evaluate the specimen in terms of the conception and the execution of an original idea. The Creator was implicitly cast as the master artisan, capable of incomparably fine work, and also occasional bursts of humor. Pliny first identified sea creatures as manifestations of nature's "sportive mood."¹³⁵ Sixteenth-century natural philosophers such as Girolamo Cardano, in the *De rerum varietate* (1557), noted the stunning variety of nature's handiwork "in plants and in trees... but she is most diverse in those [creations] which originate in the sea, or at least in a place near the

¹³³ Gesner worried aloud about this. Fearing that "the greatnesse of the Booke, before it is read of any man, may seeme to blame me to be too tedious," he hastens to defend himself in the second of his prefaces: "This booke might be much shorter, if I had not touched the love of learning." See Gesner/Topsell "Conradus Gesnerus to the Reader," pp. 0r, 1r.

¹³⁴ Findlen, "Courting Natural History," p. 73.

¹³⁵ Pliny the Elder, *Naturalis Historia*, quoted in Findlen, "Jokes of Nature and Jokes of Knowledge: The Playfulness of Scientific Discourse in Early Modern Europe," *Renaissance Quarterly* 43 (1990) p. 296.

water.”¹³⁶ Sometimes zoologists praised nature for the economy with which she fashioned each creature for its function. Yet the rarest and most exotic animals (those most likely to appear among the splendid curiosities of a princely collection) are consistently described as *lusus naturae*, or jokes. Their bizarre anatomies revealed nature’s wit, extravagance, and limitless variety, qualities that collectors sought in explicitly manmade objects too. As Ambroise Paré observed of seashells, “There are to be found in the sea such strange and diverse kinds of shells that one can say Nature, chambermaid of great God, plays in fabricating them.”¹³⁷ Among all the monstrous and bizarrely formed creatures of the sea described in *La nature et diversité des poissons*, Pierre Belon claimed to “find nothing in this that nature cannot do as recreation.”¹³⁸ Like an artisan who tucks a fanciful element into an heroic work to call attention to his own skill and labor, with certain obscure marine creatures, Nature “has disported herself, in order to cause the grandeur of her works to be admired.”¹³⁹ French humanist Pierre de la Primaudaye (1546-1620) was most explicit of all in conflating the products of nature and the works of a skilled craftsman: the world, he declared, “is a great, beautiful, and rich shop in which the sovereign and excellent artisan shows all of his works so that he may be known by them.”¹⁴⁰

Lurking in the zoological encyclopedias of the 1550s, then, are the same criteria employed by aristocratic collectors in appreciating manmade objects, criteria that Lorraine Daston and Katharine Park have summarized as an aesthetic of virtuosity: “Both naturalia and

¹³⁶ Findlen, “Jokes,” p. 302

¹³⁷ Ambroise Paré, *Des monstres et prodiges* (1573), translated by J. L. Pallister as *Of Monsters and Marvels* (Chicago: University of Chicago Press, 1982) p. 125, quoted in Daston and Park, p. 277.

¹³⁸ “[Je] ne trouve rien en cela que nature ne puisse faire par esbat.” Belon, *La nature et diversité des poissons*, 33.

¹³⁹ “Nature s’y jouée, pour faire admirer la grandeur de ses oeuvres.” Paré, trans. by Pallister, p. 139.

¹⁴⁰ “C’est une belle, grande et riche boutique en laquelle ce souverain et tres excellent ouvrier deploye toutes ses oeuvres, à fin qu’il soit cogneu par icelles.” Pierre de la Primaudaye, *Académie française, divisée en dix-huit journées [traitant] de l’institution des mœurs, et de ce qui concerne le bien et heureusement vivre en tous états et conditions, par les préceptes de la doctrine et les exemples de la vie des anciens sages et hommes illustres* (Paris, 1577), book II. English translation in Ann Blair, *The Theater of Nature: Jean Bodin and Renaissance Science* (Princeton UP, 1997) p. 156.

artificialia embodied difficulties of material overcome seemingly without effort: hard, dense ivory turned into filigree; baroque pearls formed into a tiny jester by touches of gold and enamel; the brittle, porcelain-like material of a seashell curled and crimped into a murex. These objects crystallized painstaking labor, but labor cleansed of the sweat and toil of the workshop.”¹⁴¹ The connoisseurship practiced by sixteenth-century collectors centered upon luxurious materials, ingenious design, marvelous workmanship, and the illusion of ease, and was directed at nature’s works as readily as the works of skilled artisans.

It is also worth noting how many of the precious materials used in the construction of costly collectible objects came from or were associated with the sea: coral, pearl, mother of pearl, conches and other rare seashells (used for certain cameos, a form that grand duke Cosimo especially prized). The Medici collections, like many northern *Kunstkammern*, also included a number of elaborate vessels built around nautilus shells (figs. 37-8).¹⁴² The sea was clearly a rich source of treasure for the princely collector.

Generally speaking, the illustrated zoological publications of the 1550s made visible what was difficult for the human eye to see: creatures whose mysterious cycles of predation and reproduction occurred far away in Asia or the New World, in the nocturnal wilderness, or underwater. In a sense, even familiar marine species were marvels. Long before the era of naturalists such as Robert Hooke, whose *Micrographia* (1665) revealed a previously unimagined world of minuscule organisms, the burgeoning scientific literature on fish published in the 1550s reflected widespread curiosity about the rarely glimpsed animals of the deep.¹⁴³ Charles

¹⁴¹ Daston and Park, p. 277.

¹⁴² See Mariarita Casarosa Guadagni, “The Medici Collections at the Time of Cosimo I and Francesco I,” in Cristina Acidini Luchinat and Kate Garratt, eds., *The Treasures of Florence: Medici Collection, 1400-1700* (Munich and New York: Prestel, 1997) pp. 66-9.

¹⁴³ Robert Hooke, *Micrographia, or, Some physiological descriptions of minute bodies made by magnifying glasses, with observations and inquiries thereupon* (London, 1665).

Estienne, the publisher of Pierre Belon's treatise on fish, praises the naturalist in a preface to the work as "a man of great labors in observing rare things," and prides himself on having "brought into the light [Belon's] descriptions and portraits of fish, which the eye can little comprehend."¹⁴⁴ There is a theatrical sense of unveiling within such texts, an implicit *voilà!* as previously unseen works of nature are revealed, and as the authors work to impress upon the reader a sense of privilege. Importantly, Hooke would describe a thyme seed under his microscope as evidence of nature's skillful workmanship, like that of the goldsmiths who created exquisite miniature boxes and self-propelling animals for display in *Kunstkammern* across Europe.¹⁴⁵

We may perceive in those small Grains, as well as in greater, how curious and careful Nature is in preserving the seminal principal of vegetable bodies, in what delicate, strong, and most convenient cabinets she lays them and closes them in pulp for their safer protection from outward dangers, and for the supply of convenient alimental juice, when the heat of the sun begins to animate and move these little automats or Engines; as if she would, from the ornaments she has deckt these cabinets, hint to us, that in them she has laid up her Jewels and Masterpieces.¹⁴⁶

Hooke's perspective on natural minutiae may have been new, but the sentiment he expresses was at least a century old, and was first articulated by naturalists who had never looked through a microscope. Indeed, his approach grew logically from the natural history texts early moderns had inherited from antiquity. Aristotle described the growth and the anatomy of animals in terms of causes, and understood each species as movement towards an end or set of ends. His *De Partibus Animalium* defines not only whole creatures but their individual parts according to their

¹⁴⁴ "Pierre Belon, homme de grand travail a observer les choses rares...a eu mis en lumiere ses descriptions & pourtraicts des poisons, tells qu'il a peu comprendre a l'oeil." *L'histoire naturelle des estranges poissons marins* (Paris: Charles Estienne, 1555), "Charles Estienne à Lecteur," n.p.

¹⁴⁵ See for examples Dirk Syndram and Antje Scherner, *Princely Splendor: the Dresden Court 1580-1620* (Milan: Electa and Dresden: Staatliche Kunstsammlungen, 2004).

¹⁴⁶ Hooke quoted in Martin Kemp, "Taking It On Trust: Form and Meaning in Naturalistic Representation," *Archives of Natural History* 17:2 (1990)p. 132.

ostensible function: “[I]t is plain that the body as whole is composed for the sake of a full activity. For sawing has not come to be for the sake of the saw, but the saw for sawing.”¹⁴⁷ This is as true of small and repulsive animals as it is of the larger noble beasts:

For even in the study of animals unattractive to the senses, the nature that fashioned them offers immeasurable pleasures in the same way... Therefore we must avoid a childish distaste for examining the less valued animals... we should approach the inquiry about each animal without aversion, knowing that in all of them there is something natural and beautiful. For the non-random, the *for-something's-sake*, is present in the works of nature most of all, and the end for which they have been composed or have come to be occupies the place of the beautiful.

Beauty in nature is thus defined as the apt fulfillment of a function; the naturalist is compelled to admire the *design*.

Clearly, one of the dominant messages of Aristotelian natural history is that “[n]ature fashions all things reasonably,” and it is this idea of skillful fashioning that provided a bridge between naturalists and princely courts in the early modern period.¹⁴⁸ Sixteenth-century zoologies invariably begin and end with an injunction to the reader to marvel at how cleverly nature has crafted the bodies of each of the animals to enable them to accomplish their respective tasks with maximal efficiency and thus beauty.¹⁴⁹ The sum of all of this careful craft and divinely orchestrated activity was a natural world that closely resembled a great gallery of finely wrought objects. Rondelet opens the preface to his encyclopedia of fish by placing the reader at the center of the marvelous overarching architecture of the natural world:

¹⁴⁷ Aristotle, *De partibus animalium I and De generatione animalium I* (with passages from II.1-3, trans. D.M. Balme (Oxford: Clarendon Press, 1992) p. 19.

¹⁴⁸ Aristotle, p. 56.

¹⁴⁹ Belon’s dedicatory letter to his patron the Cardinal de Chastillon, which opens the 1555 edition of *L’histoire naturelle des estranges poissons marins*, serves as an excellent example of the survival of this Aristotelian reasoning, though too long to quote here.

There is no one of good sense who would not admit that the universe was created for man, and that man was created for the glory of God. For man has been placed in such a beautiful domicile, or even more, such a magnificent theater, to contemplate the sky, the stars, the air, the water, the earth, the animals, the plants, the whole fashioned with such great artifice, ornamented with such excellent beauty, assembled and composed with such great harmony, imbued with such great virtue, so well ordained that more would not be possible.¹⁵⁰

Rondelet's description of Nature the "magnificent theater" confirms Paula Findlen's observation that many sixteenth-century aristocratic patrons were invited to view nature "a continuous spectacle placed in front of them by the humanists who revived the empirical study of nature." Rondelet's formulation is repeated in the prefatory material of many sixteenth-century texts on natural and also moral philosophy, and across confessional lines (Philip Melancthon employs a nearly identical description of the sweep of the natural world at the beginning of his *Doctrinae physicae elementa*, published in 1552 in Lyon).¹⁵¹ Pierre Belon welcomes his reader by affirming that the principal task for which man was fashioned by "the great Architect" is the "contemplation and consideration, without end, with great admiration and praise" of Nature as an *ouvrage*, a piece of work, full of examples of "excellent artifice."¹⁵² These panoramic descriptions also suggest the many splendid collections amassed by sixteenth-century rulers, which arrayed an encyclopedic assortment of precious objects and natural rarities, the whole representing the sum of natural knowledge, around the implicit central figure of the patron. In

¹⁵⁰ "Il n'y a personne de bon sens qui ne confesse, que l'univers ne soit créé pour l'homme, aussi que l'homme ne soit fait pour la gloire de Dieu. Pource l'homme étant mis en ce beau domicile, ou plus tost en ce très magnifique theatre, doit contempler le ciel: les estoiles, l'air, l'eau, la terre, les animaux, les plantes, le tout fait de si grand artifice, orné de si excellente beauté, assemblé & composé de si grande harmonie, doué de si grande vertu, tant bien ordonné qu'il n'est possible de plus." Guillaume Rondelet, "Preface sur tout l'oeuvre," *L'Histoire Entière des Poissons* (Lyon 1558), n.p. Facsimile ed. by François J. Meunier (Paris: Comité des Travaux Historiques et Scientifiques, 2002).

¹⁵¹ Blair p. 155. Gesner also offers a very similar formulation in "The First Epistle," which appears in this dissertation as the epigram.

¹⁵² Belon, *L'Histoire naturelle*, chap. 1, p. 1 (1555 French edition).

this paradigm the natural world surrounds and frames man like a fine house, a magnificent theater that has been filled (as we still say) with “works.”

Ann Blair has examined the uses of the phrase “theater of nature” (*theatrum naturae*), which originates with Philo of Alexandria (first century AD), in the titles of more than one hundred scientific and philosophical treatises published between 1500 and 1700.¹⁵³ She concludes that while its meaning changed considerably over time, in the sixteenth century, the phrase cast the natural world as a static visual spectacle, and more specifically connoted “vast expanse, intricate order, and elaborate construction.”¹⁵⁴ This description applies quite beautifully to the Medici *spalliere*, which were designed to encircle the great Audience Hall in the Palazzo Vecchio.

It was important for naturalists to attach a certain exclusivity to the pursuit of natural history, and to differentiate between the prince’s and the peasant’s interest in animals. At sixteenth-century courts, natural knowledge was increasingly regarded as an ornament to a prince or gentleman. Daston and Park have identified an “aristocratic model of knowledge” in the Renaissance that emphasized exclusivity and informed wonder, meaning that intellectually and socially elite viewers could distinguish what really deserved their amazement.¹⁵⁵ Their focus is sixteenth-century preternatural philosophers, but the same model can be discerned among zoologists. Conrad Gesner, who actually sought and achieved a wide readership for the *Historia animalium*, cannily distinguished in his text between a fine and vulgar appreciation for zoology, simultaneously courting and guiding his aristocratic audience. His “Epistle to the Reader,” intended to demonstrate “with how great study both Kings and Princes, as also many great and most learned men have revered the history of Creatures,” provides a brilliant demonstration

¹⁵³ See Blair, “Chapter Five: Theatrical Metaphors,” pp. 153-179.

¹⁵⁴ Blair p. 155.

¹⁵⁵ Daston and Park, p. 167.

of how natural history was marketed to elites in the period as an edifying form of leisure.⁸⁷¹⁵⁶

Gesner at first seems to undercut the Aristotelian emphasis on function, but in fact his Epistle reaffirms that the study of zoology is a lesson in appreciating ingenious design. He begins by half-apologizing for the quantity of practical information (concerning food, medicine, and husbandry) contained within his treatise, and argues that scrutinizing the works of nature merely for their aesthetic qualities is a higher kind of appreciation (he attributes this observation to none other than Aristotle). Gesner then likens the beasts cataloged in his encyclopedia to precious gems which serve no useful purpose other than to elevate the minds of men toward the heavens.

Aristotle maketh it a true property of a Noble, liberal, and well-governed mind, to be more delighted with the rare, pleasant and admirable qualities of a beast, then (*sic*) with the lucre and gaine that cometh thereby.

For it is a token of a filthy, beastly, illiberal and wretched mind, to love no more than we can reape commodity by. There be very many things which do not yeald any profit to the possessors or owners, but only please them, & allure their minds by outward form and beauty, so do the most precious stones, as Adamants, Topayzes, Iacynthes, Smaradgs, Chrysolytes, and many such other things; by the wearing whereof, no man is delivered, either from sicknesse or perill (although some superstitious persons put confidence in them for such vertues) but have crept into the favour and treasures of men, only because like earthly stars they shine and glitter in the eies of men, resembling the resplendent glory and light of heavenly bodies, and other use they have none...¹⁵⁷

The kingdom of beasts, with its wonderful diversity of species and their strange appearances and behaviors, is cast here as an ideal object for a prince's contemplation. By the same token, Gesner's vast zoological encyclopedia, which the reader is about to enter, boasts contents as

¹⁵⁶ The quote is from Gesner/Topsell, "Conradus Gesnerus to the Reader," p. 0r; this is the second preface Gesner attached to his encyclopedia, and not to be confused with "The First Epistle."

¹⁵⁷ Gesner/Topsell, "The First Epistle," n.p.

dazzling and various as a casket of jewels – even more precious, argues Gesner, since stones, unlike animals, are ultimately “without spirit, immoveable, unworthy.”

In constructing an analogy between his catalog of animals and collections of gems, Gesner invites the noble reader to approach the objects of the natural world with a connoisseur’s eye, examining each species for evidence of divine ingenuity. Of course, aristocratic patrons were well schooled in connoisseurship; they were expected to demonstrate proficiency in this kind of looking. Gesner echoes Aristotle’s defense of all the seemingly insignificant species, noting that divine invention is best seen in the very tiniest animals:

And what man with all his witte, can sufficiently declare and proclaime the wonderful industrious minds of the little Emmets and Bees, moved almost with no bodies, being silly things, and yet imbued with noble and commendable qualities...

For as in clocks, we admire the lesser more then the greater, so we ought to admire the lesser narrow bodies imbued with such industrious spirits, more then the greater, broader, and larger beasts: for all workmen do show more art, skill, and cunning in the small and little price of a work, then the greater.¹⁵⁸

Those who admire highly wrought objects such as engraved gems and sophisticated clocks, Gesner explains, would profit much by studying the delicate intricacy of the bodies of insects and other tiny animals.

Many of the values that shaped courtly patronage of natural history in the sixteenth century are apparent in Gesner’s passage. There is the initiate’s pleasure at discovering both fine craft and “commendable qualities” in creatures usually dismissed as insignificant. Repeated references to “industry” reveal the sixteenth-century naturalist’s fascination with nature’s workmanship. Gesner’s text demonstrates how plants and animals could be enjoyed on the same

¹⁵⁸ Gesner/Topsell, “The First Epistle of Doct. Conradus Gesnerus,” n.p.

terms as works of art: prized for their rarity, extremes of scale (the miniature and the monumental), unusual or witty form, and precious materials. Indeed, although some collectors (such as Rudolf II) distinguished between artificialia and naturalia, in a courtly context, the extreme “artifice” visible in many works of nature justified a prince’s interest in zoology and botany, and made his patronage of natural history a demonstration of taste. Even humble groups of animals such as insects, rodents, fish, and crustaceans could be recast as nature’s baubles, “silly things” that nevertheless revealed the perfect workmanship of the Creator, for those enlightened enough to see.¹⁵⁹

A century later, this discerning approach to the minutiae of nature still remained very current. Thomas Moffett, whose *Theatrum Insectorum* was completed by 1590 though it would not be published until the following century, reiterates Gesner’s praise for tiny creatures very faithfully in his preface.¹⁶⁰ Hooke’s description of very small creatures as “engines” and “cabinets” bedecked with “jewels” echoes Gesner directly. Thomas Browne (1605-1682) would declare that those who took an interest in “bees, ants and spiders” displayed superior judgment: “Ruder heads stand amazed at the prodigious pieces of Nature, Whales, Elephants, Dromedaries, and Camels; these, I confess are the colossus and majestick pieces of Nature: but in these narrow engines there is more curious Mathematicks; and the civility of these little Citizens more neatly sets forth the wisdom of their Maker.”¹⁶¹ Cosimo’s sperm whale, we recall, was banished to the loggia, to be ogled at by the “ruder heads” of Florentine crowds; inside the palazzo, in the grand

¹⁵⁹ Daston and Park, p. 167-72; see also p. 19.

¹⁶⁰ See Hendrix, “The Four Elements,” pp. 230-232.

¹⁶¹ Quoted in E. S. Merton, “Sir Thomas Browne the Zoologist,” *Osiris* 9 (1950) p. 413.

duke's collections and in the chamber of woven grotesques, nature's more sophisticated works were displayed.¹⁶²

The appeal to the connoisseur evident in the texts of sixteenth-century natural history is even more apparent in proto-scientific images of animals created for aristocratic collectors. Artists such as Ligozzi, Bol, De Gheyn, and Hoefnagel lavished unprecedented attention on the particularities of small plant and animal specimens, replicating each irregular feather, each insect-bitten leaf. They were called "miniaturists" by their contemporaries, for their *trompe l'oeil* techniques derived partly from the exquisitely illuminated margins of medieval manuscripts and prayer books.¹⁶³ Hoefnagel approached the minutiae of nature like a jeweler, bending and arranging specimens in highly artificial symmetrical patterns, sometimes securing the stems of flowers with a clasp or a fictional slit in the page, encircling and highlighting his specimens with touches of applied gold (figs. 39-40). He gilded the lowly bodies of locusts, flies, and mollusks, making them visible to collectors, transforming them into covetable works of art and revealing the divine craftsmanship behind their baffling anatomies. Hoefnagel's tiny paintings were given edifying mottoes and presented as gems of knowledge, in the same way that collections of emblems were understood in the period as treasuries. The trope of the goldsmith reigned there, too. Renowned humanist Andrea Alciato described his gift of a book of emblems to Konrad

¹⁶² Over the course of the sixteenth century, the comparison between exotic creatures and finely crafted works of art implicitly made by Gesner and other naturalists would be reiterated even by their non-aristocratic readers, who had no access to courtly settings or patronage. The largely unschooled beachcomber Adriaen Coenen (1514-1587), for example, is known to have read Gesner, Rondelet, and Olaus Magnus through the good graces of a neighbor. A page from Coenen's *Whale Book* of 1585, a manuscript illustrating the marine species its author discovered along the Dutch coast, describes a rare *opah* fish that was "displayed in Leiden for money," in terms that recall the precious vessels crafted for princely Kunstkammern: "The tail and fins were red as coral and he was the size of a turbot. He had a smooth body like a shiny tin bowl, and the marks were as beautiful and smooth as silver." Florike Egmond and Peter Mason, eds., *The Whale Book: Whales and Other Marine Animals as Described by Adriaen Coenen in 1585* (London: Reaktion Books, 2003) pp. 104-5.

¹⁶³ Hendrix, "Four Elements," pp. 223-4; Kaufmann, *Mastery of Nature*; see also Otto Pächt, "Early Italian Nature Studies and the Early Calendar Landscape," *Journal of the Warburg and Courtauld Institutes* 13: 1-2 (1950) pp. 13-47. Furthermore, as Jurgis Baltrušaitis has demonstrated, the imagery of the Renaissance grotesque can be traced not only to classical precedents but to the illuminated margins of medieval manuscripts; see his *Réveils et prodiges*.

Peutinger as “treasures too, if only of paper,” quite as valuable as the “precious coin and the rarest handiwork of the ancients.”¹⁶⁴

Around 1575, Hoefnagel executed four delicately illuminated volumes of zoological emblems, entitled *The Four Elements*, with a courtly patron (perhaps Emperor Rudolf II) in mind. In her perceptive analysis of the four-volume set, Lee Hendrix has demonstrated that the artist lavished painstaking attention on depictions of the smallest and lowliest creatures, such as crustaceans and insects, in order to highlight both the divine ingenuity of God and the marvelousness of his own handiwork.¹⁶⁵ With the exception of the *Theatrum Insectorum* (London 1634), an entymological treatise published by Thomas Moffett, the sources Hendrix draws upon in her study originate from within the arts, such as the Ferrarese humanist Angelo Decembrio’s *De politia litteraria* (c. 1450) and the writings of Vasari and Van Mander. They provide ample evidence of a special appreciation for craftsmanship on a miniature scale.¹⁶⁶ “And indeed one often finds such small insects carved on gems,” writes Decembrio,

[such as] a spider in combat with a fly, or a bee with a drone, or an ant with a gnat – shown just as accurately as if they were real insects held in a drop of amber, like the marvelous one Martial mentions. When Nature gives us such lessons in representation as this, it is only right that men should be capable of such work... [V]ery small representations require quite as much judgement both in judging them and in carrying them out, as those which astound men, as I have said,

¹⁶⁴ Cummings pp. 256-7, 265. As noted previously, the same artist, Georges Reverdy, provided woodcut illustrations both for Guillaume Rondelet’s *Libri di piscibus marinis* (Lyon 1554) and the first early modern numismatic treatise, Guillaume Rouillé’s *Promptuaire des Medailles* (Lyon 1553), almost simultaneously. On Reverdy, see Katharina Kolb, *Graveurs*, p. 97 with bibliography. On the emblematic nature of Hoefnagel’s oeuvre, see Theadora A. Wilberg Vignau-Schurman, *Die Emblematischen Elemente im Werke Joris Hoefnagels*, 2 vols. (Leiden: Universitaire Pers, 1969) and Hendrix, “Four Elements,” pp. 17-18.

¹⁶⁵ Hendrix, “The Four Elements,” esp. Chapter Five, “Natural Artifice and Illusive Life: Thematic Concerns in Hoefnagel’s Still Life Imagery,” pp. 215-262.

¹⁶⁶ Hendrix, “Four Elements,” pp. 223-5.

through their great size. For these diminutive things go beyond the capacity of our human senses and strain the eyes. Medium-sized objects on the other hand, by natural habit we easily despise.¹⁶⁷

As we have seen, many zoological publications of the mid-sixteenth century, such as those surveyed above, reiterate the same appreciation, rhetorically conflating nature's ingenuity with the skill of an artisan. As Gesner argues in the *Historia animalium*, "we ought to admire the lesser narrow bodies" of tiny, obscure animals the most, "for all workmen do show more art, skill, and cunning in the small and little price of a work than in the greater." *The Four Elements* beautifully illustrates the belief, reiterated over and over by naturalists like Gesner during the latter half of the sixteenth century, that it is nature's humblest creatures that best reveal the wondrous creativity of the Creator. One may draw an analogy between Hoefnagel's illuminated volumes of miniature animals and the Medici *spalliere*, with their bands of naturalistic marine creatures encased in ornate tanks. Created for enjoyment within a princely environment, both works rehabilitate humble pieces of naturalia as precious and costly handiwork, and testify to the inextricability of art and science in courtly patronage of natural history of the period.

Other artists working in Central Europe contemporaneously with Hoefnagel created exact three-dimensional replicas of natural minutiae such as reptiles, seashells, insects, and snakes, but in precious materials, transforming the ephemeral bone, skin, and shell of genuine naturalia into exquisitely rendered simulacra more suitable for a prince. The works of Nuremberg goldsmith Wenzel Jamnitzer (1508-1585), for example, were famous for both their verisimilitude and luxury. Techniques for the live casting of small animals developed in the mid-sixteenth century by Jamnitzer and French potter Bernard Palissy (c. 1510-1590) illustrate the comparison between

¹⁶⁷ Angelo Decembrio (c. 1415-c.1465), translated by Michael Baxandall in "A Dialogue on Art from the Court of Leonelle d'Este. Angelo Decembrio's *De Politia Litteraria* Pars LXVII," *Journal of the Warburg and Courtauld Institutes* 26 (1963) pp. 322-5, fn. 61-63, quoted in Hendrix, "Four Elements," p. 226-7.

the minutiae of nature and a casket of jewels made in writing by Conrad Gesner.¹⁶⁸ Palissy's glazed platters, clustered with reptiles and crustaceans, like Jamnitzer's silver caskets and fountains covered with crawling animals and cast flora, made lowly natural objects fit for a prince's contemplation, and implicitly celebrated Nature's skill in craftsmanship by displaying the ingenuity of their own makers. Such objects were ubiquitous in aristocratic collections of the later sixteenth century: "Owning something by Jamnitzer or Palissy became a virtual necessity for any self-respecting collector in the period, at least for those with the financial means to acquire one of their pieces," art historian Mark Meadow has observed.¹⁶⁹ Jamnitzer replicated tiny beetles, crabs, and snails down to their very antennae and last row of scales (fig. 41), but he did so in the princely medium of silver, elevating nature's humble creatures to covetable princely baubles, and highlighting the intricacies of their miniature bodies.

A collection or *Kunstkammer* might display dozens or hundreds of such treasures, often alongside real specimens, replicating what Rondelet called the "magnificent theater" of nature in one space. A botanical garden served a similar function, providing a "living catalog of Creation" as a source for simples, a place of private refreshment, and at court, a backdrop for entertainments and for ceremony.¹⁷⁰ What about a tapestry series? This dissertation is intended to demonstrate that chambers of tapestry, too, functioned as theaters of nature at certain European courts in the sixteenth century. More than pictures, woven sets of tapestry formed virtual environments, enveloping their viewers on a magnificent scale. Thus the medium was brilliantly

¹⁶⁸ For Jamnitzer, see *Wenzel Jamnitzer und die Nürnberger Goldschmiedekunst 1500-1700* (Munich: Klinkhardt and Bierman, 1985) and Ernst Kris, "Der Stil 'Rustique,'" *Jahrbuch der kunsthistorischen Sammlungen in Wien* 1 (1926) pp. 137-208. For Palissy, see Leonard N. Amico, *Bernard Palissy: In Search of Earthly Paradise* (Paris: Flammarion, 1996). Incidentally, Palissy also drew upon the anatomies of marine creatures when concocting elaborate projects for the French court. He produced, for example, an extravagant design for a fortified city in the shape of a conch shell; see his *Recepte veritable* pp. 208-18, as well as Anne-Marie Lecoq, "The Garden of Wisdom of Bernard Palissy," in *The Architecture of Western Gardens*, pp. 69-80.

¹⁶⁹ Mark A. Meadow, "Quiccheberg and the Copious Object: Wenzel Jamnitzer's Silver Writing Box," in Stephen Melville, ed., *The Lure of the Object* (New Haven and London: Yale University Press, 2005) p. 46.

¹⁷⁰ Prest pp. 1-26.

suited to representing the “theater of nature” described so enthusiastically by sixteenth-century naturalists. As the remainder of this chapter will demonstrate, one of the earliest tapestry series to fulfill such a function was the *grottesche a spalliere* commissioned by Cosimo I.

A guest important enough to be admitted to the Sala dell'Udienza while the *spalliere* were displayed would have been dazzled by their brilliance and their naturalism. The grotesques are woven primarily of silk, and their unique gold ground would have shimmered in the light of many torch and candle flames. Once again, to enter the hall would have been a bit like walking into a gigantic jewel box: the complicated assemblage of censers, swags, strange and familiar animals, and masks depicted in the tapestries covered the room's lower frescoed walls, spanning their entire length and measuring taller than a man. At eye level, the viewer would have made out objects of fine gold and silverwork, flowers, tiny chain links, smoky incense, moths, and birds, while above, ornate Roman weaponry hung clustered with swags of abundant fruit.

This visitor would also notice bits of the natural world captured and displayed within the tapestries' strange glittering constructions. Spherical aquaria mounted in silver contain pairs of tiny fish and eels. Birds hang in pendant gilt cages in one of the *spalliere* (fig. 20). These specimens are small, widely spaced, and elaborately housed; they are not meant to be the tapestries' centerpiece (for the tapestry series, which encircles the room, has no true center). The specimens function like every other object pictured in the *spalliere*, as ornament: apparently discerningly selected, and precisely placed, and fully subsumed within the symmetrical rhythm of the whole. Perhaps then the visitor would notice that the splendid fragile framework illustrated in the *spalliere* – the framed orbs, mounted mirrors, perched moths, dangling ribbons – rests on a foundation, at approximately knee level, of exotic fish, which are carefully speciated, sealed into discrete bubbles, startlingly naturalistic.

The fish consistently strike modern viewers as out of place; the manner in which they have been isolated and rendered in careful profile seems to jar with the lively fantasy of the rest of the grotesque. How are we to make sense of this seeming intrusion of scientific material?

In his study of grotesque wall paintings in Italy in the sixteenth century, Philippe Morel observes that the revival of the grotesque form happened concurrently with the development of the Wunderkammer at European courts, and he sees in both an abiding fascination with the eclectic and encyclopedic.¹⁷¹ Morel also briefly proposes that grotesque wall painting was fundamental to the development of early modern natural history illustration in Italy. His suggestion, though undeveloped, bears directly upon the puzzling iconography of the Medici *spalliere*. Whereas in Rome, antiquarian references dominate the grotesque frescoes commissioned for papal patrons, Morel observes that at the Medici court in Florence, grotesque wall paintings (by Bachiacca among others) were so replete with painstaking images of flora and fauna that they constituted a “preliminary exercise” in the naturalistic portrayal of plants and animals, prior to the arrival of miniaturists like Jacopo Ligozzi.¹⁷² Indeed, we have seen sixteenth-century viewers themselves observe that painted grotesque imagery could have epistemological value, as when Benedetto Varchi described Bachiacca’s grotesques in the studiolo of Cosimo I as having “great use to science.”

The exceptional naturalism of the *spalliere*’s woven “portraits” of marine species should be understood, I have argued, as a display of highly skilled craft (and by extension, evidence of their patron’s erudition and reach). Morel rightly suggests that certain images of plants and animals found in grotesque wall painting deserve consideration within the history of scientific illustration, because they are highly naturalistic. But in this chapter, I have tried to address a

¹⁷¹ Morel, op. cit, esp. Chapter Five, “Du Collectionisme Éclectique à L’Illustration Scientifique: Le Décor des Offices (1579-1600),” pp. 63-74.

¹⁷² Morel p. 70.

slightly different question: what can the grotesque as a form tell us about the uses of naturalism in sixteenth-century zoological imagery? The *spalliere* arguably have much to reveal in this area.

The fish in the Medici tapestries are *conspicuously* naturalistic. One could even say that there is a certain showiness or bravado in the exactitude with which the fish are represented, which parallels the ostentation of the rest of the elaborate woven grotesques. As with Joris Hoefnagel's illuminations, these fish replicated in tapestry are designed to call attention to an extremely refined artistic technique, while the technique in turn highlights the refinement and intricacy that sixteenth-century viewers increasingly recognized in natural minutiae. Ironically, today we tend to admire the images of plants and animals painted by Hoefnagel, Bachiacca, Ligozzi, and other sixteenth-century court artists as unembellished, uncompromising records of empirical facts.¹⁷³ We detect an obsessive quest for increasingly naturalistic description in the rendering of the crisp, browned leaf-edges of a semi-wilted iris by Ligozzi (fig. 42), for example, or the stiffened, scaly feet and slightly parted beak of Daniel Fröschl's dead woodpecker (fig. 43). The artist's inclusion of such "imperfections" seems to promise that he set aesthetic considerations aside, recording exactly what he saw. So it is the artist's fidelity to nature that we praise in these images, and evidence of a new kind of looking, a forerunner of modern scientific practice.¹⁷⁴ Historians like James Ackerman are to some extent justified in crediting sixteenth-century artists who drew from life with "preempting" a later shift in scientific and observational practice.¹⁷⁵ Yet a host of clues suggest that sixteenth-century viewers appreciated concerted pictorial naturalism, not as reportage, but as a display of extreme artifice.

¹⁷³ On the absence of such a standard of accuracy in the early modern period, see Peter Galison, "Judgment Against Objectivity," in Caroline A. Jones and Peter Galison, eds., *Picturing Science, Producing Art* (New York: Routledge, 1998) pp 327-59.

¹⁷⁴ For additional examples of this kind of image, see Sybille Ebert-Schifferer, *Deceptions and Illusions: Five Centuries of Trompe l'Oeil Painting* (Washington: National Gallery of Art, 2002).

¹⁷⁵ James S. Ackerman, "Early Renaissance 'Naturalism' and Scientific Illustration," in *The Natural Sciences and the Arts*, op. cit., pp. 1-17.

If this is true of paintings on paper, it is doubly true of natural history illustration in tapestry, a collaborative and cumbersome medium several times removed from direct observation of a specimen, and composed of distractingly lavish materials like silk and gold. The startling naturalism found in the *spalliere*, which were among the first tapestries to fall from the looms of the grand duke's newly founded workshops, must have been attempted as a demonstration of mastery of a difficult craft.

In fact, several of the earliest tapestries produced by the Medici workshops feature a veritable catalog of visual effects, a surfeit of simulated textures and materials, all represented with astonishing naturalism. With no narrative or portrait function, the portiere entitled "Abundance" (fig. 31), for example, seems designed to showcase the weavers' mastery of perspectival designs and the illusion of receding space, contrasting a few massive foreground figures in a doorway with the shimmering vista, done almost in grisaille, with a tiny distant pavilion.¹⁷⁶ Moreover, in the tapestry's foreground are juxtaposed a careful selection of natural and artificial objects and materials, including rare plants and animals: fernlike foliage, turkey feathers, and a tortoise's mottled shell, as well as matte human flesh, flowing garments, and the polished marble panels and carved ceiling rosettes of the entryway. It was the first weaving presented to Cosimo by weaver Jan Rost, in the winter of 1545. *Joseph Fleeing from the Wife of Potiphar*, from a twenty-piece set completed in 1548, also seems to offer a showcase of visual effects that are not necessarily all in the service of a narrative (fig. 44). The variety of carved and cast hard stone surfaces pictured in the tapestry makes it almost seem to vibrate with pattern – there are panels of veined, feathered, and clotted marble, pilasters, a painted barrel vault, a pair of complex golden statues, and a variety of moldings – yet the weavers have maintained perspectival clarity and distinguished between materials. Billowing drapery and creased

¹⁷⁶ Campbell p. 495.

bedlinens, a border of birds and fruit, even a set of fictional grotesque tapestries hung along the room's rear wall: all provide further difficult textural contrasts. Previous scholars have suggested that the grand duke's *Joseph* tapestries might represent a contribution by the designers Bronzino and Salviati to the *paragone* debates, which were underway at the Academy in Florence at the time of the Flemish weavers' arrival.¹⁷⁷ More immediately, however, the newly emigrated weavers needed an opportunity to show that they could simulate any texture, represent any object. Cosimo had to be convinced to go forward with his enterprise. This partly explains why in the *spalliere*, rare animal specimens, depicted with painstaking naturalism, appear alongside virtuosic woven representations of a host of precious materials: carved gemstones and fine goldsmithery, lapis lazuli, milky quartz-like stone, even the shiny reflective surface of mirrored glass. The *spalliere* are marked by a kind of ostentatious naturalism, showy naturalism, because they were important first tests of representational skill.

Cosimo's demonstrated interest in natural history would have made rare plant and animal specimens an obvious choice of imagery through which the newly arrived Flemish weavers could display their feats of verisimilitude.¹⁷⁸ As I have tried to argue, botanical and zoological imagery was being put to similar use by European naturalists such as Gesner, Salviani, and Rondelet, in their publications of the 1550s. The naturalists, too, were bidding for recognition and patronage from aristocratic patrons by emphasizing the ingenious workmanship and clever design, the divine virtuosity, to be found in exotic creatures, particularly in creatures of the sea.

¹⁷⁷ Campbell p. 498; Adelson pp. 169-170.

¹⁷⁸ Indeed, as Pamela Smith has demonstrated, during the sixteenth century, workshop-trained artisans across northern Europe were using their skill in representational naturalism to bid for new legitimacy and recognition. Smith includes painters and artists along with "practitioners" such as potters, alchemists, physicians, and those who cast in metals: artisans whose work represented a physical and also metaphysical effort to "redeem imperfect matter." Weavers and the tapestry industry play no role in her argument, but woven depictions of flora and fauna like those in the *spalliere a grottesche* were certainly calculated to induce wonder in their viewers and to suggest a kind of mastery on the part of their creators and their patrons. See *The Body of the Artisan: Art and Experience in the Scientific Revolution* (Chicago: University of Chicago Press, 2004).

In sum, proto-scientific images of fish belong within the Medici grotesques, it seems clear, because such creatures were valued by princely patrons like Cosimo for their strange and ingenious construction, that is, their anatomy. The fish also represented an obvious opportunity for the new workshops to demonstrate their virtuosity to the duke. Ultimately the *spalliere a grottesche* depict a lavish collection of highly wrought objects – the exotic and antique weaponry, shells, the gold and silver censers, the lapis lazuli set in gold, the glass aquaria in carved stands, *and* the living marine specimens – that may ultimately be found to portray the duke’s collections in some direct way. The tapestries’ two most innovative pictorial features – Bacciacca’s careful attention to three-dimensional illusion (and the resultant sense that the grotesque is “mechanical” and occupies space), and the painstaking naturalism of the fish specimens – likewise suggest that what is pictured in the tapestries is a kind of collection, a delicate assemblage of prized objects that have been framed and mounted and strung up, all examples of exquisite craft.

Cosimo’s ten golden weavings illustrate a sixteenth-century discourse celebrating nature as an artisan, a discourse in which both naturalists and their patrons participated. It appears throughout the zoological and particularly the ichthyological treatises published in the 1550s, the same decade in which the weaving of the *spalliere* was completed and the set was presumably first displayed. Within these publications, and within the iconography of the tapestries, distinctions between naturalia and artificialia were often downplayed or ignored, as aristocrats were invited to appreciate the minutiae of nature in the same terms as works of art, and to exercise connoisseurship upon flora and fauna.

Certainly the widespread belief that nature “sported” most frequently in the design of sea creatures made them ideal for grotesque imagery. It seems highly unlikely, however, that the

marine species illustrated in the *spalliere* would have signified banquet fare for viewers at Cosimo's court, as previous scholars have proposed.¹⁷⁹ Tables groaning under heaps of highly realistic fish, eels, and shelled creatures, fishing hauls laid out for the viewer's consumption, would not appear as the main subjects of Dutch paintings, as in the work of Joachim Beuckelaer (1533-1575), until the following century. Furthermore, the suggestion that the fish might represent meals would probably have been distasteful to enthusiasts of natural history in the Medici circle, including the grand duke himself. It was in the mid-sixteenth century that humanists began to look outside of texts and to closely scrutinize plants and animals for information about the natural world. In exactly the same years in which the *spalliere* were designed and woven, Italian naturalists began to look to fishermen for specimens of rare sea species and for practical information about them. Ulisse Aldrovandi recalled that it was a visit to the Roman fish markets in 1549 or 1550 ("in that same time that [Guillaume Rondelet] was in Rome") that he first took an interest in studying natural history, including "the sensory knowledge of plants, and also of dried animals, particularly the fish I saw often in the fish markets."¹⁸⁰ As Paula Findlen has demonstrated, correspondence left by ichthyologists Rondelet and Ippolito Salviani reveals that they too, along with their agents and friends, regularly combed the fish markets of Rome and other cities in search of unusual specimens.¹⁸¹ They were joined by some wealthy collectors of naturalia and the growing number of merchants who scouted for them. Not surprisingly, the naturalists, their patrons, and princely amateurs, rubbing shoulders with humbler folk in the markets, were extremely careful to distinguish their own erudite interest in dried fish from that of their suppliers. The naturalist visited the fish market in search of

¹⁷⁹ Meoni in Campbell, p. 517

¹⁸⁰ Findlen, *Possessing Nature*, p. 175.

¹⁸¹ Findlen, *Possessing Nature*, pp. 172-7. Rondelet (who was trained as a physician) reportedly took an interest in ichthyology initially because his family's farm was a regular stopping point along the route used by fish carts trundling between the Mediterranean and Montpellier. See Oppenheimer p. 826.

creatures to dissect or collect, not to eat. Fishermen, gardeners, and hunters, though they were increasingly consulted as sources of natural knowledge, were also disdainfully described by naturalists as “friend[s] of edible things.”¹⁸² We have seen how Conrad Gesner included in his encyclopedia much information useful to the farmer, the physician and even the cook; Belon too offered his opinions about the tastiness of many of the fish he anatomized. Yet the authors disown such humble information in their descriptions of their own work. In his introductory epistle, for example, Gesner scorns readers in search of such practicalities and insists that the study of zoology is best suited to princes: it is “a true property of a Noble, liberal and well-governed mind, to be more delighted with the rare, pleasant, and admirable qualities of a beast, then with the lucre and gaine that cometh thereby.” A sixteenth-century viewer who regarded the various marine specimens in the tapestries as food would have appeared uneducated and unworthy.

As a chamber, a complete artificial environment, the *spalliere* functioned as a “theater of nature” in much the same way a princely collection would. Other tapestry series discussed in this dissertation were designed to function as theaters of nature, but by simulating the natural landscape and bringing it indoors. Cosimo’s golden grotesques, an early example of natural history imagery in tapestry, function more like a treasury. Aristocratic collections in Italy in this period were known for their deceptively pell-mell juxtaposition of naturalia and artificialia: the primary criterion was that an object should be exceptional, as Samuel Quiccheberg declared in the first museological treatise (*Inscriptiones vel tituli theatri amplissimi*, 1565).¹⁸³ The grotesque tapestries, too, depict choice fragments from the natural world – caged and perched birds,

¹⁸² Findlen, *Possessing Nature*, p. 174.

¹⁸³ S. Quiccheberg, *Inscriptiones vel tituli theatric amplissimi complectentis rerum universitatis singulas materias et imagines eximias...* (Munich: Adam Berg, 1565). See Olmi in Impey and MacGregor, p. 1.

delicate winged insects, rare fish – alongside carved and filigreed objects, to create pleasing contrasts of weight, form, and texture.

The frequent reorganizations to which the grand duke's collection was subjected during the 1550s suggests that the placement of individual objects was of prime importance. To arrange such objects exclusively according to aesthetic or symbolic criteria affirmed the social status of the patron: the princely collection, real or fictional, was not tainted by professional or functional exigencies, as the collection of a physician or apothecary would have been. In 1557, in the *Ragionamento IV*, Vasari described the grand duke's plans for a private scrittoio or study to house portions of his collection:

[Vasari to the prince] In this study, the duke wishes to use the rows of shelves around the walls, resting on a series of pilasters, to display small bronze statues of which, as Your Excellency can see, there are very many, all of which are antique and most beautiful; between the columns and the pilasters and in the cedarwood drawers he will keep all his medals so they can be seen easily and kept in good order...

[Prince] What will be kept in this section between the columns?

[Vasari] Here there will be the miniatures made by Don Giulio and other excellent master craftsmen as well as small paintings which are in themselves little gems; below the drawers, at the bottom of the whole structure, there will be treasures of all kinds, the bowls and vases in one place, those of stone in another, while in the cupboards beneath will be the large oriental crystal, the sardonix and cornelian pieces and the cameos; in the larger one he will keep the antiques for, as Your Excellency knows, he has many and most rare examples.¹⁸⁴

Though very general, Vasari's description can, without much stretching, be read to recall the composition and contents of the *spalliere*. Comprising a three-dimensional chamber, the

¹⁸⁴ Giorgio Vasari, *Le vite de' più eccellenti Pittori, Scultori, Architettori italiani* (Florence 1568), ed. G. Milanesi (1878-85), vol. 8, pp. 58-60, translated in *Treasures of Florence* 56.

tapestries organize treasures of many shapes and sizes into neat rows or strata, like the scrittoio's "three tiers all the way around." Small antique figures and busts are interspersed in the *spalliere* with slim caryatid pedestals that function rather like the columns and pilasters that punctuate the scrittoio's horizontal shelves. Paintings and "miniatures" of gemlike quality adorn "the whole structure," a phrase which suggests that the duke's collection, too, was conceived and arranged as a single composition of many parts. Carved hardstones and relief medals, prized for their antique connotations, are given pride of place in both Vasari's description and the grotesque tapestries. Along the lower level are heavier objects and more substantial storage, drawers and cupboards rather like the heavy series of daises that house the tanks of fish in the *spalliere*.

All natural history collections were arranged to some extent to please the eye of the visitor, and many of the compositional features of the *spalliere* would have also been visible in cabinets of rarities assembled in Italy during the sixteenth and seventeenth centuries. Well into the seventeenth century, in fact, large Italian collections were arranged for display along similar lines. The museum of Manfredo Settala in Milan, for example, as illustrated by Pietro Francesco Scarabelli a century after the *spalliere* were completed, shares a gridlike symmetrical structure with Cosimo's woven grotesques (fig. 45).¹⁸⁵ This rather rigid framework maintains order among the riotous variety of dried animals, paintings, instruments, sculptures, artifacts, fragments, fossils, fish, weaponry, vessels, and clocks on display. Like the elaborate assemblage of objects depicted in the *spalliere*, Settala's collection is organized into strata: caskets and cabinets of minutiae at eye level, larger specimens fitted individually into rounded alcoves below, and abundant swags of drapery (with preserved animals) suspended above, shown hoisted by familiar putti. In Scarabelli's illustration, a rigorously observed vanishing point keeps the room's contents

¹⁸⁵ P.F. Scarabelli, *Museo ò Galeria Adunata dal sapere, e dallo studio del Sig. Canonico Manfeedo Settala* (Tortona 1666). Illustration reproduced by Olmi in Impey and Macgregor, pp. 32-3.

from becoming chaotic. Perhaps Bachiacca, charged with designing tapestries that featured an assemblage of dissimilar naturalia and artificialia (the better to showcase the skill of the grand duke's new weaving workshops), chose the grid-like format of the grotesque for the same purpose.

Thus the Medici chamber of woven grotesques can be seen to represent that “beautiful domicile” envisioned by ichthyologist Guillaume Rondelet: a glittering architecture harmoniously “assembled and composed,” precisely “ornamented” with flora, fauna, and elaborately worked minerals. The encyclopedias of natural history published by Rondelet and others throughout the 1550s construct an analogy between small objects of precious workmanship and the design of nature's tiniest creatures. In a similar way, the Medici *spalliere* invite viewers to appreciate specimens from the natural world in the same terms as the silver censers and plumed masks alongside, all depicted with conspicuous naturalism by the grand duke's own weavers. In both the texts and the tapestries, natural history is presented as a noble pursuit, and the products of nature – no matter how lowly – are framed as works of sophisticated artifice.

In the second half of the sixteenth century, a number of other Flemish tapestries woven for princely patrons would, like the *spalliere*, foreground highly naturalistic depictions of marine creatures, but all of these take landscape, rather than grotesque, form. A tapestry in the seven-piece Isola Bella series (c. 1575, subject of this dissertation's final chapter), features an enormous and anatomically correct lobster placed right in the central foreground (fig. 109), featuring a carefully mottled and segmented shell and bristly antennae.¹⁸⁶ An identical lobster

¹⁸⁶ In the Isola Bella series and in the borders of a tapestry from *The Story of Romulus and Remus*, a mid-sixteenth century set attributed to Frans Geubels and now divided between Vienna and Toledo, Ohio, the lobster is shown prying open the shells of oysters. For the symbolism of this image, see Guy de Tervarent, *Les animaux symboliques*

occupies a prominent place in a weaving from *The Story of Alexander* series (c. 1590, workshop of Jacob Geubels) now in the Patrimonio Nacional, Madrid (Ser. 35, no. 2; fig. 46); the tapestry depicts the conquering hero crossing the Granicus River surrounded by a host of strange beasts, which serve to characterize the landscape as exotic.¹⁸⁷ Painstakingly speciated marine specimens are also given pride of place in an earlier tapestry depicting the *Baptism of Christ* (Brussels, c. 1525) in the Musées Royaux d'Art et d'Histoire in Brussels (fig. 47).

Furthermore, the curious row of naturalistic fish that sets the *spalliere a grottesche* apart was apparently successful enough to be adapted, within a few decades, for another decorative program created for the Medici. The Tribuna, an octagonal structure begun in the Uffizi in 1581, was designed to house portions of the grand ducal collections. None other than Jacopo Ligozzi was commissioned to create a frieze that encircled the space near floor level, and featured painstakingly naturalistic birds, fish, water, rocks and plants painted on an ultramarine ground.¹⁸⁸ Little information on this lost frieze survives (we do not know, for example, whether Ligozzi's painted specimens were separated into discrete lozenges as in the *spalliere*, or placed within a cohesive landscape, more like Giovanni da Udine's grotesques for the Vatican loggia). Yet the

dans les bordures des tapisseries bruxelloises au XVIe siècle (Brussels: Palais des Académies, 1968) pp. 22-3 and fig. 20.

¹⁸⁷ Paulina Junquera de Vega and Concha Herrero Carretero, *Catálogo de tapices del Patrimonio Nacional. Volumen I, Siglo XVI* (Madrid: Editorial Patrimonio Nacional, 1986) pp. 248 and 250, with bibliography. In a third example, the same lobster appears in a verdure tapestry at Wawel Castle in Cracow that bears the mark of Jan Van Tieghem and which, since it was damaged while being evacuated from Poland in 1939, has not been published for almost a century; see Marjan Morelowski, "Arrasy Wawelskie Zygmunt Augusta: Ich Wartość i Znaczenie w Dziejach Sztuki XVI wieku" *Sztuki Piękne* I (Cracow: Nakl. Drukarni Narodowe, 1925 or 1929), p. 314 and Szablowski, op. cit., p. 360. A series in the Bayerisches Nationalmuseum in Munich, *The Story of the First Parents*, which represents a kind of amalgamation of the Creation tapestry cycles in Florence and Cracow, features the very same lobster (MRAH photo archive, no. 1550.507). As late as the eighteenth century, the Royal Manufactory at Beauvais was weaving tapestry series that feature marine animals very prominently, after seventeenth-century Flemish cartoons; see Nello Forti Grazzini, *Gli arazzi della Fondazione Giorgio Cini* (Venice: Fondazione Giorgio Cini and Marsilio Editori, 2003) pp. 116-125. The case of the circulating lobster model suggests how useful the close study of zoological imagery might be to historians of Flemish tapestry in tracing contacts between workshops.

¹⁸⁸ Detlef Heikamp, "La Tribuna Come Era Nel Cinquecento," *Antichità Viva* 3:3 (1964) pp. 11-30; "Zur Geschichte der Uffizien-Tribuna und der Kunstschränke in Florenz und Deutschland," *Zeitschrift für Kunstgeschichte* 26 d., H.3/4 (1963) pp. 193-268; and "Le sovrane bellezze della Tribuna," *Magnificenza alla Corte dei Medici: Arte a Firenze alla fine del Cinquecento* (Milano: Electa, 1997). I thank Stephanie Nadalo for information and references on Ligozzi's frieze at the Tribuna.

proto-scientific appearance of Ligozzi's careful miniatures of flora and fauna, and their location within a low register encircling the space of the Tribuna, must certainly have called to mind the grotesque tapestries that Cosimo I had commissioned for the Sala dell'Udienza in the late 1540s.

The establishment of the ducal tapestry workshops in Florence did not prevent Cosimo I from purchasing additional weavings produced in Flanders. He also continued to regard tapestry as a prime medium for natural history illustration. In 1551, for example, the grand duke obtained a magnificent seven-piece set depicting *The Story of Creation* from Antwerp merchant Jan van der Walle, a set which is exceptionally rich in zoological and botanical imagery (for example, *The Naming of the Animals*, fig. 48).

Indeed, narratives of the Creation provided the most important framework and metaphor for natural knowledge in the early modern period, and determined the goals and methods of natural history. The next chapter examines a preeminent example of the Creation narrative illustrated in tapestry: a large collection of weavings purchased by the Polish king Sigismund II Augustus upon his accession to the throne in 1548. If the *spalliere a grottesche* reflect the naturalist's fascination with the finely crafted and the miniature, isolating and displaying zoological minutiae in ornate aquaria and gilt cages, the Wawel tapestries function on a very different principle: they subsumed the palace interiors they occupied, simulating a complete natural landscape with its rich diversity of species and its hidden, hunted secrets.

CHAPTER TWO: NARRATIVES OF NATURAL HISTORY
THE WAWEL TAPESTRIES (1548-1560)

The enormous tapestry collection assembled by Polish king Sigismund II Augustus roughly between 1548 and 1560 represents both an illustrated zoological encyclopedia and a monumental narrative of the creation of the natural world. In fact, Sigismund proved to be one of early modern Europe's most lavish patrons of natural history illustration, but in a pictorial medium that contemporary art historians tend to neglect: the medium of tapestry. Like the *spalliere a grottesche* in Florence, the Polish royal collection of Flemish weavings demonstrates that our understanding of Renaissance natural history illustration may be limited. In a courtly setting, mimetic images of flora and fauna could be life-sized, three-dimensional – indeed, they might comprise a complete artificial environment. Natural history illustration could spill out of the pages of illuminated albums and printed florilegia to encompass whole transportable rooms, even suites of rooms.

Sigismund's tapestries for Wawel castle in Cracow give splendid pictorial form to the familiar Old Testament narrative of the garden, ark, tower and temple – that is, the preeminent framework for the pursuit of natural history in early modern Europe. My discussion of the tapestries is divided into seven sections. The first three sections offer overviews of the Polish court in the sixteenth century and of Sigismund's lavish patronage of Flemish workshops. The remaining four sections examine specific parts of his large tapestry collection: three narrative tapestry series illustrating the Story of Creation, the Story of Noah, and the narrative of Babel Tower, along with a series of forty-four surviving verdure tapestries with animals. All of these tapestries share a common border; the entire collection is marked by a unified and cohesive style.

The six-part *Story of the First Parents* (fig. 50-55) begins the biblical narrative illustrated in Sigismund's tapestry collection, and is the subject of this chapter's fourth section. The

narrative of Adam and his descendants, as it is illustrated in the Wawel tapestries, was designed to underscore the importance of divine limits on man's natural knowledge. At the same time, the tapestries foreground the scope and richness of the natural order. These tapestries introduce the richness of botanical detail and concerted variety of animal species that characterize nearly all of the king's Flemish tapestries. The experience of the first viewers of these Creation tapestries was recorded by the humanist courtier Stanisław Orzechowski in his 1553 description of the festivities surrounding the king's third wedding in Cracow. Orzechowski's ekphrastic text reveals the powerful and even frightening immediacy that the Wawel tapestries were designed to give to events described in the Book of Genesis.

Sigismund also commissioned many splendid verdure tapestries with animals, which were made to measure and occupy designated spaces within Wawel Castle. Forty-four of these verdures with animals survive (for examples, see figs. 80-95). In recent decades, Sigismund's verdures have been studied in isolation from the rest of the Polish king's tapestries, set apart as a distinct series within the Polish royal collection. Yet the verdures were almost certainly intended to complement and enhance the larger religious narrative pictured in the Old Testament scenes. In "Emblematic Animals and Adam's Lost Mastery," I argue that there are compelling reasons for placing the verdures within the larger Old Testament narrative illustrated by Sigismund's other weavings. First, Eden was imagined throughout the early modern period as a zoological encyclopedia. In both print and tapestry series of the period, the rich diversity and peaceful intermingling of beasts represented, for early modern viewers, the most recognizable features of the Garden of Eden. By extending the landscapes of the king's biblical tapestries throughout suites of palace rooms, the verdures helped locate the pivotal events of Genesis in the present. Isolating Sigismund's verdures from his narrative tapestries in scholarship obscures the

experience of a courtier walking through Wawel Castle when many or all of Sigismund's tapestries were displayed. Furthermore, the development of the emblem was set in motion by the fifteenth-century discovery of the *Hieroglyphica* of Horapollo, a Greek manuscript full of zoological symbols that was enthusiastically received by Marsilio Ficino and others as an ancient Egyptian original, and a key to the lost Adamic language of Eden. The *Hieroglyphica* forms the basis for much of the animal symbolism in sixteenth-century emblemata. I argue that the verdure augment the Wawel Old Testament tapestries by comprising a kind of monumental woven emblemata, representing what man once knew of nature and what he might, with divine grace and diligence, know again.

Eight of the Wawel Old Testament tapestries recount the *Story of Noah* (figs. 57-64). This tapestry cycle held great appeal for Sigismund's contemporaries, and was re-commissioned and rewoven with some frequency at the request of other European rulers during the later sixteenth and early seventeenth centuries. In this chapter's sixth section, I consider the Wawel Noah cycle, not only from the perspective of Sigismund's own court and political exigencies, but as a monumental celebration of natural history exported from Brussels to a variety of other early modern courts, most notably that of Philip II of Spain. The Noah tapestries commissioned by Sigismund II August for Wawel Castle are one of the most important sets produced in Brussels during the sixteenth century, yet the tapestries have never been considered in light of the intertwined theological, commercial, and scientific importance in this period of the narrative of the Flood and the Ark. In an age of burgeoning transatlantic exploration and commerce, in particular the quite profitable traffic in exotic animals as gifts between courts, Noah's feat aroused great curiosity and respect. As a floating microcosm, the Ark could also serve as a powerful metaphor for tolerance (natural order mirroring civic order) in a period of ubiquitous

religious violence. Clearly, such a grandly illustrated story of Noah would have reflected well upon Sigismund Augustus and later patrons of the series in a variety of ways. No other narrative from the bible or antiquity so emphasized the teeming diversity of creation and its rediscovered harmony under the guardianship of a wise steward.

Furthermore, a popular genre of painting developed by artists such as Jan Breughel (1568-1625) during the seventeenth century locates events from Genesis within landscapes teeming with exotic animal species. These paintings recently have been studied as pictorial catalogs of nature, analogous to the zoological encyclopedias published in the mid-sixteenth century; they are described as having no precedent later than the twelfth century. It has not been acknowledged that the paintings arguably grew out of the demand among sixteenth-century princes for tapestries illustrating the same events, a demand which originated with Sigismund Augustus and extended to Philip II of Spain, Margaret of Parma, and other patrons. Sigismund's *Noah* cycle is therefore an extremely important *editio princeps*.

The final four biblical scenes at Wawel comprise a small set illustrating the construction and destruction of the Tower of Babel (figs. 65-68). In the final section, I argue that early modern interpretations of the confusion of tongues at Babel help to explain the profusion of zoological imagery prevalent throughout Sigismund's cohesive tapestry collection. As noted above, many commentators, from Marsilio Ficino to Thomas Browne, believed that Adam's perfect understanding of the natural world was preserved in recently rediscovered hieroglyphic manuscripts such as the *Hieroglyphica* of Horapollo. Thus the story of Babel Tower forms a fitting conclusion to the narrative of natural knowledge bestowed on mankind and then lost, illustrated by the Wawel tapestry program as a whole. The tapestry collection served as a public affirmation of a particularly contentious part of Sigismund's royal identity, namely the humanist

ideal of the virtuoso prince. Most importantly, the abundance of zoological imagery in the ¹¹²Wawel tapestries suggests emblematic decorative programs in other media, and together the king's tapestries would have transformed the palace into a kind of temple of natural knowledge, another theater of nature constructed of cycles of Flemish tapestry.

At the turn of the sixteenth century, Cracow was a wealthy, cosmopolitan city of burghers, famous for its many monasteries and its university (founded in 1364, it was home to Nicholas Copernicus during the 1490s). Cracow was the capital of a state ruled since 1386 by the Jagiellon dynasty, a family well connected through marriage and diplomacy with Central Europe's other major courts.¹⁸⁹ In 1500, the Jagiellonian territories stretched from the Baltic to the Adriatic Sea, encompassing not only Poland but the Kingdoms of Bohemia and Hungary, as well as the enormous Duchy of Lithuania to the east. Mines rich in gold, silver, and salt, as well as burgeoning textile and grain production, gave the Jagiellonian territories the potential for great wealth, though they were perpetually threatened on three sides by the Habsburg, Ottoman and Muscovite empires. At the end of the reign of Sigismund II Augustus (1520-1572), Poland's last Jagiellon king, the city of Cracow would be the political and cultural center of Europe's largest state, a vast Polish-Lithuanian Commonwealth of almost one million square kilometers. A national policy of religious toleration did not always suppress violent conflict, but it did result in an exceptionally diverse population; the Commonwealth had six official languages (Polish, Latin, Ruthenian [Belorussian], Hebrew, German, and Armenian) and a population numbering 7.5 million at the end of the sixteenth century.¹⁹⁰ Cracow's urban residents reflected this diversity in microcosm.

At the top of Wawel Hill in the center of town, high above the city's rooftops and the noise of the streets, stood the royal castle, the seat of the Jagiellon kings, an historic complex

¹⁸⁹ As Almat Bues has observed, "The variety of countries from which the Jagiellon kings drew their wives underlines the range of their impact... There were one Italian, one German, one Pole, one Lithuanian, two Ruthenians, two Hungarians and three Habsburgs." For a partial genealogy, see Bues, "The Formation of the Polish-Lithuanian Monarchy in the Sixteenth Century," in *The Polish-Lithuanian Monarchy in European Context, c. 1500-1795* (New York: Palgrave, 2001) 61.

¹⁹⁰ Harry E. Dembkowski, *The Union of Lublin: Polish Federalism in the Golden Age* (Boulder, Colorado: Eastern European Monographs and New York: Columbia University Press, 1982).

fortified with tall walls and removed from the urban bustle. The *Nuremberg Chronicle* (1493) describes the complex with reverence but its first line suggests the palace exterior looked a bit unkempt:

Then, the enormous royal castle, composed of large miscellaneous buildings; here was the capital of the entire kingdom where the whole Royal Treasury was preserved. Here the princes were gifted with supreme powers because the Royal Crown was kept here and watched by a large number of guards.¹⁹¹

Soon after the *Chronicle* was published, Wawel Castle would be completely transformed. In 1507, King Sigismund the Old (1467-1548) began a radical architectural overhaul of the hilltop complex, transforming the medieval fortress into an Italianate palazzo with an arcaded courtyard and a loggia employing the classical orders (figs. 69-70).¹⁹² The king also engaged Florentine architect Bartolommeo Berrecci to design a funerary chapel within Wawel Cathedral; the chapel is a centrally planned, domed mausoleum with a complex program of allegorical and grotesque sculpted decoration (fig. 3). Both projects proved influential in the region, as some Polish magnates began demanding classicizing forms for their own residences and churches.¹⁹³ A great number of Italian craftsmen and architects, particularly Florentines and painters from the Lombard region, emigrated to Poland to take up this work, many arriving by way of the Jagiellon court in Buda, where large-scale commissions had essentially dried up after the death of King

¹⁹¹ Hartmann Schedel (1440-1514), "De Sarmacia regione Europe," *Liber Chronicarum* (Nuremberg: Anton Koberger, 1493), trans. in Bogdan Deresiewicz, *Sarmatia: From the Original Nuremberg Chronicle, Printed by Anton Koberger in 1493* (Los Angeles: Plantin Press, 1976).

¹⁹² Adam Miłobędzki, "Architecture under the Last Jagiellons in Its Political and Social Context," in Samuel Fiszman, ed., *The Polish Renaissance in Its European Context* (Bloomington: Indiana University Press, 1988) 291-301. See also Jan Białostocki, *The Art of the Renaissance in Eastern Europe: Hungary, Bohemia, Poland* (Oxford: Phaidon Press, 1976) and Helena and Stefan Kozakiewicz, *Renesans w Polsce (The Renaissance in Poland)*, Warsaw: Arkady, 1976) 7-47.

¹⁹³ Kaufmann, *Court, Cloister and City: The Art and Culture of Central Europe, 1450-1800* (Chicago: University of Chicago Press, 1995) pp. 55-6.

Matthias Corvinus in 1490.¹⁹⁴ Some twenty-five percent of the laborers engaged in rebuilding Wawel Castle during its thirty-year renovation were Italians.¹⁹⁵

The transformation of the palace complex in Cracow reflected profound changes in the culture of Polish elites occurring at the same time, most importantly, a growing interest in Italian humanism, spearheaded by the Jagiellonian rulers themselves. The old king had been educated by Filippo Buonaccorsi, called Callimachus (1437-1496), who maintained a correspondence from Cracow with Lorenzo the Magnificent, Marsilio Ficino, and Pico della Mirandola, and whose *Consilia Callimachi* is regarded as a precursor to Machiavelli's *Il Principe* (1513).¹⁹⁶ Sigismund's arcaded courtyard at Wawel is the first surviving example of the form for a castle outside of Italy; in Central Europe, this structural form was associated with the scholastic environment of the cloister and university quadrangle, not with palatial residences.¹⁹⁷ The structure advertised the Jagiellons' enthusiasm for the new learning originating in Italy. As early as the mid-fifteenth century, Polish intellectual elites began to pursue philological studies and to assemble and translate texts from antiquity; the syllabus of the university in Cracow was reformed to include the study of Greek language and literature. Sigismund the Old's patronage of Italian craftsmen and musicians, as well as Polish humanists who composed in Latin; his acquisition of Italian architectural drawings; and the establishment of a library of classical texts at Wawel: each of these patronage activities announced the king's public espousal of Italian humanism. His humanist interests took other forms as well. In 1518, the king married Bona Sforza (1494-1557), daughter of Gian Galeazzo Sforza, Duke of Milan, and Isabella of Aragon,

¹⁹⁴ Białostocki p. 19.

¹⁹⁵ Tadeusz Ulewicz, "Polish Humanism and Its Italian Sources," in Fiszman, p. 229.

¹⁹⁶ Kazimierz Lepszy, "Les humanists Italiens à Cracovie au XVI^e siècle," *Venezia e la Polonia nei secoli dal XVII al XIX, Civiltà Veneziana Studi* 19 (Venice and Rome: San Giorgio Maggiore, 1964) 243-5. For a biography of Callimachus, see Józef Garbacik, *Kalimach jako dyplomata i polityk* (Callimachus as Diplomat and Politician) (Cracow: Nakł. Akademii Umiejętości, 1948).

¹⁹⁷ Białostocki p. 21; Kaufmann, *Court, Cloister, and City*, pp. 54-55.

the Princess of Naples (long believed to be the model for Leonardo's *Mona Lisa* [1489]).¹⁹⁸ ¹¹⁶ With this unprecedented marriage, a rather daring act of self-fashioning (for Sigismund was the only Polish ruler in the early modern period to look to Italy for a bride), the king staked his identity upon the new learning originating from beyond the Alps. A large entourage of Italian attendants and diplomats accompanied Queen Bona from Milan; they joined the already sizeable Italian population in Cracow, an *haute bourgeoisie* that would compete with the city's affluent Germans and was comprised in part of merchant families and physicians and scholars associated with the university.¹⁹⁹ Polish-Italian exchanges in the sixteenth century were further strengthened by the aristocratic Polish families who sent their sons to study philosophy, law and medicine in Padua.²⁰⁰

An ongoing contest for power between the Polish king and his nobles made Sigismund's embrace of Italian humanism a partly political maneuver. Thanks to a rapidly expanding export market for grain, the *szlachta* or Polish-Lithuanian nobility had amassed great personal wealth.²⁰¹ Over the course of the sixteenth century, a period in which many other European monarchs were consolidating their personal control of the state and their power over both feudal magnates and local gentry, the *szlachta* managed to increase their already exceptional privileges.²⁰² Polish

¹⁹⁸ For an overview of Queen Bona's reign and a bibliography, as well as a transcript of her last will, see Alfonso Falco, *L'ultima Testamento di Bona Sforza* (Bari: Diritti Riservati, Edizioni Giuseppe Laterza, 2000).

¹⁹⁹ Lepszy p. 242.

²⁰⁰ The path from Poland to the University of Padua was well worn by the end of Jagiellonian era: between 1501 and 1605, the student population at the university was, incredibly, at least 25% Polish, and in 1563 a Pole, Jan Zamoyski, was appointed rector. See Lepszy and Norman Davies, *God's Playground: A History of Poland in Two Volumes* (New York: Columbia University Press, 1982) I: 150-152. See also Henryk Barycz, "Seventeenth-Century Padua in the Intellectual Life of Poland," in Mieczysław Giergielewicz, ed., *Polish Civilization: Essays and Studies* (NYU Press, 1979) pp. 135-162. Stanisław Lubomirski (b. 1583) kept a detailed book of expenditures on his travels to and from school; it was published by Władysław Czapliński and Józef Długosz as *Podróż Młodego Magnata do Szkół* (Warsaw: Państwowy Instytut Wydawniczy, 1969).

²⁰¹ For an overview, see Antoni Mączak, "Polish Society and Power System in the Renaissance," in Fiszman, 17-33. See also Andrzej Wyczański, "The Problem of Authority in Sixteenth-Century Poland: An Essay in Reinterpretation," in J. K. Federowicz, ed., *A Republic of Nobles: Studies in Polish History to 1864* (Cambridge UP, 1982) pp. 96-108.

²⁰² Perry Anderson, *Lineages of the Absolutist State* (London: New Left Books, 1974).

royal succession was nominally hereditary before the Union of Lublin of 1569 established a permanent elective monarchy, but precedent required that the king seek approval for this and all important matters from the *sejm*, the annual parliament of nobles. Belief in the “divine right” was tempered in Poland by an expectation that the king too was bound by all laws, and by 1515 the *szlachta* had already defeated royal attempts to implement an effective system of taxation and establish a standing army. The king simply could not formulate policy, nor could he enact any laws, without first holding negotiations with a powerful class of magnates. Throughout the sixteenth and into the seventeenth century, this unresolved struggle between the king and *szlachta* would be the defining feature of the Polish monarchy. It inevitably shaped the way the Polish king fashioned his public persona and thus influenced his patronage activities.

In contrast to the royal family, who sought out foreign artists and scholars and modeled their courtly environment on other European examples, many of the *szlachta* did not seek opportunities to explore the new learning through patronage of arts or letters. As Andrzej Wyrobisz and others have demonstrated,

The nobility of Poland tended to be preoccupied with managing its estates and campaigning first to obtain and then to preserve a privileged political position in the Commonwealth... (Moreover) the nobility generally was convinced of the moral superiority of the Polish social and political system and it preferred its own indigenous customs and manners to any elsewhere in Europe... In the Polish edition of Castiglione’s *Il Cortegiano*, which Łukasz Górnicki prepared in 1566, the discussion dealing with art was omitted on the grounds that it was incomprehensible to Poles who had only recently acquired a *delicatum palatum* and because it was superfluous for a Polish courtier to know how to paint.²⁰³

²⁰³ Andrzej Wyrobisz, “The Arts and Social Prestige in Poland Between the Sixteenth and Eighteenth Centuries,” in Federowicz, pp. 157-178. Łukasz Górnicki (1527-1603) served as Royal Chancellor under Sigismund II Augustus; see his *Dworzanin polski* (The Polish Courtier), ed. Roman Pollak (Wrocław: Zakład im. Ossolinkskich, 1954; orig.

Though certainly true of the lower gentry, such an interpretation may be overly pessimistic with regard to the magnate class; several of the richest Polish and Lithuanian families amassed large art collections, and expressed a keen interest in the rediscovered texts of antiquity and imported artistic forms.²⁰⁴ Initially, in the early sixteenth century, it was their sons who traveled to Italian universities for their education. More generally, however, it seems that the *szlachta* constructed and furnished their palatial residences with little understanding of aesthetic theories circulating elsewhere in Europe. Pedagogical practices in Poland emphasized languages, military skill, and the acquisition of manners proper for a courtier, but included no systematic study of the fine arts or encouragement concerning good taste.²⁰⁵ Nobleman Jan Zamoyski, educated in Italy at the turn of the sixteenth century, a statesman and a prodigious patron of the arts, faced frequent criticism from his peers for “his needless intellectual and artistic concerns which... merely distracted him from political and military concerns.”²⁰⁶ As art historian Jan Białostocki summarized it, “The import of new styles into Hungary and Poland was at first a purely elite, royal undertaking. In court circles it went with an intense interest in humanistic studies, but for a long time new buildings and works of art must have remained for many people strange and in several respects misunderstood.”²⁰⁷

Into this climate the last Jagiellon king was born. Sigismund the Old’s son and heir, Sigismund II Augustus (b. 1520), spent his first sixteen years observing the conversion of Wawel Castle from a medieval fortress to a magnificent Tuscan palazzo. His parents chose for the boy

Cracow 1566). See also Maria Bogucka, “L’Attrait de la culture nobilaire? Sarmatisation de la bourgeoisie polonaise au XVII^e siècle,” *Acta Poloniae Historica* 33 (1976).

²⁰⁴ Władysław Tomkiewicz, “Le Mécénat Artistique en Pologne à l’Époque de la Renaissance et du Début du Baroque,” *Acta Poloniae Historica* 16 (1967) pp. 91-108.

²⁰⁵ Wyrobisz pp. 158-9. Though its focus is Polish art and culture in the period immediately following the Jagiellonian era, see also the exhibition catalog *Art in Poland, 1572-1764: Land of the Winged Horsemen* (Alexandria, Va.: Art Services International, 1999), particularly the contributions of Thomas DaCosta Kaufmann and Jan Ostrowski.

²⁰⁶ Wyrobisz p. 157

²⁰⁷ Białostocki p. 4.

an Italian tutor, Johannes Silvius Amatus Siculus (dates unknown), who had come to Cracow to teach Greek. The young prince's name, an allusion to Caesar, reflected both his mother Bona's ambitions and the pro-Italian climate of the Wawel court. Remembered by Polish historians as the first Polish king to be "wholly the product of a Renaissance courtly upbringing," young Sigismund was raised to identify with the humanistic ideal of the virtuoso prince, for whom learning is an ornament. It was inevitable that his education and training should be seized upon by the *szlachta* in their efforts, real and rhetorical, to curtail royal power. A certain magnate out of favor at court reportedly received "thunderous applause" at a 1537 *sejm* when he "denounced the Queen for having made the heir to the throne unfit to rule a nation of warriors."²⁰⁸

Sigismund Augustus would face similar criticism throughout his reign. For most of it, he steadfastly maintained the public identity of the virtuoso crafted for him by his parents. Only during the last ten years of his reign – when he reversed his earlier policies on a number of economic and political issues – did he choose to publicly identify himself with the *szlachta*. This necessitated a kind of symbolic renunciation of his humanist identity. Throughout his life, Sigismund had favored rich Italian garb, but for the first time, on November 11, 1562, the king appeared before his nobles in the city of Piotrków dressed in a *kontusz*, the traditional ankle-length costume of the Polish gentry.²⁰⁹ The king understood that many of the *szlachta* perceived their own cultural values in opposition to Italian humanism. Clearly, he also understood the power of visual images to send a political message.

²⁰⁸ James Miller, "The Nobility in Polish Renaissance Society, 1548-1572," 2 vols., PhD dissertation, Indiana University, 1981, vol. I, p. 13. For similar criticisms of the king, see Górnicki's anecdotal history of the Polish crown, *Dzieje w Koronie Polskiej* (Wrocław: Zakład im. Ossolinkskich, 1950; orig. 1603) p. 11.

²⁰⁹ Dembkowski p. 69.

By all accounts the reign of Sigismund II Augustus was remarkable for its ceremonial splendor. Contests (*gonitwy*) held at Wawel between 1548 and 1572 outshone those of later Polish kings and became the stuff of legend: as a chronicler recalled in 1588, the festivities held for the coronation of Sigismund III were nothing compared to those that took place “during the reign of King August.”²¹⁰ Pageantry at Sigismund Augustus’ court – from the order of precedence observed in processions, to rules for the doffing of headgear – was partly modeled on the Habsburg courts at Vienna and especially Madrid.²¹¹ Family connections are one cause for this. Throughout most the sixteenth century, the Jagiellonian kings were closely tied to the Habsburgs through marriage, and emissaries passed regularly between Cracow and Habsburg courts across Central Europe. Queen Bona Sforza’s uncle through marriage was Holy Roman Emperor Maximilian I (1459-1519). Two of Sigismund Augustus’ own wives were Habsburgs: Elizabeth (1526-1545) and Catherine (1507-1578), while his first cousin Anna (1503-1547) married Emperor Ferdinand I (1503-1564) in Prague. But family links provide only a partial explanation for the prevalence of Habsburg ceremonial forms in Cracow. Habsburg regulations for behavior at court were explicitly associated with the emperor’s *absolutum dominium*; not surprisingly, the Polish *szlachta* feared and derided these associations.²¹² King Sigismund affirmed his own unique status as monarch through the implementation of such ceremonials. At a time when other European rulers were consolidating their power, the ethnic and religious

²¹⁰ “Daleko od onych rozne, jakowe bywały za króla Augusta,” *Kronika Mieszczanina Krakowskiego 1575-1595* (Cracow Burgher’s Chronicle, Cracow: Druk w.l. Anczyca i Spółki, 1930), p. 52.

²¹¹ Ryszard Skowron, “Znak i Liturgia Władzy – Ceremoniał i Etykieta Dworu Hiszpańskiego,” in Mariusz Markiewicz and R. Skowron, eds., *Theatrum Ceremoniale na Dworze Książąt i Królów Polskich* (Cracow: Wawel Royal Castle/Zamek Królewski na Wawelu, 1999) pp. 123-4.

²¹² Skowron p. 124.

diversity and the size of the Polish state, combined with the king's comparatively weak political position, put Sigismund in need of unifying and self-aggrandizing pageantry.

Sigismund Augustus also cultivated and maintained his identity as a virtuoso through patronage. He began assembling a private library in 1544, four years before he was crowned king; at the end of his life, its four thousand volumes included treatises on astronomy, geography, architecture (such as Alberti's *Decem libri de re aedificatoria*), the natural sciences, medicine, history, and law.²¹³ Surviving royal accounts reveal Sigismund's employment of numerous craftsmen from Italy, Hungary or the German territories, including clock-makers, jewelers, bell-casters, and various artists.²¹⁴ The king shared in the immense enthusiasm among European elites for portrait medals, a form of self-presentation with strong overtones of humanist erudition.²¹⁵ Members of the old king's court had exchanged letters, gifts, and/or medals with Erasmus of Rotterdam, Philip Melancthon, and Martin Luther, and these objects remained in the Wawel collections.

Collecting gems and intaglios was also a well-established practice among European rulers for enhancement of one's public image. Sigismund Augustus would have found particularly committed gem collectors among his mother's relations, including her (somewhat distant) cousin Isabella d'Este (1474-1539), whose *studiolo* and *grotta* in Mantua showcased thousands of precious carved cameos and antiquities.²¹⁶ He amassed a collection nearly as

²¹³ The authors whose works Sigismund inherited from his father include the preeminent authorities on animals of the medieval period: Albertus Magnus, Aelian, and Aesop. In addition, Sigismund owned a physiognomic treatise by thirteenth-century physician and astrologer Pietro d'Abano, a zoological encyclopedia published by English physician Edward Wotton in 1552 and zoologies by Gesner and Belon, and theological writings by Origen and John Chrysostom, for both of whom animals played a central role in Christian spirituality. See Kazimierz Hartleb, *Biblioteka Zygmunta Augusta. Studium z dziejów kultury królewskiego dworu* (Lvov, 1928).

²¹⁴ Marek Ferenc, *Dwór Zygmunta Augusta: Organizacja i Ludzie* (Cracow: Historia Jagellonica, 1998) pp. 102-104.

²¹⁵ See Cunnally, op. cit. On the portrait medal as the period's "currency of fame," see Jardine, *Worldly Goods*, pp. 416-8.

²¹⁶ Bona Sforza's great uncle was Ludovico Sforza (1452-1508), whose consort was Beatrice d'Este (1475-1497), Isabella's younger sister. On Isabella d'Este's gem collections, see Jardine, *Worldly Goods*, pp. 410-415 and

impressive. Bernardo Bongiovanni, the papal nuncio, was granted a tour of Sigismund Augustus' *Kunstkammer* in 1560. After describing the king's "twenty full coats of armor for his person," Bongiovanni turned to the royal gems; his report combines breathless admiration with careful accounting:

He has a predilection for jewels and one day he showed them to me in confidence, for he wishes not for the Poles to learn how much he has spent on them. He has in his room a table as big as the room itself, with room for sixteen caskets on it, each two palm long and one and half wide, all of them full of jewels. Four of the caskets he received from his mother, worth 200,000 scudos, from Naples. Four others His Royal Highness bought for 500,000 scudos in gold. Inside there is a *spinella* of Charles V, which is worth 30,000 scudos in gold, and his diamond medal as big as Agnus Dei which has an eagle with the arms of Spain on one side and two columns and the motto PLUS ULTRA on the other. Apart from this there are many rubies and emeralds square and sharp. The remaining eight caskets come from old times. In one of them there is a cap full of emeralds, rubies and diamonds worth 300,000 scudos in gold. Altogether I saw so many jewels which I never hoped to find and with which the Venetian jewels, which I also saw, and the papal ones cannot compare.²¹⁷

The gems bearing the insignia of Charles V further reveal Sigismund Augustus' identification with the Habsburg emperor.²¹⁸ Unfortunately, the papal ambassador left some of the more curious objects in the Polish royal collection for last, offering only a cursory list:

There are... many fine pieces of which his majesty is passionately fond, to mention only fountains, clocks the height of a man adorned with statues, organs and other instruments, a globe

Clifford M. Brown, "Isabella d'Este Gonzaga's Augustus and Livia Cameo and the "Alexander and Olympia" gems in Vienna and Saint Petersburg," in Brown, ed., *Engraved Gems: Survivals and Revivals* (Washington DC: National Gallery of Art, 1997) pp. 85-107.

²¹⁷ Trans. in Szablowski p. 38. "Spinella" signifies a kind of crystal, from the Italian word for thorn.

²¹⁸ For the origins and meaning of the emperor's motto, see E. Rosenthal, "Plus ultra, non plus ultra, and the columnar device of Charles V," *Journal of the Warburg and Courtauld Institutes* 34 (1971) and Rosenthal, "The invention of the columnar device of Emperor Charles V at the Court of Burgundy in 1516," *Journal of the Warburg and Courtauld Institutes* 36 (1973).

bearing all the celestial signs, bowls and vases adorned with all sorts of divine, terrestrial and sea creatures.²¹⁹

Bongiovanni's report reveals the Polish king to have been a secretive collector whose interests (like many of his contemporaries') spanned the domains of art and science: jewels, armor, furs, serving vessels, tack, gold- and silverwork, machines and instruments. In many European collections, such objects were displayed alongside precious artifacts from the natural world, such as dried or stuffed specimens of exotic animals, birds of paradise, unicorn's horns, even live animals housed in a menagerie. Princely collections testified to their owners' wealth and erudition, demonstrating the breadth of the collector's territories and their economic promise.²²⁰ The collection assembled by Habsburg emperor Rudolf II in Prague (beginning in the early 1580s) was the largest in sixteenth-century Europe, but it was preceded by many smaller *Kunst- und Wunderkammern* at princely courts in Italy and across the continent. Assembling exquisite manmade objects as well as specimens and representations of natural rarities allowed royal patrons to simulate the world in glittering microcosm and position themselves at its center.²²¹ Yet there is no evidence that Sigismund collected *naturalia*, and his interest in natural history would be a matter of speculation, were it not for his tapestry patronage.

One hundred and thirty eight of Sigismund's tapestries are extant (all but two at Wawel); he is thought to have purchased approximately one hundred and seventy tapestries during his

²¹⁹ Trans. in Jardine, *Worldly Goods*, pp. 307-9. Clocks commissioned for Queen Bona and for Sigismund Augustus survive in Polish and English collections. Though none approaches "the height of a man," these timepieces reveal the sophistication of the Cracow locksmiths' and metalworking guilds; Queen Bona's cast brass clock could even indicate the hour in the dark. See *An Outline History of Polish Applied Art* (Warsaw: Interpress, 1986) p. 22.

²²⁰ Kaufmann, "Remarks on the Collection of Rudolf II: The *Kunstkammer* as a Form of *Representatio*," *Art Journal* 38:1 (Autumn 1978) pp. 22-28. See also Jürgen Schultze and Hermann Fillitz, *Prag um 1600: Kunst und Kultur am Hofe Rudolfs II*, 2 vols. (Frankfurt: Luca Verlag, 1988); and Syndram and Scherner, *Princely Splendor*, op. cit.

²²¹ Julius von Schlosser, *Die Kunst- und Wunderkammern der Spätrenaissance; ein Beitrag zur Geschichte des Sammelwesens* (Leipzig, Klinkhardt & Biermann, 1908); Krzysztof Pomian, *Collectors and Curiosities: Paris and Venice 1500-1800* (Cambridge, UK: Polity Press, 1990); Oliver Impey and Arthur MacGregor, *The Origins of Museums: The Cabinet of Curiosities in Sixteenth- and Seventeenth-Century Europe* (London: House of Stratus, 2001); Joy Kenseth, ed., *The Age of the Marvelous* (Hanover, N.H.: Hood Museum of Art and Chicago: University of Chicago Press, 1991).

reign.²²² The collection customarily has been divided into three groups: three narrative series illustrating the first eleven chapters of Genesis, from the Creation to the confusion of tongues at Babel Tower; forty-four verdure tapestries depicting wild and exotic animals; and a variety of grotesque and heraldic tapestries (including tapestries with the arms of Poland and Lithuania, those bearing the king's monogram, and a variety of over-door and over-/under-window weavings, as well as chair coverings; see figs. 72-74 for examples).²²³ Nearly all of the tapestries feature a grotesque scrollwork border (derived from the Mannerist engravings of Cornelius Bos and Cornelius Floris) and a background of lush vegetation inhabited by wild animals.

The remainder of this chapter will be devoted to an examination of Sigismund's tapestries as a unique and subsequently overlooked form of natural history illustration. I will discuss the Polish king's tapestries for Wawel Castle as an elaborate – the *most* elaborate – program of natural history illustration to survive in the medium of tapestry. His massive series, woven some time between 1548 and 1560, provided a biblical justification and program for the study of the natural world. It also subtly shored up the authority of its patron, the newly crowned king of sixteenth-century Europe's most expansive and most ethnically and religiously diverse state.

²²² Hennel-Bernasikowa in Campbell p. 447. Two of the tapestries are now at the Museum Narodowe in Warsaw.

²²³ Documents refer to another biblical set, five tapestries illustrating the *Story of Moses*, which remains unknown; it has been suggested that Sigismund inherited this set from his parents or obtained it in some other way; Szablowski p. 70. On the king's grotesque tapestries, see Magdalena Piwocka, "Arrases with Grotesques" in Szablowski, pp. 271-348; and Janina Ruszczyk, "Au Sujet de l'Iconographie des Tapisseries aux Éléments Grotesques," *Bulletin de Musée National de Varsovie* 2:4 (1961) pp. 103-114. Research on the Wawel tapestries is complicated by the fact that no scholarly catalogue of the collection has been published since before the Second World War (the monograph edited by Szablowski in 1972, republished in 1994, is not annotated and does not include images of a number of weavings in the collection), and by inconsistencies in the titles of tapestries and in the bibliographies compiled by Wawel curators in different publications. For the most part I have drawn tapestry titles from the "Catalogue of Wawel Arrases" provided in Szablowski, pp. 349-377.

THE WAWEL TAPESTRIES: AN INTRODUCTION

Sigismund the Old died on April 1, 1548. His son, twenty-eight at the time, was summoned from Vilnius for the funeral solemnities the following month. The funeral provided an opportunity for the Jagiellonian court to affirm its ties to the powerful Habsburgs. As court chronicler Łukasz Górnicki records, before the funeral a “*vellus aureum*” (an unspecified object signifying membership in the Order of the Golden Fleece, perhaps the familiar golden chain with lamb pendant), which Emperor Charles V had sent to the old king in 1525 “as a sign of brotherhood,” was returned to the emperor as agreed, by a Polish delegation “full of love.”²²⁴ In the fall of that year, Sigismund II Augustus was crowned the King of Poland and Lithuania.

In all likelihood he began planning a large collection of Flemish tapestries very soon after assuming the throne. The grandest of his tapestries were delivered to Wawel in time to be displayed at his third wedding in 1553 (also the occasion of the first written description of the tapestries). Given the tremendous amount of time and labor required to produce sets of such size and quality, the design if not the weaving was almost certainly begun in the late 1540s. Multiple workshops in Brussels performed the weaving (as was common for large royal commissions), and tapestries probably continued to arrive in Cracow in batches throughout the 1550s. The spectacular cost of such a series would have necessitated complex financing and payment in installments over a number of years.

As with most princely tapestry commissions of the sixteenth century, almost no written records of Sigismund’s tapestry purchases survive.²²⁵ The king’s will of 1571 included the

²²⁴ “na znak braterstwa,” “z poselstwem pełnym miłości”; Łukasz Górnicki, *Dzieje w Koronie Polskiej* p. 8

²²⁵ One payment is recorded in 1564 to Roderick Dermoyen, the king’s agent for tapestry purchases, for three years’ back pay. Historians have understood this date as the *terminus ante quem* for the delivery of the king’s tapestry collection from Brussels. See M. Gębarowicz and T. Mańkowski, “Arasy Zygmunta Augusta,” *Rocznik Krakowski* 29 (1937) pp. 15-6. Years later, Dermoyen was apparently responsible for obtaining a set of black and white Flemish tapestries bearing the royal initials, all of which are now lost; see Hennel-Bernasikowa, “Czarno-białe tkaniny Zygmunta Augusta,” *Studia Waweliana* 5 (1996) pp. 33-44.

provision that all of his private correspondence be assembled into caskets and burned in the presence of his sister Anna; if the documents concerning his tapestry commissions survived that event, then they disappeared during the Swedish Deluge of 1655-57, or during the political turmoil that Poland has regularly experienced throughout subsequent centuries.²²⁶ Though the total number of tapestries that Sigismund inherited, commissioned, and received as gifts during his lifetime remains unknown, his collection was numbered at 157 Flemish weavings in a Wawel inventory of 1669.²²⁷

The king collected other luxury textiles in abundance. The text of his will suggests a profusion of lavish fabrics and upholsteries too numerous for his secretaries to detail, although the Brussels weavings are set apart and mentioned first:

Flemish tapestries with gold and with figures and others of simple workmanship, as well as wall and bench coverings of cloth of gold, velvet and silk, carpets, tapestries, *arazzi* and all other furnishings – whatever their name – for apartments, chambers, walls, tables, benches, and also beds, floor coverings, canopies, *grobki* (Lat. *sepulchriola*), counterpanes, bolsters.²²⁸

Shortly before 1553, Sigismund also acquired 132 pieces of decorative fabric from Turkey.²²⁹ He also took the extraordinary step of maintaining three Armenian weavers on the court payroll, further evidence of his enthusiasm for luxurious and exotic textiles.²³⁰ More recent research by

²²⁶ Hennel-Bernasikowa, *Arrasy*, p. 24.

²²⁷ Hennel-Bernasikowa, *Arrasy*, p. 9. The king's full collection may have included as many as 350 tapestries before his death; see Gębarowicz and Mańkowski, p. 27.

²²⁸ English translation by Krystyna Malcharek, in Hennel-Bernasikowa, *Arrasy*, p. 8. See also *Testament Zygmunta Augusta*, eds. Antoni Franaszek, Olga Laszczynska, and Stanisław Nahlik (Cracow: Nakł. Ministerstwa Kultury i Sztuki, 1975). *Grobki* were likely textiles made for use in funerary rituals, which reached fantastic heights of elaborateness among the Polish aristocracy in the early modern period; see Juliusz A. Chroscicki, *Pompa funebris; z dziejów kultury staropolskiej* (Warsaw: Państwowe Wydaw. Naukowe, 1974).

²²⁹ Szablowski p. 47

²³⁰ Ferenc p. 104. Like other European princes, Sigismund's acquisition of luxurious textiles during the 1550s was in emulation of both the Habsburg brand of magnificence (expressed in tapestry) as well as an oriental, particularly Turkish, model of opulence. See Jardine, *Worldly Goods*, pp. 402-3. For example, the tapestry workshops founded by Cosimo d' Medici produced a magnificent *carpita all moresca* in Florence between 1550 and 1553 (executed by Flemish weaver Nicholas Karcher, and possibly designed by Agnolo Bronzino). See Meoni pp. 186-7 and Adelson pp. 280-314.

Maria Hennel-Bernasikowa suggests that Sigismund embarked, during the final years of his reign, on assembling a separate collection of decorative textiles in an unknown medium, exclusively in black and white.²³¹ Tapestry scholars point out that the bare interiors of historic residences today would have appalled an early modern visitor, who expected to see fine fabrics lining the walls and covering the floors. Yet even by sixteenth-century standards, the Polish court environment would have dazzled the eye: when the king's collection was put to use, nearly every square inch of formal space was apparently swathed in sumptuous textiles.

Sigismund Augustus' tapestry commissions of the 1550s reveal a uniquely holistic approach to adorning a palace (in this case, the palace his father had lately transformed into an Italianate villa). Each of the 138 surviving Wawel weavings shares a common style and most feature an identical border. The king's enormous purchases from Brussels occurred within just a few years (it is at least conceivable that the entire order may have been completed as early as 1553, though Orzechowski only provided descriptions of the Old Testament scenes), and although the tapestries were produced in a variety of workshops, they unquestionably form one monumental unified series. This was an unusual conception of tapestry patronage. Although individual tapestry series could include a dozen or more weavings, and the tapestries owned by the English, French, or Habsburg crowns far outnumbered the Polish, no other European monarch seems to have commissioned a single cohesive group of Flemish tapestries extensive enough to furnish an entire building. Sigismund's tapestry collection together forms one complete woven decorative program, encompassing furniture, sills, the arches above recessed windows, freizes, *portieres* (door coverings), and *entre-fenêtres* (hangings placed between and around windows). Many of the tapestries were clearly made to measure and occupy designated

²³¹ Hennel-Bernasikowa, "Czarno-białe tkaniny," pp. 43-44.

spaces at Wawel.²³² Hung all together, the tapestries would have created a seamlessly rich simulation of the natural environment.

What motivated Sigismund to amass such a splendid tapestry collection in a relatively short time? There are several possibilities. The Wawel tapestries served to bring visual unity to the renovated palace, suite after suite. Jan Białostocki observed that the

construction of what is known as the Wawel castle of Polish kings in Cracow was done in sections, each addition being a separate unit, and only at some point during the progress of the work did the ingenious and fashionable idea of an arcaded courtyard help to put a unifying curtain around the rectangle of individually conceived units.²³³

This part-by-part exterior renovation of the castle complex lasted almost two decades, and by the time Sigismund Augustus took the throne, it would have made sense to try to impose some visual unity on the building's *interior* as well. His enormous tapestry purchases comprise a “unifying curtain” – quite literally – for the interior of the castle, complementing the exterior structural changes undertaken by his father.

As a tapestry patron, Sigismund was both imitative and prescient. As Lisa Jardine and Jerry Brotton have argued, the sixteenth-century Habsburg courts (recalling the splendor of fifteenth-century Burgundy) established Flemish tapestry as the primary artistic medium for the illustration of political power. For patrons such as Charles V and Mary of Hungary, “imperial authority was increasingly measured through the conspicuous purchasing power required to commission, transport and repeatedly display massive, visually overpowering tapestry cycles.”²³⁴

²³² In addition, Sigismund's smaller heraldic weavings probably traveled with him as he moved around the realm to perform his administrative duties. After the death of his second wife, the king retreated from his earlier plans for a splendid Wawel court and spent much time away from the capital, traveling between royal residences in cities such as Warsaw, Piotrków, Gdansk, and Lublin. See Hennel-Bernasikowa, *Arrasy* p. 13.

²³³ Białostocki p. 18.

²³⁴ Brotton and Jardine, p. 70.

Tapestry was understood as a direct index of a prince's magnificence.²³⁵ We have already seen how Wawel court ceremony and the contents of Sigismund's *Kunstkammer* reflected the king's esteem for and identification with the Habsburg emperor. Similarly, Sigismund's patronage of Flemish tapestry workshops was an effort to emulate a Habsburg model of magnificence, which centered upon the exhibition of splendid weavings. His contemporaries Francis I and Henry VIII commissioned equally splendid tapestry sets from Brussels workshops with the same goal in mind.²³⁶

Interestingly, in Sigismund's case the pattern of emulation proved circular: following the Wawel tapestry commissions of the 1550s, Habsburg patrons such as Philip II of Spain and Margaret of Parma demanded copies of the Polish king's weavings, with the addition of even more zoological images (figs. 75-76). Their re-editions of the Wawel tapestries will be discussed later in this chapter.

²³⁵ Campbell p. 4; Delmarcel, *Flemish Tapestry*, pp. 16-18; Belozerskaya, *Luxury Arts*, pp. 89-133.

²³⁶ Brotton and Jardine, *op cit*.

Elites pursued natural history in the sixteenth century – amassing collections and establishing botanical gardens, sponsoring the publication of treatises and adorning their courts with zoological and botanical imagery – with a variety of motivations. Royal patrons such as Rudolf II of Prague demonstrated their power by arranging their encyclopedic collections to suggest the world in microcosm.²³⁷ Natural rarities and exquisite objects of human manufacture testified to a patron's wealth and reach. To describe, classify, and name natural specimens was not only to emulate the ancients but also to appropriate the economic potential of such plants and animals for oneself. Exotic species were regularly exchanged as gifts between courts, especially among the Habsburgs of the sixteenth century. Early modern courtly gardens were cultivated and enjoyed as living catalogues of Creation; they were conceived as sites for the restoration of lost learning, particularly the medical plant lore of antiquity.

Along with these motivations, and arguably underpinning all of them in the period, was a religious imperative: princely patronage of natural history represented a biblically mandated effort to regain what Adam, the first man, had forfeited. The practices of early modern natural history – assembling, classifying, describing – were performed in emulation of biblical figures such as Adam and Noah, who had been privileged with a perfect understanding of the natural world. The construction of a botanical garden encompassing every known plant was not only regarded as a scientific achievement but a spiritual one; such a garden would provide a cure for every known malady, effectively nullifying the punishment laid upon mankind by Adam: death and decay.²³⁸

²³⁷ Kaufmann, "Some Remarks," *op. cit.*

²³⁸ Prest p. 10.

The tapestries woven for the Polish king gave splendid pictorial form to man's pursuit of natural knowledge, and illustrated the biblical justification for the pursuit and patronage of natural history. With their overwhelming quantity of precise zoological and botanical imagery, the tapestries reflect new forms of attention to natural specimens, and the growing concern among early modern artists and naturalists for close empirical observation and representational naturalism. Beyond this, the Wawel tapestries comprise an elaborate narrative of mankind's pursuit of natural knowledge.

Jim Bennett and Scott Mandelbrote have identified the four-part biblical creation narrative of the Garden of Eden, Noah's Ark, the Tower of Babel, and Solomon's Temple as the most important framework for natural knowledge in the early modern period. Indeed, allusions to these scriptural events, interpreted as historical facts, appear regularly in the literature of natural history of the sixteenth and seventeenth century.²³⁹ Together these four Old Testament accounts – the garden, ark, tower, and temple – provided a cautionary tale of man's acquisition, loss and ongoing effort to regain an original, perfect understanding of the natural world. The narrative of garden, ark, tower and temple shaped early modern beliefs about the progress of knowledge, linking scientific pursuits with human spiritual development, and framing nature in terms such as innocence and corruption, or chaos and control. The biblical narrative also helped to shape the goals and methods of scientific exploration in the period.

The Wawel tapestries illustrate the first three parts of this important narrative, and by transforming the interior of the palace into a kind of theater or temple of knowledge, they ultimately posit their patron, Sigismund II Augustus, as a new Solomon. The tapestries therefore elaborate the problem of natural knowledge as it was understood in the early modern period

²³⁹ Jim Bennett and Scott Mandelbrote, *The Garden, the Ark, the Tower, the Temple: Biblical Metaphors of Knowledge in Early Modern Europe* (Oxford: Museum of the History of Science, 1998).

more splendidly than it had ever been presented before. Sigismund's weavings vividly and monumentally recount mankind's possession and subsequent loss of a perfect understanding of nature. The tapestries feature images of animals and plants which closely resemble the proto-scientific images in printed books and illuminated albums of the period; this is not the only reason, however, that they should be regarded as natural history illustration. Rather, the tapestries narrate on a grand scale the central metaphor for natural knowledge in early modern Europe: the biblical account of man's lost mastery of the natural world. Insofar as the early modern study of nature was understood as an effort to overturn Adam's fall and recreate the Ark or paradise garden, the Wawel tapestries constitute a monumental form of natural history illustration.

Sigismund's tapestries include biblical scenes, heraldic and grotesque tapestries, and several dozen verdures featuring animals in a wooded landscape. The Old Testament tapestries in the Wawel collection divide into the following sets:

- I. The First Parents
 - a. Paradise Lost
 - b. Adam Tilling the Soil
 - c. Abel's Sacrificial Offering
 - d. Cain Conceiving Fratricide
 - e. Cain Slaying Abel
 - f. Cain's Flight from God's Wrath
- II. The Story of Noah
 - a. Noah's Conversation with the Lord
 - b. Building of the Ark
 - c. Animals Embarking
 - d. The Flood
 - e. Animals Disembarking
 - f. Noah's Sacrifice

- g. God Blessing Noah
- h. Noah Intoxicated
- III. Tower of Babel
 - a. Construction of the Tower
 - b. God's Wrath
 - c. Confusion of Tongues
 - d. The Scattering of Mankind

These narrative tapestries are complemented by the numerous verdure, grotesque and heraldic tapestries in the Wawel collection. All types were likely hung interspersed throughout the palace. The richly detailed vegetation and profusion of small and exotic animals in many of the Wawel weavings, like the grotesque borders they all share, ensured visual unity throughout suites of rooms, no matter how the tapestries were mixed and matched for various occasions.

The three Old Testament tapestry sets, the grandest and undoubtedly the costliest weavings, formed the heart of the king's collection.²⁴⁰ In 1553, they attracted the attention of Stanisław Orzechowski (1513-1566), and are described in his *Panagyricus nuptiarum Sigismundi Augusti Poloniae Regis*. The document recounts the festivities at Wawel surrounding the celebration of king's third wedding, and its author devotes a great deal of attention to the Flemish weavings hung in the palace for the event.²⁴¹ Ekphrastic descriptions of tapestry from this period are extremely rare, and Orzechowski's panegyric offers a precious glimpse into the sixteenth-century viewer's experience of the Wawel weavings, displayed then in much the same spaces as they are today. Orzechowski's introduction to the tapestries highlights how their naturalism amazed their first viewers, and demonstrates how the particular tapestries displayed in

²⁴⁰ Anna Misiąg-Bocheńska offers an overview of the biblical tapestries that is primarily concerned with problems of style and attribution in "Biblical Arrases: Scenes from the Book of Genesis," in Szablowski pp. 69-172.

²⁴¹ Though Orzechowski, composing his text after the wedding celebration, did not recall with perfect accuracy how the biblical events divide up among the king's tapestries, his description of the series is mostly correct and his presence at court is accepted by historians. See Hennel-Bernasikowa, "Sprawa 'editio princeps' Arrasów Zygmunta Augusta," *Rocznik Krakowski* 56 (1990) pp. 95-102.

a palace (through both their quality and content) were perceived to directly reflect the character and status of the patron:

After the banquets, games and merry-making, the nuptial bed was prepared in the back of the room. The splendor of the wall-hangings, unusual and not seen elsewhere at royal courts [shone at this time]. On them Adam and Eve, our first parents and the perpetrators of our misfortune, stood as if alive, painted in the weaver's craft, both of them on all the hangings with a golden thread. And because the figures of these first parents, beside other features worth observing, were characterized by an extraordinariness of material and artistry, I will present them in the manner of Cebes, so that you may perceive them in this fashion, not only the work of an excellent artist, but also the personality of a noble monarch who best expresses his love of such things.²⁴²

Orzechowski characterizes the Polish king's tapestries as marvelous, "extraordinary" even among royal courts for their "material and artistry." He also explains the significance of Adam and Eve through their trespass: they are the "perpetrators of *our* misfortune," and presents the consequences of their fall as both palpable in the present and shared by all. I will return to Orzechowski's text periodically as an important reference point in this chapter.

The most unique and mysterious feature of Sigismund's tapestry collection, however, is the large group of verdure, with their painstakingly naturalistic animals, both exotic and familiar, in forest settings. The role played by the verdure within the larger tapestry program at Wawel has not been fully explored, though they constitute a full third of the king's tapestry collection. The problem is central to this chapter. How do these life-sized images of animals relate to the biblical scenes they accompanied? What did such animal images, devoid of inscriptions and featuring almost no sign of human presence, signify for their sixteenth-century viewers?

²⁴² Szablowski p. 45. Cebes of Thebes was thought to be the author of the *Pinax*, a first-century ekphrastic description of an allegorical painting hanging in a temple.

Though I have been careful to provide a historical and geographic context for Sigismund's tapestry patronage, I have chosen to analyze the iconography of the Polish king's tapestries rather broadly, without restricting my discussion to the political exigencies and cultural milieu of the Cracow court. This is partly due to a dearth of available relevant sources dating from Sigismund's reign. Primarily, however, it is because the Wawel tapestries, like all high-quality weavings produced by sixteenth-century Brussels workshops, were created for export, and designed to be "legible" to elites across the European continent.

The first six of Sigismund's tapestries illustrate the story of the First Parents and the corruption of both humanity and the environment. The tapestries begin with the trespass of Adam and the expulsion from paradise, and conclude with Cain's flight following his murder of his brother Abel. Sixteenth-century viewers understood the Creation story as one of forfeiture and loss, but also read the Book of Genesis as a directive about how mankind's prelapsarian mastery of the natural world might be regained. The narrative of Adam and his descendants, as it is illustrated in the Wawel tapestries, underscores the importance of divine limits on man's natural knowledge. At the same time, the tapestries foreground the scope and richness of the natural order.

Five events from the Creation story are condensed in the first Wawel tapestry (fig. 50, 463 x 854cm), including God's creation of Adam and then Eve; his command to refrain from touching the fruit of the tree of knowledge of good and evil; the tasting of the fruit; and finally the expulsion. An inscription from Genesis describing these events occupies a cartouche in the center of the tapestry's upper border. This format is repeated on all of the Old Testament tapestries at Wawel.²⁴³ The inscription on the first Creation tapestry reads DEVS ADE ET EVE NE POMO LIGNI VITE VESCERENTVR PRACEEPERAT ILLI INOBEDIENTES EIECTI SVUNT PARADISO GEN.III (God forbade Adam and Eve to eat the fruit of the Tree of Knowledge; for their disobedience they were driven out of the Garden of Eden). This tapestry, like others in the series, with their enveloping scale and profusion of detail, brought a frightening

²⁴³ English translations are from Hennel-Bernasikowa, *Arrasy*. All of the tapestries' Latin inscriptions are quotations from the Book of Genesis, and as they have been fully transcribed and published in Szablowski, pp. 351-6, they will not each be repeated here.

immediacy to the biblical account. “Thus the wall hanging depicted the sin of Adam and God’s anger in all the aspects and details,” wrote Orzechowski approvingly.²⁴⁴

In the tapestry, the Creation narrative is depicted chronologically from left to right. The tapestry eschews unity of time and space, situating its chain of events within a single landscape. This format was also used in some contemporary printed depictions of the Creation narrative, such as one by Nuremberg engraver Virgil Solis (1514-1562). He arranges multiple events from Eden within a long, horizontal, unbroken landscape (fig. 77). Events from the narrative are drawn together in Solis’ print by a winding stream, much like the one running through many of the Wawel tapestries (both the Old Testament scenes and the verdures).

Episodes from the Creation story are hierarchized in the first Wawel tapestry in terms of their proximity to the viewer. The nearest and largest episode, occupying the center of the tapestry, is God’s prohibition of the fruit of the tree of knowledge; it is not, significantly, the moment of original sin. The figure of God in splendid robes presents the forbidden tree in the heart of the garden, while Adam (equal in stature, to show that he was made in God’s image) appears to repeat His divine commandment to Eve. Thus, at Wawel, divine ordination of the rightful limits of human knowledge takes precedence over all of the other episodes in Eden.

The biblical tapestries have been discussed at length in stylistic terms. It is generally agreed that their designer was Michiel Coxcie (1499-1592), a pupil of famed tapestry designer Bernaert Van Orley (1488-1541).²⁴⁵ Coxcie spent much of the 1530s traveling in Italy and the Wawel Old Testament tapestries reflect his familiarity with both Antwerp Mannerism and the

²⁴⁴ Szablowski p. 46.

²⁴⁵ On Van Orley, see Maryan W. Ainsworth, “Bernart Van Orley as a Designer of Tapestry,” PhD dissertation, Yale University, 1982.

works of Italian artists such as Michelangelo and Raphael.²⁴⁶ There are also similarities between the Wawel tapestries and a set of engravings of the Creation story by Jan Sadeler (c. 1576) after designs by Coxcie. Most of the tapestries from the Wawel collection bear one of six weaver's marks, indicating that (as was common for large princely commissions) the weaving was contracted out to multiple workshops in Brussels. The mark of Jan Van Tieghem appears most frequently throughout the collection, while marks reveal that prominent weavers Willem and Jan de Kempeneer and perhaps Frans Ghieteels also participated in the creation of Sigismund's tapestries.

The Creation tapestry, the first in Sigismund's grand Genesis narrative, introduces the richness of botanical detail and startling variety of animal species that characterize nearly all of his Flemish weavings, not only the other Old Testament scenes but the verdures and heraldic tapestries as well.²⁴⁷ In addition to the requisite serpent, an exotic variety of animal species (mostly birds) wander through the paradise garden and mingle peacefully with the human figures, including a lion, an American turkey, a parrot, quail, a pelican, frogs, a pair of dragonflies, a sandpiper, and a prominently placed ostrich and peacock.²⁴⁸ Like the consistent scrollwork borders, this continuous, teeming, inhabited landscape – the vibrant presence of the natural world – recurs throughout Sigismund's large and diverse collection of weavings across multiple genres, and would have unified the ornate interior of Wawel Castle. The rich diversity of plants and animals in the biblical scenes is echoed and amplified by the dozens of verdure

²⁴⁶ Marjan Morelowski, "Arasy wawelskie," op. cit.; George Wngfield Digby, "Tapestries from the Polish State Collections," *The Connoisseur* 138 (1956) p. 6; Campbell pp. 441-7.

²⁴⁷ A recently published study of the botanical imagery in Sigismund's tapestries (including examples from all genres represented in the collection, not only the verdures) identified eighty plant varieties, including European and exotic (American and Asian) species. See Anna Kostuch and Alicja Zemanek, "Plants in the 16th Century Flemish Tapestries from Wawel Castle (Cracow, Poland)," *Polish Botanical Studies* 20 (1998) pp. 205-230.

²⁴⁸ On birds in Eden, see Philip Almond, pp. 95-6, and Prest, p. 84. On pictorial "catalogs of nature" in seventeenth-century paintings of scenes from Genesis, see Arianne Faber Kolb, "Cataloguing Nature in Art: Jan Brueghel the Elder's Paradise Landscapes" (PhD dissertation, University of Southern California, 2000).

tapestries, which likely hung interspersed between the biblical weavings. The overall impression made by the collection would have been of a dense forest, crawling with animals and thick with vegetation. No other known tapestry commission by a sixteenth-century patron was designed to occupy and transform a building in the same way.

The Creation tapestries were hung at Wawel for the first time on the occasion of the king's third wedding in 1553, and they were displayed in a way that was intended to suggest a direct link between the still masterful figure of Adam and the tapestries' royal patron. Their idealized nude figures, suggestive of trends in Italian art, also caused a stir at the Polish court. Stanisław Orzechowski's description reveals this clearly:

On the first wall hanging, at the head of the nuptial bed, on can see represented on a tapestry a picture of the bliss of our ancestors, in which as blessed they went naked. Meanwhile their nakedness had such an effect on those who saw them that the men smiled at Eve and the wanton girls, once they entered, at Adam. Because the uncovered private parts showed him in the fullness of his manhood and her in her womanhood.²⁴⁹

The first tapestry in the Creation series was positioned above the king's own marriage bed, to implicitly link Sigismund Augustus with the tapestry's lordly figure of Adam and his bride with the glorious beauty of Eve. Most importantly, Orzechowski's description shows how powerfully immediate the events of Genesis felt to the first viewers of the king's Flemish tapestries. Orzechowski's description of the temptation and the expulsion (both pictured in the same tapestry) magnifies this sense of immediacy even further. The tapestry

depicted the fruit of the tree and the serpent's beguiling with such artistry that the tapestry itself spoke of the serpent's trick and Eve's covetousness as well as of Adam's sin... [The tapestry also] showed our expulsion, our poor and unfortunate exile. Here you could feel fear seeing

²⁴⁹ Szablowski p. 46.

Adam's flight, Eve's trembling and God the judge in anger, so that you could say that you, too, are condemned and that you have been sentenced as well.²⁵⁰

Orzechowski places the reader directly into the tapestry, not simply as a viewer but at times as a participant – “the tapestry showed *our* expulsion,” and “*you* could feel fear” – collapsing the distance between the viewer and the woven image. Tapestry is rarely perceived today as having *trompe l'oeil* potential, but Orzechowski's text demonstrates that the medium was appreciated in the sixteenth century in no small part for its illusionism. “The *tapestry itself spoke* of the serpent's trick,” Orzechowski declared, meaning that the scene from Eden appeared so palpable, so convincing, that no explanatory text was required for the wedding guests to understand the narrative and its moral. When we recall that Sigismund's collection included well over one hundred more, equally vibrant weavings, we get a hint of how utterly transformed the palace interior must have been when the royal collection was displayed in whole or in part. The natural landscape would have seemed to come alive within the building, to unfold through successive suites of rooms.

The second tapestry illustrates *Adam Tilling the Soil* (fig. 51), and the first family is shown completely surrounded by assorted species of birds, exotic and domestic land animals, fish, reptiles, and even precious branches of coral. An inscription reads IVBET DEVS ADAMO OPERARI TERRAM. GEN III (God commands Adam to till the ground). The tapestry differs from other sixteenth-century depictions of this biblical episode, such as a print by Baldassare Aloisi Galanini (1577-1638) after Raphael (fig. 78) or another (fig. 79) published in 1585 by Johannes Sadeler (1550-1600) after Crispijn van den Broeck (1523-91), only in its huge and lively menagerie of animals. After the Fall, the natural landscape continues throughout the tapestries in uninterrupted plenitude. Living amidst wild creatures and boasting only a single

²⁵⁰ Szablowski p. 46.

crude tool and a rude hut, the first family has just begun to tame and exploit their natural environment. Orzechowski interprets the overwhelming presence of the beasts in this tapestry as a reminder of Adam and Eve's trespass, which brought them closer to the level of animals:

Unhappy Adam in animal skins, expelled from his land, tilling the soil with a heavy hoe. And impudent Eve in a furry skin guarding the poor hut and caring for two children with her. One could see the roof of the hut thatched with grass and around it and on the hill various untamed birds reproaching her for her sin and deriding her for causing the banishment.²⁵¹

In Orzechowski's view, the whole of the natural landscape takes part reproaching the first parents for their sin, while Adam and Eve's clothing, shelter, and work all draw them closer in to the world of animals.

The tapestry's emphasis on natural or zoological abundance reflects contemporary interpretations of the curse of labor imposed after Adam's expulsion from the garden. Development of the early modern sciences was partly justified in the period as an effort to "restore that which had been damaged by the Fall, and to return the earth to its primevally perfect state," as Peter Harrison observes, and as historians Charles Webster, Philip Almond, Jeremy Cohen, John Passmore, and many others have argued.²⁵² Even the rhetoric of seventeenth-century natural philosophers such as Francis Bacon is deeply informed by an understanding of modern science as a quest to recover man's original dominion over nature through the inherited burden of work. Labor was man's punishment after the Fall, and likewise the means through which he

²⁵¹ Szablowski p. 46.

²⁵² Harrison, "Reading the Passions," p. **, "Original Sin and the Problem of Knowledge in Early Modern Europe," *Journal of the History of Ideas* 63:2 (April 2002) pp. 239-259, and "Subduing the Earth: Genesis I, Early Modern Science, and the Exploitation of Nature," *The Journal of Religion* 79:1 (January 1999) pp. 86-109, with bibliography; Almond, p. 35; Jeremy Cohen, *"Be Fertile and Increase, Fill the Earth and Master It": The Ancient and Medieval Career of a Biblical Text* (Ithaca: Cornell UP, 1989); John Passmore, *Man's Responsibility for Nature* (London: Duckworth, 1974); Charles Webster, *The Great Instauration: Science Medicine and Reform, 1626-1660* (New York: Holmes and Meier, 1976).

might recover paradise. The tapestry *Adam Tilling the Soil* depicts man's first steps toward recovering his lost mastery of nature.

Zoological imagery is not as prominent in the other tapestries in Sigismund's Creation series (figs. 52-55). Their theme, in keeping with the text of Genesis, is the fate of Adam's descendants and the narrative of the first murder. Nevertheless, the same concern for an animate landscape, filled with botanical minutiae and small creatures, is evident in the remaining four weavings.²⁵³ The elegant circling figures of the brothers in *Fratricide Conceived* (fig. 53, 455 x 246cm) is echoed by a pair of tall trees behind, with their multicolored bark and contrasting leaves elaborately detailed. Abel's lifeless body falls next to a stream filled with busy creatures: reptiles, buzzing insects, crustaceans, surrounded by ferns and climbing grasses (fig. 55, 468 x 526cm). The inhabited forest is always a presence in these scenes, and in each, the lush green landscape extends far into the distance behind.

In sum, Sigismund's Creation tapestries celebrate the abundance of flora and fauna placed by God in the service of man, and recount the foundational narrative of man's lost possession and lost perfect understanding of nature. Orzechowski's ekphrastic text reveals that the tapestries overwhelmed their first viewers by lending a dramatic immediacy to these events.

The biblical tapestries would very likely have hung interspersed with the large number of verdure tapestries that also formed an important part of the king's tapestry collection. The verdures (of which forty-four variously-sized weavings survive) show real and mythical animals in a lush forest. They extend and elaborate the rich natural landscape visible in the narrative biblical scenes. We have examined the Creation tapestries; before moving on to discuss the Story

²⁵³ A fifth tapestry, *The Moral Decline of Mankind Before the Flood*, differs somewhat and may or may not have been part of Sigismund's original commission; Szablowski pp. 98-9 and 353; the tapestry bears no weavers' marks.

of Noah and Babel Tower weavings, we must pause to consider the specific role played by the
verdures within Sigismund's tapestry collection.

In a forest clearing, a mother boar with a thick brown hide suckles her young and cowers in her den, watching as a lion captures a small brown ape in its jaws just outside (fig. 80, 399 x 324cm). Beyond them, past a small ridge overgrown with ferns and weeds, a panther hunts another group of apes by playing dead; the curious monkeys gather around its body closely, chattering, unaware that the cat will spring up in a moment to devour the bunch. Oak and apple trees with trailing vines of ivy and morning glories shade the clearing, and in the distance can be seen a lake, more forests, and a steeple, the only sign of human presence. This large verdure tapestry, just one of the surviving forty-four in Sigismund's collection, contains a wealth of naturalistic detail as well as familiar moralized tales from the animal world; images of lions and/or panthers preying upon apes to cure a fever appear in many sixteenth-century tapestries (often peripherally) and the phenomenon, described by numerous classical authors, is also recorded by zoologists such as Gesner.²⁵⁴ Another of Sigismund's large verdures depicts the combat between a feathery panther and a bejeweled dragon with luminously variegated wings (fig. 81, 363 x 337cm). The *Physiologus*, an early Christian compendium of animal tales that formed the basis for the medieval bestiary, describes the hostility between these two beasts as a battle between good and evil.²⁵⁵ Yet at Wawel the combat occurs among a host of other creatures pursuing their own interests (giraffes, a deer, a scaly salamander), and in a landscape overwhelmingly rich in different textures: clumps of soft moss, sinewy tree roots, coarse bark, fruit, acorns. Other verdures of various sizes and shapes depict serpents, goats, a civet cat,

²⁵⁴ Horapollon, Pliny, and Aelian, as well as Ambrose and Augustine, mention this phenomenon; see Arthur Henkel and Albert Schöne, *Emblemata, Handbuch zur Sinnbildkunst XVI und XVII Jahrhunderts* (Stuttgart: J.B. Metzler, 1967) pp. 395-6. It appears in emblem books roughly contemporary with the verdures such as the *Emblemata* of Hadrianus Junius (Antwerp: C. Plantin, 1565), no. 22 and Joachim Camerarius, *Centuria II* (Nuremberg 1595), no. 8. See also Gesner/Topsell p. 482. Images of the same phenomenon published by Daniel de la Feuille (*Devises et emblems anciennes et modernes*, Amsterdam 1691, pp. 2 and 32, available at <http://emblems.let.uu.nl/f1691016.html> and <http://emblems.let.uu.nl/f1691434.html>) reveal how long-lived an emblem it proved to be.

²⁵⁵ Michael J. Curley, trans., *Physiologus* (Austin: University of Texas Press, 1979) pp. 42-4.

turtles, ducks, a fox, lynxes, storks, falcons, an ostrich, a tiger, a pheasant, parrots, peacocks, a camel, hares, and a menagerie of other animals (figs. 82-92). Though combats between predators and prey appear in some of the verdure (figs. 93-94), many depict strange and exotic creatures wandering peaceably through a lush landscape. Several family groups are pictured (figs. 80-81, 95). The overall impression is one of a land of harmony and abundance, and this is affirmed by the neat villages and tidy farms visible in the background of some of the verdure. The design of the verdure has been attributed to both Pieter Coecke van Aelst (1502-1550) and Willem Tons (active mid-sixteenth century). All the verdure are framed by the scrollwork grotesque border found throughout the Polish king's tapestry collection, though on some of the verdure this is abbreviated.²⁵⁶

Together, the verdure make up a lavish and monumentally-scaled bestiary that could be displayed in a tremendous variety of combinations. Though no written document or pictorial record survives to indicate how the tapestries were hung in the sixteenth century, many of the verdure and some of the over-window and -door weavings in Sigismund's collection feature what seem to be clues to their hanging arrangement: in gold thread along the selvages of these tapestries are various numbers (between 1 and 12) and the letters A, B, C, or D.²⁵⁷ These coded notations may have helped the custodians of the royal wardrobe keep track of the king's overwhelmingly large collection of tapestries. They suggest that the animal tapestries, even more than the larger Old Testament weavings, comprised a kind of modular system of decoration, whose variations could be easily mapped and recorded without the help of drawings or lengthy

²⁵⁶ Inventories from after Sigismund's death describe additional verdure that have not survived, including depictions of an elephant with monkeys, an eagle with a hare, and a dolphin with its young. See Gębarowicz and Mańkowski, pp. 194-215, and Hennel-Bernasikowa, "Geneza Artystyczna Arrasów Krajobrazowo-Zwierzęcych z Kolekcji Króla Zygmunta Augusta," *Studia Muzealne* (1974) p. 14.

²⁵⁷ Hennel-Bernasikowa, *Arrasy*, p. 21.

descriptions. The selva marks confirm that Sigismund's verdures were designed as individual components of a single, cohesive decorative program, moveable parts within a greater whole.

Sigismund's passion for the hunt certainly helps to explain his sumptuous collection of animal-landscape tapestries. Surviving account books reveal that dozens of men (anywhere between twenty-one and thirty-seven at one time) were employed at the Polish court to assist with the royal hunt, including falconers, dog keepers, those charged with the care of weapons, and several professional hunters who regularly supplied the royal table and guarded the king's person during the frenetic chase.²⁵⁸ However, Sigismund's verdures are not technically hunting scenes, explicitly celebrating horsemanship and the ritual of the chase in the way that *The Hunts of Maximilian* and many lesser sixteenth-century Flemish weavings do (for example, a series of five tapestries known as the Getty Game Park Set A).²⁵⁹ The Wawel verdures do seem to offer an array of half-hidden exotic game for the courtly viewer's pleasure, subtly positioning him in the role of hunter/observer. In this way they may have been intended to invoke the king's preeminent claim to the rich royal hunting grounds, reminding courtiers and visitors of his exclusive stewardship of the realm. Certain heraldic tapestries in his collection, by superimposing his giant gilded initials against a forest inhabited with animals, surely serve this function. Yet what about the forty-four verdures, teeming with birds and beasts and wild plants, and free not only of human figures but inscriptions of any kind?

In recent decades, Sigismund's verdures have been studied in relative isolation from the rest of the Polish king's tapestries, set apart in publications and considered a distinct series

²⁵⁸ Ferenc, pp. 107-109. See also Agnieszka Samsonowicz, *Łowiectwo w Polsce Piastów i Jagiellonów* (Hunting in Poland under the Piasts and Jagiellons) (Wrocław, Warsaw and Cracow: Zakład Narodowy Im. Ossolińskich, 1991).

²⁵⁹ Images of five weavings from this series, attributed to Jacob I Geubels and now dispersed, are available online through the J. Paul Getty Tapestry Study Collection (http://www.getty.edu/research/conducting_research/digitized_collections/tapestries.html), image numbers 0240983, 0240984, 0240986, 0240989, and 0240990.

within the Wawel royal collection.²⁶⁰ “It is difficult to observe in them a deep ideological meaning,” Maria Hennel-Bernasikowa has written, “when they are mainly decorative in character.”²⁶¹ One cannot deny the decorative function of any of the king’s tapestries, and the verdure especially offer such a wealth of natural detail and visual pleasure, it seems enough to justify their purchase and display. Yet there are compelling reasons for placing the verdure within the larger Old Testament narrative illustrated by Sigismund’s other weavings.

First, Eden was imagined throughout the early modern period as a zoological encyclopedia.²⁶² The period’s preeminent artists provided well-known images of this for others to emulate. For example, a lost cartoon of Adam and Eve in paradise by Leonardo da Vinci, known through a description by Giorgio Vasari (1511-74), placed the couple in “an endless meadow with many animals, regarding which it may be verily affirmed in the whole world only such a ‘divine mind’ could execute a thing so marvelous in careful diligence and naturalness.”²⁶³ The description aptly captures the visual impression made by the Wawel tapestries: a lush green expanse filled with beasts, marvelous for its painstaking naturalism. There had been some interpretative disagreement among patristic and medieval theologians over whether animals were indeed present in the garden, but by the mid-sixteenth century, the place was usually imagined as a vast, peaceful wildlife park containing specimens of every created animal. Print series by Maarten de Vos (1532-1603), published in the *Thesaurus Sacrarum Historiarum Veteris Testame(n)ti...* (1585) and adapted for republication later by Johannes Sadeler I (c.1550-1600),

²⁶⁰ Szablowski, op. cit.; Hennel-Bernasikowa, *Arrasy*, op. cit.; and Hennel-Bernasikowa, “Geneza artystyczna,” op. cit.

²⁶¹ Hennel-Bernasikowa in Szablowski, p. 204.

²⁶² *Het Aards Paradis: Dierenvoorstellingen in de Nederlanden van de 16de en 17de eeuw* (ex. cat., Koninklijke Maatschappij voor Dierkunde van Antwerpen, 1982).

²⁶³ Tomasi, “The Study of the Natural Sciences,” p. 180. Romaine Berens has speculated that both Cosimo de’ Medici’s *First Parents* tapestries and the Creation tapestry at Wawel may derive from this unknown cartoon; see *La Tenture du Mythe du Paradis: Tapisseries Flamandes de la Renaissance à Florence et à Cracovie* (Luxemburg: 1992, publisher unknown), booklet in the library of the MRAH, no. M.6.209.

depict the story of Creation within such a teeming yet harmonious zoological park. Nature is not merely a backdrop here for human events; it is conspicuous for its diversity and abundance (figs. 102-103).²⁶⁴ As in the Wawel tapestries, New World and African species share space with mythical and domestic animals in the Sadeler prints. In both the print and tapestry series, the beasts are the point; their rich diversity and peaceful intermingling represented for early modern viewers the most recognizable features of the garden of Eden.

Later in the century, no less an authority than Galileo (1564-1642) would explicitly distinguish between, on the one hand, representations of the hunt, and on the other, representations of the menagerie of creatures imagined milling about in scenes from Genesis. The Wawel verdures clearly fall within the latter group of landscapes with animals. Criticizing the aesthetic of eclecticism epitomized by poet Torquato Tasso (1544-1595), Galileo observed in the polemical *Considerazioni al Tasso*,

Our poet errs as much as would the painter who, purposing to depict a particular hunting scene, were to clutter his canvas with conies, hares, foxes, goats, deer, wolves, bears, lions, tigers, boars, hounds, greyhounds, leopards and all manner of wild beasts, clustering at will animals of the hunt with every sort of game such as to liken his painting more unto a representation of the entry into the Ark of Noah rather than unto a natural hunting scene...²⁶⁵

Putting aside the astronomer's own clear preference for the sparseness of "natural hunting scenes," we may easily place the Wawel verdures within the other, biblical genre. Hung interspersed with the Old Testament scenes that formed part of the same enormous woven series, the verdures would have been understood to illustrate the richly populated natural landscape repeatedly described in Genesis.

²⁶⁴ Hollstein vol. 21, pp. 85-86, nos. 15,16.

²⁶⁵ Galileo Galilei, *Opere* IX p. 126f; quoted in Erwin Panofsky, *Galileo as a Critic of the Arts* (The Hague: Martinus Nijhoff, 1954) p. 18, fn. 1. English translation in Adalgisa Lugli, "Inquiry as Collection," *RES* 12 (Autumn 1986) p. 111, fn. 4.

The verdures also illustrate the ongoing consequences for the natural world of man's original trespass. The original sin of Adam and Eve had caused a rupture in the natural order, as beasts began preying upon each other for the first time. These animals, sharing with man "a similitude of body and affections," as Conrad Gesner wrote in 1551, were directly affected by Adam's disobedience. (This is the central conceit of the *Isola Bella* tapestries and the focus of this dissertation's third chapter: after the Fall, man's passions rebelled against his reason, and by extension the animals no longer showed him obedience.²⁶⁶) Hence the several combats included among the animal scenes: the lion and the panther begin to hunt the ape (figs. 80, 90), the leopard attacks the bear (fig. 93), and the otter seizes a carp in its jaws as hissing salamanders look on, guarding their nest (fig. 83).

Representations of paradise by painters such as Jan Brueghel the Elder (1568-1625) and Friedrich Brentel (b. 1580) demonstrate how the number and species of animals in Eden came to be fantastically elaborated in the seventeenth century: the garden became positively crowded with animals of every conceivable exotic species (though a few staple beasts usually appear, including a Dureresque rhinoceros, a unicorn, and a footless bird of paradise shown in perpetual flight). Brueghel's paintings of this type have been described as pictorial catalogs of nature, analogous to the printed encyclopedias compiled by Conrad Gesner, Guillaume Rondelet, and other naturalists.²⁶⁷ Brueghel probably studied the hundreds of exotic animals assembled by the Archduke Albert and his wife Isabella in Brussels; his paintings combine the close observation and painstaking attention to detail of the miniaturist and the naturalist with the promise of comprehensiveness: the animal kingdom in its entirety is his subject. Brueghel's painted catalogs

²⁶⁶ This is discussed more thoroughly in the next chapter, "An Ecology of the Passions: The *Isola Bella* Tapestries."

²⁶⁷ See Arianna Faber Kolb, "Cataloguing Nature in Art," op. cit., and Kolb, *Jan Brueghel the Elder: The Entry of the Animals in Noah's Ark* (Los Angeles: The J. Paul Getty Museum, 2005).

also symbolically represent Albert and Isabella's dominion over the natural world.²⁶⁸ The genre arguably reached its culmination with the chaotic and congested zoology of *The Entry of Animals Into Noah's Ark* (fig. 96, 1620) by Rudolf II's court painter Roelandt Savery (c.1576-1639), who also drew upon the emperor's celebrated menagerie for many of the animals pictured. In these later paintings, events from the lives of Adam and Eve or of Noah (the two narratives are sometimes conflated) are compositionally minimized, subsumed within a teeming zoological park. By itself, the Wawel Creation tapestry does not match the wild profusion of creatures found in this later category of paintings. However, when the Creation tapestry was displayed amid a selection of Sigismund's verdures, the Edenic garden of creatures would have multiplied and expanded enormously, and the viewer's experience would have been rather like walking through one of the Brueghel paintings in three dimensions. Such a chamber full of melded biblical and zoological imagery would have announced a developing conception of Eden that centered upon describing and cataloging animals.

This leads us to a second argument: isolating Sigismund's verdures from his narrative tapestries belies the experience of a viewer walking through Wawel Castle when many or all of Sigismund's tapestries were displayed. The complete tapestry collection forms a roughly continuous stream-fed landscape, thick with detailed exotic vegetation and inhabited by many dozens of small, busy animals. Both the biblical scenes and the verdures, and even most of the heraldic tapestries, could be combined to spread a profusion of animal imagery throughout the castle. All of the weavings share a similar border, palette, representational style, and composition. The king's tapestry collection truly comprises a "unifying curtain" for the interior of the building. Finally, there are theological and natural-philosophical grounds for considering the verdure tapestries an important part of Sigismund's complete tapestry commission. Fifty

²⁶⁸ Kolb, *Jan Breughel*, p. 74.

years on, specialized animal painters such as Roelant Savery (1576-1639) and Frans Snyders (1579-1657) would begin to paint landscapes populated solely by beasts and largely devoid of direct references to a scriptural narrative.²⁶⁹ Such a secular theme would have been highly unlikely in the 1550s, however; the Wawel verdurees were almost certainly intended to complement and enhance the larger religious narrative pictured in the Old Testament tapestries. If one views the Polish king's tapestry collection as a grand illustration of the foundational narrative of garden, ark, tower, and temple – the central metaphor for natural knowledge in the sixteenth and seventeenth centuries – then the iconographic role of the forty-four animal tapestries within the collection becomes clearer. It is not simply that Sigismund's tapestry collection features a tremendous *quantity* of zoological and botanical imagery, though this is important. Rather, the tapestries' highly naturalistic, moralized images of wild animals can be seen to represent natural knowledge itself. They represent that perfect understanding of plants and beasts enjoyed and forfeited by Adam, an understanding that early modern patrons and scholars of natural history were striving to regain.

This section examines how the verdurees complement and expand the biblical narrative of natural knowledge presented in the king's larger, figural tapestries. I argue that Sigismund's verdurees or "animal tapestries," which comprise a kind of woven emblemata (akin to the emblematic borders applied to other princely tapestry series in the period), serve an important multifaceted function within the larger tapestry program designed for Wawel. They suggest to the viewer the scope and richness of the natural order, illustrate the perfect knowledge of nature that Adam lost, and also illustrate the violent consequences of that loss.

²⁶⁹ On Snyders, see Susan Koslow, *Frans Snyders: The Noble Estate: Seventeenth-Century Still-Life and Animal Painting in the Southern Netherlands* (Antwerp: Fonds Mercator, 1995). On Savery, see E. Mai, K. J. Müllenmeister et al, *Roelant Savery in seiner Zeit (1576–1639)* (Cologne, Wallraf-Richartz-Museum, 1985) and Kaufman, *School of Prague: Painting at the Court of Rudolf II* (Chicago: University of Chicago Press, 1988).

Eden was the ideal garden, spontaneously fertile, in which man enjoyed a “complete knowledge of both words and things.”²⁷⁰ This perfect identification between objects and their names was one of the most important characteristics of the prelapsarian world for early modern natural and moral philosophers. As one English writer put it in the early seventeenth century, “All arts were engraven vpon the creatures, yet none but man could see them; for he receiued them both actiuey or passiuey; and therefore by logicke vnderstood their natures, and by grammar gaue them names.”²⁷¹ Adam’s initial understanding of all living things, then, was both involuntary and comprehensive. He demonstrated this knowledge by speaking the name of each creature aloud. It was widely believed in the sixteenth century that the knowledge Adam enjoyed of the essences of all plants and animals was, following his expulsion from Eden, hidden in nature. Only the initiated could read the natural landscape as Adam had been able to do, like an open book. Calvinist Pierre Viret (1511-1571), for example, asserted that only a select few could decipher the divine hieroglyphs embedded in the landscape, and called the beasts “the natural preachers” of God their Creator:

There are nevertheless very few [men] who have the eyes that are required to read in this book and who have ears suited to hearing the voices and sermons of these natural preachers, even amidst the most learned and those who have best pursued research into nature and who have most progressed in the knowledge of natural things...²⁷²

The roots of this view of nature as a living text ran deep in the Christian tradition; both Albertus Magnus (1206-1280) and Roger Bacon (1214-1294) had argued that learning the true natural properties of plants, stones and beasts was both a means of devotion and a necessary supplement

²⁷⁰ Bennet and Mandelbrote, p. 8.

²⁷¹ John Yates, *A Modell of Divinitie* (London 1625), pp. 159-60, quoted in Almond, p. 115.

²⁷² Pierre Viret, *Instruction chrestienne*, 2 vols. (Geneva: Jean Revery, 1564) vol. 2, sig. Cvir, trans. in Ann Blair, *The Theater of Nature*, p. 164.

to studying the Scriptures.²⁷³ Just as plants indicated their therapeutic uses through their shape, color, size and other physical properties, according to the doctrine of signatures expounded by sixteenth-century mystics Jacob Boehme, Paracelsus, and others, animals wore the signs of their natures on their bodies for man to read. Indeed, Paracelsus explained that Adam was the first practitioner of the science of signatures:

Adam our first father had complete knowledge and perfect understanding of these names. For directly after the Creation he gave to all things their own proper and specific names. He gave to each of the animals – and also to the trees, roots, stones, ores, metals, waters and to the fruits of the earth, water, air and fire – its own special name. And as Adam then christened them with their names, so was God pleased to ordain them. For their names were based upon real foundations, not upon their pleasant appearances, but rather upon a predestined art, namely the signatory art [*kunst signata*].²⁷⁴

Thus the divinely endorsed taxonomy established by Adam in Eden, the natural order of names, was not mere description.²⁷⁵ The words Adam chose for each beast, plant, and stone derived from his full knowledge of all of the object's properties and uses. Adam's act of naming showed that he comprehended the full workings of the natural world, and this act represented, to early modern minds, the vast body of natural knowledge man had since lost. Therefore, as Peter Harrison has observed, recovering the words Adam spoke, or the "characters" he used to represent natural objects, was seen as a pressing problem in the period.

²⁷³ Albertus Magnus, *The boke of secretes of Albertus Magnus, of the virtues of Herbes, stones, and certayne beastes; also, a boke of the same author, of the maruaylous thinges of the world, and of certayne effectes caused of certayne beastes* (1560); Roger Bacon, *Epistollo de Secrets*, trans. T.M., *Frier Bacon his Discovery of the Miracles of Arts, Nature, and Magick* (London: Simon Miller, 1659) p. 249. See also Drayton p. 5.

²⁷⁴ Theophrast von Hohenheim Paracelsus, *Die 9 Bucher De natura rerum* (1537), in *Samtliche Werke*, vol. 11, ed. Karl Sudhoff, p. 397. Translation by James Bono in *Word of God*, p. 130. On Paracelsus, see Foucault, *Order of Things*, pp. 26-7, and Pamela H. Smith, *The Body of the Artisan*, op. cit.

²⁷⁵ Indeed, taxonomy in the natural sciences, as Umberto Eco and others have argued, was born of the early modern search for the original Adamic language. See Eco, *The Search for the Perfect Language* (trans. James Fentress, Oxford, UK and Cambridge, Mass.: Blackwell, 1995) 19, and M. M. Slaughter, *Universal Languages and Scientific Taxonomy in the Seventeenth Century* (Cambridge UP, 1982).

As a consequence of his naming of the beasts, Adam was assumed to possess an encyclopedic knowledge of the natural world. The names, read from the external appearances of things, were thought to constitute a language of nature in which was [*sic*] encoded the secret essences of all natural objects. Subsequently, this language had been lost, either with the Fall or later with the confusion of tongues at Babel. The Renaissance and early modern preoccupation with the language of nature thus arose out of the belief that the Adamic language held the key both to knowledge of nature and to dominion over it.²⁷⁶

Understandably, then, early modern efforts to recover Adam's lost mastery of nature were intricately entwined with the search for his original language. Since Adam's prelapsarian language embodied his true and perfect knowledge of the natures of all earthly creatures in the Garden of Eden, recovering access to this pristine language, which was lost in the confusion of tongues at Babel, would unlock the secrets of the very Book of Nature for its sixteenth-century readers.²⁷⁷

Sixteenth-century zoological publications clearly reflect this fascination with Adam's perfect knowledge of nature encapsulated within a set of perfect names, once lost and perhaps soon to be regained. Conrad Gesner published the first modern zoological encyclopedia in exactly the same years in which the Wawel tapestries were produced and first displayed. In his *Historia animalium* (Zurich 1551-8), each entry on every creature begins with an exhaustive discussion of the animal's various names. Zoological monographs by Guillaume Rondelet and Pierre Belon replicate this structure. Indeed, the majority of zoological encyclopedias published before 1650 are organized in the same way, as are many early modern herbals. At the beginning or end of all of these volumes, the authors provide a concordance of animal names in Latin and/or Greek and various European vernacular languages. The proximity of species within the

²⁷⁶ Peter Harrison, "Reading the Passions," pp. 53-4.

²⁷⁷ Bono, p. 14. See also Foucault, "The Prose of the World," in *The Order of Things*, pp. 17-45.

hierarchy of Creation was thought to be reflected etymologically (since all human languages derived from one Adamic original). Moreover, to grasp the name of a creature was to demonstrate one's mastery of it, just as Adam had done. It was to approach a perfect understanding of the creature's true nature.

In both written and pictorial accounts, the naming of the animals took on unprecedented importance in sixteenth-century accounts of Creation. This episode from Genesis had been, as Peter Harrison notes, largely absent from patristic and medieval writings on Creation. The parading of animals past Adam was added in the Renaissance, to better emphasize human knowledge and control.²⁷⁸ As historian Philip Almond has also observed, in early modern belief, "Man's dominion over the beasts was most manifest in God's parading them before Adam to be named...His ability to name the animals provided proof of his encyclopedic knowledge."²⁷⁹ Representations of the Creation story from the later sixteenth and early seventeenth centuries emphasize animals' original docility before Adam, as an illustration for Giovanni Batista Andreini's *L'Adamo, sacra rappresentatione* (Milan, 1617) reveals. Andreini's illustrations of animal rebellion and violence after the Fall (fig. 97) are preceded by two quite different views of prelapsarian zoological order. At the moment of Adam's creation (fig. 98), the animals assemble peaceably in rapt attention. As Adam bestows proper names upon the animals (fig. 99), they surround him, each awaiting its turn.

An excellent example of a similar image in tapestry form can be found in Florence. At exactly the same time that Sigismund's biblical tapestries were woven, in the late 1540s, a set of seven magnificent tapestries illustrating the story of Adam and Eve was purchased by Cosimo I de Medici, a prodigious patron of natural history. Documents indicate that the set, now known as

²⁷⁸ Harrison, "Reading the Passions," p. 53.

²⁷⁹ Almond p. 114.

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The First Parents, was bought for the grand duke in Antwerp in 1551 from Jan van de Welde.²⁸⁰

Marks reveal that the Brussels workshops of Jan van Tieghem and Jan de Kempeneer contributed tapestries to both Cosimo's *First Parents* and Sigismund's biblical sets; given the dates, work on the two series may have even overlapped.²⁸¹

The most remarkable tapestry from Cosimo's *First Parents* series depicts the bestowal of names by Adam upon all of God's obedient animals, shown filing past in a taxonomic parade (fig. 48).²⁸² Here natural order takes the form of a lengthy procession. The central column, led by the unicorn, comprises the superlative creatures: the rarest, fiercest, noblest and largest. Humbler and smaller species flank them right and left, and birds and insects descend from the air in formation behind a pair of ostrich (held inexplicably aloft) and a pair of American turkeys.²⁸³ Adam and God are placed in the foreground to mediate between the viewer and the natural world, and their arms are spread wide to indicate both the expanse of the zoological kingdom and their mastery over it. Naming the animals, said John Calvin, ensured their obedience to Adam – implicitly this assured the obedience of man's passions too, as zoological knowledge and knowledge of man's passions were deeply intertwined.²⁸⁴ Moreover, the orderly procession of such a complete range of animals recalls embarkation scenes from the story of Noah. Noah was

²⁸⁰ Cosimo had established his own tapestry manufactory in Florence only five years before, placed under the direction of Flemish émigrés Jan Rost and Nicholas Karcher. The duke was engaged in overseeing the development of an elaborate, self-referential decorative program for his new residence (now known as the Palazzo Vecchio), and required large numbers of fine tapestries to display on rotation throughout the building. The cost of producing such a splendid set in Cosimo's own fledgling workshop would have far exceeded the cost of obtaining it from established Flemish weavers. For the Medici *First Parents* tapestries, including a thorough bibliography, see Lucia Meoni, "Gli arazzieri delle 'Storie della Creazione' Medicee," *Bolletino d'Arte* 58 (Nov-Dec 1989) pp. 57-66.

²⁸¹ As noted above, Romaine Berens has suggested that the designs for both the Wawel and the Medici Creation tapestries may have originated with Leonardo da Vinci; Guy Delmarcel, meanwhile, speculates that the Medici set may derive from designs by Raphael. See Berens, *La Tenture du Mythe du Paradis*, op. cit.

²⁸² No marks survive on the Medici "Naming of the Animals" tapestry.

²⁸³ Royal physician Ambroise Paré (1510-90), author of the treatise *On Monsters and Marvels* (1573), who had had the privilege of dissecting an ostrich belonging to Charles IX, placed the animal first in his chapter on "Flying Monsters," praising it as "almost partaking of the nature of four-footed animals"; see Pallister p. 136.

²⁸⁴ Almond 116. See also the next chapter of this dissertation.

the only other mortal in history, it was believed, privileged by God with a perfect understanding of the nature of every creature.

Adam's act of naming the beasts is not pictured in the Wawel tapestries. Or rather, it is not pictured explicitly, as in the exactly contemporaneous Medici *First Parents* series. Yet it is important that nearly all of the beasts populating Sigismund's tapestries probably carried symbolic connotations for early modern viewers. The animals' wide-ranging moral associations derived from a variety of texts (including the Book of Psalms, the writings of Isidore of Seville and Albertus Magnus, the *Physiologus* and its descendant the bestiary, as well as early natural history treatises and their antique sources such as Aristotle, Pliny, and Aelian), and of course oral and folk traditions. The camel, for example, was well-known for its sobriety (fig. 87), the lizard or salamander for its Christlike pursuit of eastern light and its ability to quench any fire it was thrown upon (fig. 83), and the basilisk for its royal diadem and evil eye (fig. 84).²⁸⁵ The frog (fig. 100), which reportedly could not stand being caught in the rain ("that is," says the *Physiologus*, "in worldly desires") stood for abstinent men.²⁸⁶ The fox devouring one bird while its mate looks on from a safe branch (fig. 91) suggested that punishment never applied solely to one person but to whole families. The otter (fig. 83), which Conrad Gesner too depicts seizing a fish in its strong jaws, reputedly survived being ingested by a crocodile because it chewed its way out again, and thus represented Christ's triumph over death.²⁸⁷ The panther and the lion were known to hunt foolish apes through deception, playing dead until the curious creatures approached (fig. 80); in

²⁸⁵ Studies of animal symbolism include Tervarent, op. cit.; Adolpho S. Cavallo, "Appendix II: Fauna in the Unicorn Tapestries," *The Unicorn Tapestries at the Metropolitan Museum of Art* (New York: Harry N. Abrams, 1998); Henkel and Schöne, op. cit.; E. P. Evans, *Animal Symbolism in Ecclesiastical Architecture* (London: William Heinemann, 1896); Marie-France Dupuis, Sylain Louis, et al., *Le Bestiaire*, translation of *Bestiarium*, Ms. Ashmole 1511 (Paris: Philippe Lebaud, 1988); Hope B. Werness, *The Continuum Encyclopedia of Animal Symbolism in Art* (New York and London: Continuum, 2004); M.W. Tisdall, *God's Beasts* (Plymouth, UK: Charlesfort Press, 1998); and Malcolm Jones, *The Secret Middle Ages* (Phoenix Mill: Sutton Publishing, 2004).

²⁸⁶ Curley p. 61.

²⁸⁷ Gesner/Topsell p. 574; Werness pp. 302-3.

other accounts it represented Christ, because of its beauty and the sweet fragrance it was thought to emit. The unicorn dipped its horn into water to purify it of all toxins (fig. 84). The crane (at times the stork) was prized for its ability to devour poisonous serpents with impunity, and so served as a symbol of the defense of the public good (fig. 92).²⁸⁸ In short, the Wawel verdures can be seen to comprise a set of richly elaborated animal emblems, a lexicon transplanted into a full-sized landscape. In Sigismund's tapestry collection, I wish to argue, Adam's revered natural knowledge is represented, not as an historical event (the moment of naming), but through the emblematic landscape of the verdures.

A number of the emblematic animals pictured in Sigismund's verdures also appear in the borders of Flemish tapestry cycles commissioned by other European princes in the mid-sixteenth century. Indeed, several of the same Brussels workshops whose marks appear on the Wawel tapestries also produced magnificent tapestry cycles with borders of emblematic animals for other courts, and in the same years. For example, in the collections of the Patrimonio Nacional in Madrid is a ten-piece set illustrating the *Story of Cyrus*, designed, like the Wawel Old Testament tapestries, by Michiel Coxcie; this set is dated to the 1550s and bears the mark of weaver Jan van Tieghem, whose mark also appears on many of Sigismund's verdures.²⁸⁹ The lower borders of the *Cyrus* tapestries, for example, are composed of animal emblems, some of which exactly match animal vignettes from the Wawel verdures, including a camel, a unicorn dipping its horn into a stream, and an ibis or heron among water plants.²⁹⁰ This type of zoological tapestry border,

²⁸⁸ Tervarent pp. 17-18; Schöne and Henkel, p. 794.

²⁸⁹ Junquera de Vega and Carretero, op. cit.: see the *Story of Cyrus* (series 39, pp. 279-289), as well as the *Story of Alexander* (ser. 35, pp. 248-262). A set illustrating *The Story of Romulus and Remus*, attributed to Pieter Coeck Van Aelst and Jan Tons II, c. 1550, now in the Musées Royaux des Beaux Arts, Brussels, also features splendid borders of emblematic animals. Another well-known *Romulus and Remus* series with emblematic animal borders is divided between the Kunsthistorisches Museum in Vienna and the Toledo Museum of Art; it is reproduced in Delmarcel, *Flemish Tapestry*, pp. 155-163.

²⁹⁰ Other verdures from the Wawel collection closely resemble but do not match exactly animal emblems from the *Story of Cyrus* and *Romulus and Remus* tapestry borders. These include a lobster cracking open oyster shells (see

which proved popular for princely commissions in the mid-sixteenth century, essentially serves as a splendid woven emblemata. The animal emblems frame heroic narratives, frequently drawn from antiquity, and offer marginal commentary on the virtues and vices of the human characters represented in the tapestries' central scenes.

The Wawel verdurees seem at first quite different, and must have appeared startlingly innovative to their first viewers, in that animals occupy not the borders or any peripheral medallions, but the central scenes of a large number of discrete weavings. This difference has led Polish scholars to treat the verdurees as an independent series within the Wawel collection, but it is arguably more fruitful to approach the relationship between the verdurees and the Old Testament scenes at Wawel as a variation on emblematic borders, which were used in numerous other princely tapestry sets at the same time, and were produced by some of the same artists and weavers responsible for the Wawel collection.²⁹¹ The Wawel verdurees are like emblematic animal borders amplified. Of various shapes and sizes, they seem to have been intended to flank the much larger Old Testament scenes, to complement and augment the Genesis narrative. Although not every creature pictured in the verdurees can be positively identified with a published emblem, as a group the Wawel verdurees can be regarded as a kind of adaptable monumental emblemata, designed to suggest the rich symbolic vocabulary that humanists and naturalists discerned in the natural world. Surrounding the Old Testament scenes singly or in clusters, the verdurees would have extended their teeming natural landscapes outward into a room, expanding the definition of a tapestry border in unprecedented ways. Through the verdurees, imagery of rare

Morelowski, "Arasy Wawelskie," p. 314); a crane with a snake in its beak (fig. 92); a goat suckling a serpent (fig. 89); and a verdure depicting a serpent and unknown reptile, published in Morelowski, "Arasy Wawelskie," p. 320 and described in Szablowski p. 358, no. 28.

²⁹¹ In 1987, a selection of tapestries from the Wawel collection were exhibited in Ghent along with weavings from the Brussels *Romulus and Remus* and the Madrid *Story of Cyrus* sets, both of which feature borders of emblematic animals. Yet surprisingly, the catalogue offers no discussion of parallels concerning the kind and function of zoological imagery in these cycles and in the Wawel verdurees. See *Tapisseries flamandes du château du Wawel à Cracovie et d'autres collections européennes* (Ghent: Sint-Pietersabdij Centrum voor Kunst en Cultuur, 1987).

and beautiful plants and animals could proliferate far beyond the scrollwork frames of the Old Testament scenes, subsuming even places where the palace walls are punctuated by windows and doorways.²⁹² The animals served as reminders of the Christian virtues and vices (the peacock was guilty of vanity, for example, while the stork symbolized filial piety), and together formed a sort of modular moralized landscape, and a living lexicon that complemented the biblical narrative depicted in the larger figural tapestries. Hennel-Bernasikowa has emphasized that the Wawel tapestries inspired subsequent innovation in Flemish tapestry borders: when Philip II of Spain ordered copies of some of Sigismund's weavings in the 1560s, he requested new borders depicting a variety of beasts in a full-fledged landscape, quite similar to the Wawel verdures and quite unlike anything produced by Brussels workshops before (fig. 75).²⁹³ I wish to suggest that the Wawel verdures themselves represent the more dramatic innovation in the definition of an emblematic tapestry border in the period. In a sense, Philip II returned the familiar menagerie of symbolic beasts to their previous marginal position along the edges of conventional rectangular weavings. The designer of Sigismund's verdures, on the other hand, exploded the usual compartmentalized border of animal emblems and ranged the now-life-sized beasts across a room or suite of rooms in richly developed forests.

While many previous studies have suggested that the Wawel animal tapestries have emblematic significance, what has not been acknowledged is the strong links that sixteenth-

²⁹² In this sense, the verdures resemble the frescoed niches and bays of various sizes and shapes at the Vatican Loggia, which depict animals in landscapes; they were completed by 1550 under the patronage of Pope Julius III. These animal-landscape frescoes, now deteriorated, were recorded in the early 1550s in a codex of watercolor paintings now in the Österreichische Nationalbibliothek, Vienna (Cod. min. 33) by the artist Jacopo Strada (Johannes Stradanus), who designed a famed series of hunting tapestries for the Medici in roughly the same years. See Davidson, *op. cit.*

²⁹³ Hennel-Bernasikowa in Szablowski, p. 191. Morelowski was first to notice the similarity between Sigismund's verdure tapestries and the landscape borders ordered by Philip for his second Noah cycle; see Morelowski, "Zwierzęta i groteski w arrasach Jagiellońskich," *Pracach Komisje Historii Sztuki* 3:1 (1922) pp. 32-34, summarized in French as "Les animaux et les grotesques des tapisseries des Jagiellons," *Extrait du Bulletin de l'Académie Polonaise des Sciences et des Lettres* (1925) pp. 122-126.

century thinkers posited between the emblem form and the Genesis narrative. The development of Renaissance emblems was set in motion by the fifteenth-century discovery of the *Hieroglyphica* of Horapollo, a Greek manuscript full of zoological symbols that was enthusiastically received by Marsilio Ficino and others as an ancient Egyptian original, and a key to the lost Adamic language of Eden.²⁹⁴ The *Hieroglyphica*, and a commentary on it published by Pierio Valeriano in 1556, forms the basis for much of the animal symbolism in sixteenth-century emblem books. It was first published in 1505 along with a selection of Aesop's fables, and was translated and reprinted frequently over the next century.²⁹⁵ Mario Praz and Ludwig Volkmann have shown that early modern emblems were "a humanistic attempt to give a modern equivalent of... hieroglyphs... It was thought that the hieroglyphs were a purely ideographical form of writing... and that the Greek philosophers had drawn upon hieroglyphic wisdom."²⁹⁶ The ostensible history of certain animal images, then, was extremely important: a snake shown swallowing its tail, or a lion or panther devouring an ape, achieved hieroglyphic status because each was believed to originate with Adam in Eden. A "hieroglyph" was also understood by early moderns, as historian Denis Drysdall has argued, as a non-arbitrary sign: an image, the meaning of which is "rooted in a natural quality of the object portrayed."²⁹⁷ Hieroglyphs were believed to have comprised Adam's original perfect language because they (unlike all subsequent, degenerate languages) retained some real fragment of their referents; each true hieroglyph

²⁹⁴ George Boas published an English translation: *The Hieroglyphics of Horapollo* (New York: Bollingen Foundation/Pantheon Books, 1950).

²⁹⁵ Horapollo, *Hieroglyphica* (Venice: Aldus Manutius, 1505); see Boas p. 29.

²⁹⁶ Praz, p. 23. See also Erik Iverson, "Hieroglyphic Studies of the Renaissance," *The Burlington Magazine* 100 (1958) pp. 15-21; Rudolf Wittkower, "Hieroglyphs in the Early Renaissance," in B.S. Levy, ed., *Developments in the Early Renaissance* (Albany: State University of New York Press, 1972); and E. H. Gombrich, "Icones Symbolicae: The Visual Image in Neoplatonic Thought," *Journal of the Warburg and Courtauld Institutes* 11 (1948) pp. 163-92.

²⁹⁷ Denis L. Drysdall, "Authorities for Symbolism in the Sixteenth Century," in *Aspects of Renaissance and Baroque Symbol Theory* (New York: AMS Press, 1999) p. 116. See also the excellent overview provided by Lisolette Dieckmann in "Renaissance Hieroglyphics," *Comparative Literature* 9:4 (Autumn 1967) pp. 308-321; and Thomas C. Singer, "Hieroglyphs, Real Characters, and the Idea of Natural Language in English Seventeenth-Century Thought," *Journal of the History of Ideas*, 50:1 (Jan. - Mar., 1989), pp. 49-70.

derived its meaning from inherent, natural properties rather than through convention alone. In his handbook for composing emblems, French printer and humanist Henry Estienne (d. 1598) declared that hieroglyphs were planted in the Garden of Eden by God; they were a part, then, of the original garden.²⁹⁸ Alciato saw hieroglyphs (and their early modern equivalents, emblems) as “signs analogous to words which are ‘natural by their etymology,’ that is, to words endowed in their original form with a certain similarity to the thing they named.”²⁹⁹ Leon Battista Alberti likewise asserted the perfection of hieroglyphs by arguing that they are “universal,” as the viewer needs no other knowledge to comprehend them than a familiarity with “natural history and technology.”³⁰⁰ In the *Adages*, Erasmus echoed this claim.³⁰¹

It bears emphasizing that these discussions were not taking place beyond earshot of the Polish court. Interest in the works of Marsilio Ficino and in Neoplatonist thought more generally at the Jagiellonian court is well documented; correspondence survives between Ficino and Sigismund the Elder’s tutor Callimachus.³⁰² Likewise, Erasmus was a correspondent of Sigismund Augustus’ father, King Sigismund the Old, whom the revered humanist praised in 1527 for his efforts toward peace in Europe.³⁰³ As a ruler whose identity had been shaped from birth around the Italian ideal of the learned prince, Sigismund Augustus would have been amply familiar with the emblem form and its ostensible origins with Adam.

²⁹⁸ Henry Estienne, *L’Art de Faire des Devises* (1645), trans. into English by Thomas Blount as *The Art of Making Devises* (London 1646), p. 16; Singer, p. 49.

²⁹⁹ Drysdall p. 117.

³⁰⁰ Quoted in Drysdall p. 116.

³⁰¹ Drysdall pp. 116-117.

³⁰² See Harold B. Segel, *Renaissance Culture in Poland: The Rise of Humanism, 1470-1543* (Cornell UP, 1989) pp. 72-77. See also Tadeusz Ulewicz, “Polish Humanism and Its Italian Sources,” in Fiszman, p. 223. Maria Markiewicz suggested in 1962 that Sigismund’s tapestries may reflect an interest on the part of the designer or the patron in Ficinian humanism and Neoplatonist philosophy, but the idea has remained largely undeveloped; see Markiewicz, “Iconography of the Paradise Tapestry in the Old Polish Royal Collections,” *Bulletin du Musée National de Varsovie* 3: 1 (1962) pp. 9-18.

³⁰³ Szablowski p. 29; see also Maria Cytowska, *Korespondencja Erazma z Polakami* (Warsaw: Panstwowy Instytut Wydawniczy, 1965) pp. 11-13.

For early humanists, the idea of a natural language and the totality of natural knowledge were inextricably bound up with the language imagined to have been spoken by Adam in the Garden of Eden and with animal symbolism.³⁰⁴ This cluster of intertwined beliefs reflects a tendency to regard the landscape as a text: in the sixteenth century, as Thomas Singer has observed, “a natural language is the script in which the created world is written.”³⁰⁵ The living lexicon of animal symbols populating the Polish king’s tapestries would have recalled Adam’s perfect knowledge of the beasts at Creation. The woven beasts suggested access to an ancient and occult wisdom which a host of thinkers from Ficino to Paracelsus located in the postlapsarian natural landscape.

In a chamber hung with some combination of the verdures and perhaps also the Old Testament tapestries, a host of symbolic animals would have surrounded Sigismund on all sides. Did the Polish king, whose emulation of Habsburg patronage and court ceremonial we have already noted, have perhaps an iconic Habsburg image in mind when commissioning his chambers full of animal weavings? A few decades before, the Emperor Maximilian (1459-1519) had commissioned his monumental woodcut, *The Triumphal Arch*, from Albrecht Dürer (the iconographic program was designed by court astronomer Johannes Stabius and by Willibald Pirckheimer).³⁰⁶ Surmounting this enormous printed glorification of the emperor’s lineage and virtues (its “crowning jewel,” in Panofsky’s words) is an image of Maximilian seated beneath a sort of baldachin, entirely surrounded by a veritable menagerie of symbolic beasts (fig. 101). All but two of the animals were taken from the *Hieroglyphica* of Horapollo, which was partially

³⁰⁴ Singer p. 51.

³⁰⁵ Singer p. 51.

³⁰⁶ Erwin Panofsky, *The Life and Art of Albrecht Dürer*, 2 vols. (Princeton, N.J.: Princeton UP, 1943), v. 1, pp. 175-9. See also Boas, *Hieroglyphics*, p. 47; and Karl Giehlow, “Die Hieroglyphenkunde des Humanismus in der Allegorie der Renaissance,” *Jahrbuch der Kunsthistorischen Sammlungen der allerhöchsten Kaiserhauses* 32:1 (1915). Emperor Maximilian’s wife was Bianca Maria Sforza (1472-1510), Sigismund Augustus’ great aunt through his mother, the Polish queen Bona Sforza.

translated by Pirckheimer at the emperor's request in 1512. The beasts form a pictorial eulogy for Maximilian, representing his noble qualities and also testifying, through their mysteriousness and their proximity to his body, to his erudition. The animals were designed to be "read," to comprise a legible hieroglyphic text. Similarly, encircling the Polish king within his palace at Wawel, the emblematic animal tapestries would have announced his access to occult natural knowledge that a pan-European community of humanists had connected with both "Adam our first father" and an idealized antiquity. The king's extensive collection of animal tapestries may have been conceived as an adaptable, monumental emblemata – in a far more lavish medium than Maximilian's self-representation through hieroglyphic animals in a woodblock print (although, at eleven feet tall, *The Triumphal Arch* certainly qualifies as a monumental work). The Wawel animal tapestries would have recalled Adam's language for the Sigismund's contemporaries, particularly when juxtaposed with the king's grand figural cycles depicting events from Genesis.

Published emblemata were intended to serve as treasuries of knowledge and were frequently put to pedagogical use; emblems are, as many historians have argued, integral to the epistemology of early modern Europe.³⁰⁷ New natural knowledge, such as the discovery of species unknown from classical texts, appeared almost immediately in sixteenth-century emblemata and was disseminated quite effectively through the medium.³⁰⁸ Emblems also played

³⁰⁷ Robert Cummings, for instance, has demonstrated that Alciato conceived of his *Emblemata* as a "paper museum" when he dedicated it to antiquarian and collector Konrad Peutinger, town clerk of Augsburg. See Cummings, "Alciato's Emblemata as an Imaginary Museum," *Emblematica* 10:2 (Winter 1996) pp. 245-281.

³⁰⁸ Wolfgang Harms, "On Natural History and Emblematics in the Sixteenth Century," in Allan Ellenius, ed. *The Natural Sciences and the Arts*, Acta Universitatis Upsaliensis, Figura Nova, vol. 22 (Uppsala: Almqvist & Wiksell, 1985), pp. 67-83. On the emblematic character of zoology in the sixteenth century, see three articles by William Ashworth: "The Persistent Beast: Recurring Images in Early Zoological Illustration," in Ellenius, ed., pp. 44-66; "Natural History and the Emblematic World View," in *Reappraisals of the Scientific Revolution*, ed. by David C. Lindberg and Robert S. Westman (New York: Cambridge University Press, 1990) pp. 303-332; and "Emblematic Natural History of the Renaissance," in *Cultures of Natural History*, ed. N. Jardine et al (Cambridge: Cambridge Univ. Pr., 1995) pp. 17-37. See also Harms, "Bedeutung als Teil der Sache in zoologischen Standardwerken der

a significant role in the elaborate mnemonic programs devised in the sixteenth and seventeenth centuries, to permit humanists “ready access to vast catalogues of inventions and arguments grounded in memorable words and exemplary deeds.”³⁰⁹ Like Giulio Camillo’s plans for a memory theater filled with hieroglyphic imagery (which were first published in 1550), emblems more generally represented a distillation of complex ideas that could be fitted by the dozens or hundreds into an architecture (material or imaginary) and recalled at will.³¹⁰ Interestingly, these mnemonic schemes could serve just as well for a palatial decorative program as a printed encyclopedia:

In its most classic form, an artificial memory began with a recognizable structure – such as an animal, man, wall, room, house, theatre, or even a city – onto which were superimposed a series of striking, memorable symbols or images capable of being easily retrieved.³¹¹

Thus an emblemata, as a collection of edifying images frequently copied from the natural world, might take the form of a book or a painting, a carved ceiling or a full suite of rooms. The *Triumphal Arch* of Maximilian I is an example of an emblematic work that bridges the categories of printed illustration and architecture, straddling the distinction between book or text (since its elaborate hieroglyphic program was meant to be “read”) and monumental decoration. As a later example, in the house built at Gorhambury by Francis Bacon’s father, windows running along a “stately Gallerie” above the garden featured “every pane with severall figures of beest, bird, or flower,” images that one visitor called “Topiques for Locall memorie.” As historian William

frühen Neuzeit (Konrad Gesner, Ulisse Aldrovandi),” in *Lebenslehren und Weltenwürfe in Übergang von Mittelalter zur Neuzeit* (Gottengen: Vandenhoeck & Ruprecht, 1989), pp. 352-69. On natural history and emblematic representation in an early seventeenth-century context, see Mason Tung, “From Natural History to Emblem: A study of Peacham’s Use of Camerius’s *Symbola & Emblemata*,” *Emblematica* 1:1 (Spring 1986) pp. 52-76.

³⁰⁹ William Engel, “Mnemonic Emblems in the Humanist Discourses of Knowledge,” in Daly and Manning, eds., *Aspects of Renaissance and Baroque Symbol Theory*, p. 126.

³¹⁰ Giulio Camillo, *L’Idea del Teatro* (Florence: Torrentino, 1550). See Frances Yates, *The Art of Memory: Giulio Camillo’s Memory Theater* (University of Chicago Press, 1966).

³¹¹ Engel p. 126.

Engel explains, these were zoological and botanical emblems, partitioned and stacked within a matrix (of panes) to form a glittering treasury of knowledge, a “locall memorie,” useful “for composing treatises and speeches, or simply for ornamenting one’s inventions.”³¹²

It is possible to draw an analogy between Gorhambury’s gallery of colored glass and Sigismund’s chambers of animal tapestries at Wawel. Punctuating the Old Testament narrative of garden, ark and tower, the verdure comprised a monumental woven emblemata, a treasury of natural knowledge that recalled the perfect understanding of the beasts that Adam had enjoyed. Viewers of the tapestries were invited to decode nature’s moral lessons through zoological “signs” of ancient heritage. Conducive to meditation, offering ready material for a prince in perpetual need of fresh rhetorical flourish, the Wawel verdure formed a compendium of natural knowledge captured in animal images.

In sum, Sigismund’s remarkable tapestry purchases of the 1550s represent a departure from – an amplification of – the usual princely practice of commissioning multiple but discrete series of eight or ten weavings. The Polish king opted to purchase a single cohesive collection of well over one hundred tapestries that spanned several pictorial genres and shared a common border design. In just a few years he acquired a tapestry collection large enough to furnish an entire palace. Similarly, within the collection, Sigismund’s unique group of verdure represent an expansion of the definition of the emblematic tapestry border, which was already a popular feature in Flemish tapestry in the 1550s.

By focusing overmuch on the emblematic connotations of the verdure, however, we risk neglecting of the importance of their pictorial naturalism, which represents a milestone for illusionism in Flemish tapestry of the period and which, as Stanisław Orzechowski’s description of the Old Testament weavings suggests, amazed their early viewers. As modular landscapes

³¹² John Aubrey (1623-1687), *Aubrey’s Brief Lives*, ed. Oliver Lawson Dick (London: Penguin Books, 1982) p. 123.

devoid of distracting human figures, the verdures extend the dominant Old Testament scenes outward through a suite of rooms, enveloping the viewer and drawing him/her in as witnesses to the biblical events depicted. If Orzechowski is to be believed, that sense of being encompassed and present at the events of Genesis is the very effect that Sigismund's tapestries were designed to have on their first viewers: in the Creation tapestry, Adam and Eve "stood as if alive, painted in the weaver's craft," their nakedness a source of embarrassment and amusement to the assembled courtiers; likewise, the tapestry depicting Noah and the rising flood (discussed in the next section), "was so full of confusion and so frightened the viewer that he himself, afraid of such a terrible view, feared the Deluge for himself and thought of an Ark." The naturalism of the Old Testament tapestries furthered their didactic function. "These shapes and figures lacked only movement and speech and the rest of the representation was as if alive," Orzechowski concludes.³¹³ In the case of the verdures, the result is a believable landscape that reads like a text. Collected into a chamber-sized forest, a menagerie of zoological symbols roam and intermingle, enacting moral lessons for the viewer's benefit.

I have argued that the Wawel animal tapestries seem to have been designed to supplement the grander biblical tapestries at Wawel. They reflect the prevalent view that the knowledge forfeited by Adam at the Creation subsequently became occult and was hidden in nature. Moreover, the verdures, by continuing the landscape of the king's biblical tapestries throughout suites of palace rooms, help locate the events of Genesis in the present. The Wawel verdures have been studied separately from the biblical tapestries for too long. They belong within the castle's much larger woven decorative program recounting the foundational Christian story of the garden, ark and tower: recounting, in other words, the origins of man and the precarious progress of man's mastery of nature. The narrative of Adam and his descendants

³¹³ Szablowski p. 45-49.

retold in the Wawel tapestries underscores the importance of divine limits on man's natural knowledge. The verdure tapestries in Sigismund's collection were designed to augment the larger biblical scenes in several ways. Their wealth of flora and abundance of exotic animal species serve to remind the viewer of the scope and richness of the natural order. Moreover, the rediscovery of Horapollo's *Hieroglyphica* led some in the sixteenth century to believe that emblems comprised the original Adamic language, that lost perfect identification of words and natural objects.³¹⁴ The verdures form a kind of monumental woven emblemata representing what man once knew of nature and what he might, with divine grace and diligence, know again.

³¹⁴ James Bono, *The Word of God and the Languages of Man: Interpreting Nature in Early Modern Science and Medicine. Volume I: Ficino to Descartes* (Madison: University of Wisconsin Press, 1995) p. 176.

Eight of the Wawel Old Testament tapestries recount the *Story of Noah* (figs. 57-64). This tapestry cycle held great appeal for Sigismund's contemporaries, and was re-commissioned and rewoven with some frequency at the request of other European rulers during the later sixteenth and early seventeenth centuries.³¹⁵ Thus the series was known and admired across early modern Europe. Why? Unlike other famous tapestry cycles produced in Flanders during the sixteenth century, the series depicted neither the feats of a great warrior nor the deeds of a great ruler. In this section I consider the Wawel *Noah* cycle, not only from the perspective of Sigismund's own court and political exigencies, but as a monumental celebration of natural history exported from Brussels to a variety of other early modern courts. The chapter follows scholarly tradition in considering the Wawel *Noah* tapestries as the *editio princeps*, and examines the tapestry series in relation to New World exploration, the widespread exchange of exotic animals between courts as gifts in the sixteenth century, and the importance in this period of the prophet Noah himself as a model for collectors and patrons of natural history.³¹⁶

The figure of Noah loomed large in the imagination of natural philosophers in the later sixteenth and most of the seventeenth centuries. According to the Bible, many years after Adam's expulsion from the Eden, "the earth was corrupt in God's sight, and the earth was filled

³¹⁵ For editions of the Wawel *Noah* tapestries produced in the sixteenth and seventeenth centuries, see Crick-Kuntziger, "Tapisseries de la Genèse d'après Michel Coxcie," *Société royale d'archéologie de Bruxelles* (January-April 1938) pp. 5-17; Jarmila Blažková, "Une Tapisserie de l'Histoire de Noé au Chateau de Sychrov en Tchécoslovaquie" in *Bulletin des Musées Royaux d'Art et d'Histoire* 45 (1973) pp. 9-17; in the same volume, Erik Duverger, "Tapisseries de Jan van Tieghem représentant l'Histoire des Premiers Parents, du Bayerisches Nationalmuseum de Munich," pp. 19-63; and Nello Forti Grazzini, *Museo d'arti applicate. Arazzi* (Milan: Musei e Gallerie di Milano, 1984) pp. 28-32. Finally, for an example from American collections, see Adolpho S. Cavallo, *Textiles in the Isabella Stewart Gardner Museum* (Boston: Trustees of the Museum, 1986), pp. 84-91. Seventeenth-century re-weavings of tapestries from Wawel Genesis series also survive in collections in Lausanne, Switzerland and the Castello Sforzesco, Milan.

³¹⁶ On the Wawel Noah series as *editio princeps*, see Maria Hannel-Bernasikowa in Campbell 447; Forti Grazzini in *Gli arazzi dei Farnese e dei Borbone: Le collezioni dei secoli XVI-XVIII* (Milan: Palazzo Ducale, 1998); and Crick-Kuntziger, op. cit.

with violence.”³¹⁷ So the Lord declared ““I will blot out from the earth the human beings I have created – people together with animals and creeping things and birds of the air, for I am sorry that I have made them.””³¹⁸ Early modern commentators on Genesis believed that God saved all animals from the Deluge “precisely to enable man access to divine knowledge and the saving wisdom that may come with it.”³¹⁹ Janet Browne has demonstrated that the practical problems involved with Noah’s divinely appointed work – not least assembling, housing, and caring for all the Ark’s animals – preoccupied many late sixteenth- and early seventeenth-century naturalists and writers.³²⁰ Indeed, as she observes, “From about 1500 to 1800 the idea of an Ark, and Noah’s story itself, played key roles both in European religious doctrine and in the emerging body of thought that came to be known as science.”³²¹ The *Noah* tapestries commissioned by Sigismund II August for Wawel Castle are one of the most important sets produced in Brussels during the sixteenth century, and they were rewoven for numerous European patrons over the following hundred years. Yet the tapestries have never been considered in light of the intertwined theological, commercial, and scientific importance in this period of the narrative of the Flood and the Ark. In an age of burgeoning transatlantic exploration and commerce, in particular the quite profitable traffic in exotic animals, Noah’s feat aroused growing fascination. As Bennett and Mandelbrote observe, as detailed answers were formulated to early modern questions about the dimensions of the Ark and the dispersal of species around the globe, Noah “became variously a natural historian, a museum keeper, an astronomer, a shipwright and a

³¹⁷ Genesis 6:11.

³¹⁸ Genesis 6:7.

³¹⁹ James Bono p. 183.

³²⁰ Janet Browne, “Noah’s Flood, the Ark, and the Shaping of Early Modern Natural History,” in David C. Lindberg and Ronald L. Numbers, eds., *When Christianity and Science Meet* (Chicago: University of Chicago Press, 2003) pp. 111-138.

³²¹ Browne p. 113.

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navigator.”³²² No less than the mythological warriors and biblical kings more frequently depicted in Flemish tapestry, the figure of Noah thus provided an ideal model for European rulers during a period defined by the exploration, observation, and classification of nature.³²³

A tapestry representing *The Wickedness of the Human Race Before the Flood* (fig. 56, 452 x 612cm) marks the transition within the Wawel tapestry collection from the biblical story of the Fall of Man to that of Noah and the Flood.³²⁴ The first tapestry in the Wawel *Noah* series (fig. 57, 472 x 525cm) depicts Noah’s encounter with God, in which the imminent destruction of the world is announced and Noah is instructed to build the Ark. The two graceful figures, posed in a slow, dance-like conversation reminiscent of Antwerp Mannerism, meet in a lush clearing amid small animals and a rich variety of plants. The next tapestry (fig. 58, 483 x 784cm) illustrates the implementation of the divine command, as Noah stands amid a busy confusion of beams, ropes, steaming pitch and various tools, directing the construction of the enormous wooden ship. It is notable that the instructions recorded in the Bible for the boat’s construction are quite specific, and would have been familiar to educated viewers: the vessel was to be made of squared timber (according to the Greek Bible; the Vulgate specified smooth timber and the Hebrew gopherwood), caulked with pitch or bitumen inside and out, and was to measure 300 cubits in length, 50 in width, and 30 in height.³²⁵ A window and gate, as well as multiple stories, were also prescribed. In the third scene (fig. 59, 474 x 784cm), animals converge upon the ready Ark from the far corners of the world; the sky is filled with every species of winged bird approaching a sliding door in the vessel’s roof, while the land animals file quietly up a

³²² Bennett and Mandelbrote p. 74.

³²³ See also Olmi, “L’arca di Noè. La natura ‘in mostra’ e le sue meraviglie,” in L. Basso Peressut, ed., *Stanze della meraviglia. I musei della natura tra storia e progetto* (Bologna: CLUEB, 1997) pp. 48-74.

³²⁴ This tapestry is not described by Orzechowski’s 1553 panegyric and it may or may not have been delivered to Wawel along with the rest of the Noah series; see Hennel-Bernasikowa, “Une Tapisserie Inconnue de la Collection de Sigismond-Auguste, Roi de Pologne,” *Artes Textiles* 10 (1981) pp. 73-79.

³²⁵ Don Cameron Allen, *The Legend of Noah: Renaissance Rationalism in Art, Science, and Letters* (Urbana: University of Illinois Press, 1949), p. 69.

gangplank into the hold. A group of winged dragons, serpents, and other hybrid reptiles reflects the scriptural report that the vessel ferried specimens of all creatures, both familiar and repulsive: “Of clean beasts, and of beasts that are not clean, and of fowls, and of everything that creepeth upon the earth.”³²⁶ In the foreground of the tapestry, Noah’s family prepares a few symbolic baskets of provisions for the journey. A century later, the Jesuit Athanasius Kircher [1602-1680] would carefully enumerate a more extensive list of supplies in his *Arca Noë*, including but not limited to seeds, grains, dried fruit, jars of fresh water, dried leaves for bedding, lactating animals for milk, weaving and spinning equipment, grinding mills, ovens, oil, salt, as well as the 4562 ½ sheep which he calculated would be required to feed the meat-eating animals.³²⁷ Seven days later, rain began to fall.

The centerpiece of the Noah tapestry set is the massive *Deluge* (fig. 60, 477 x 835cm), a terrifying scene of death and confusion: panicked men and women struggle vainly to save themselves, their families and possessions as rain relentlessly falls and the sealed Ark drifts past in the distance. According to the Book of Genesis, after forty days and nights, all mountains were submerged to a depth of 15 cubits, and the earth remained flooded for 150 days. The panegyric published by Stanisław Orzechowski in 1553 reveals how vivid and immediate the biblical flood seemed to the Wawel tapestries’ first viewers. “This wall hanging,” wrote Orzechowski, “was so full of confusion and so frightened the viewer that he himself, afraid of such a terrible view, feared the Deluge for himself and thought of an Ark.”³²⁸ The tapestries enveloped their viewers and invited their imaginative participation in the scene depicted. Polish scholars have rightly perceived in this scene echoes of Michelangelo’s *terribilità*.

³²⁶ Genesis 7:8.

³²⁷ Athanasius Kircher, *Arca Noe in tres libros digesta, sive de rebus ante diluvium, de deluvio, et de rebus post diluvium a Noemo gestis* (Amsterdam 1675), cited in Allen, p. 187.

³²⁸ Szablowski p. 49.

In the next tapestry (fig. 61, 477 x 880cm), God brings the vessel to a safe landing and Noah's family and the entire preserved animal kingdom emerge on Mount Ararat to find a scarred landscape filled with the rotting corpses of the dead. The sixth tapestry in the series (fig. 62, 462 x 711cm) depicts Noah's sacrifice to God in gratitude for sparing his family; a burning altar is surrounded by many exotic animal species saved from the flood at God's command, including a civet cat, several species of ape, and a camel. This moment marked the end of human vegetarianism, according to some sixteenth- and seventeenth-century theologians; others argued that carnivorousness, a "fruit of sin," began with Adam and Eve's donning animal skins as clothing (an event illustrated in the Wawel tapestry entitled *Adam Tilling the Soil* [fig. 51]).³²⁹ In the final pair of Noah tapestries, God blesses Noah for his work and nature is restored to its full abundance (fig. 63, 467 x 604cm), after which Noah, planter of the first vineyard, is found in a drunken sleep by his three sons Ham, Shem, and Japheth, who cover him to protect his modesty (fig. 64, 470 x 610cm).

The tale of Noah and the Flood is a logical continuation of the lessons illustrated in the first set of Wawel tapestries, the Creation. Adam's sin had precipitated the rebellion of both man's passions and nature's wild beasts, and a long tradition in Flemish tapestry (as well as more broadly in northern medieval art) associates animals with human passions and appetites. (This is the central conceit of the *Isola Bella* tapestries, for example, as well as many sixteenth-century printed emblemata.) Noah was regarded as a second Adam, and the Christian canon repeatedly links unrestrained passion with threatening floodwaters; in his *Homilies on Genesis*, John Chrysostom, for example, wrote of asceticism as a defense against "a flood of unworthy passions."³³⁰ The Ark thus came to be associated with man and with divinely endowed reason,

³²⁹ Almond p. 118.

³³⁰ Chrysostom, *Homilies on Genesis* VIII.14 (FC 74, 113); quoted in Harrison, "Reading the Passions," p. 51.

and by the sixteenth century the Ark was invoked as a bulwark against the tempests of fortune and intemperate passion, and a refuge from God's just punishment of the corrupt. Moreover, the Ark was, just like man, a roving microcosm, encompassing all of nature (every known beast) within itself, as a seventeenth-century illustration from the *Antiquitatum Iudaicarum* (Leiden 1593) by Benito Arias Montano, Philip II's librarian at El Escorial, demonstrates (fig. 104).³³¹ Both Ambrose and Augustine had argued that the Ark had been designed to human proportions.³³² Rather like the ship illustrated in the frontispiece of Francis Bacon's *Instauratio Magna* (London, 1620), navigating the tempestuous seas of ignorance and error, Noah's Ark would come to be perceived in the early modern period as a metaphor for rational scientific inquiry.

Furthermore, Noah, like Adam, enjoyed complete authority over the natural world, an authority bestowed by God. Not surprisingly, the figure of Noah in the Wawel tapestries closely resembles that of God in contemporary prints depicting the Creation story by Maarten de Vos (1532-1603), Johannes Sadeler I (1550-1600), and others. For example, Sadeler's *Creation and Fall of Men*, a set of eight engravings after Crispijn van den Broeck (issued 1585 and 1643), includes an image of a bearded, robed God standing amid dozens of wild animals and beneath a sky full of birds, indicating with a gesture of magnanimity both his lordship over created nature and his gift of its riches to the viewer, to man (fig. 102).³³³ Sadeler also engraved a Creation series after designs by de Vos, dedicated to William of Bavaria, in which God's creation of the animals features exactly the same gesture of ownership and magnificence in the middle of a

³³¹ Harrison also calls attention to John Donne's use of this image: "Man is a lumpe, where all beasts kneaded bee./Wisdom makes him an Arke where all agree;/our businesse is, to rectifie Nature to what she was." Donne, *Sermon on Genesis* 1.26, quoted in Harrison, *JHI*, fn. 22.

³³² Allen p. 71.

³³³ Johannes Sadeler, *The Creation of the Animals*, fig. 2, Hollstein vol. 21, p. 84 and vol. 22, p.98.

teeming landscape of wild animals of every description (fig. 105).³³⁴ In the Wawel tapestries, Noah is a venerable and rather static figure: he does not engage in work, looking on majestically as his sons and their wives construct the Ark, pack supplies, slaughter animals for sacrifice; indeed, his appearance is an echo of that of God in the first tapestry in the Wawel Old Testament series (fig. 50). Noah emulated God in shepherding the entire animal kingdom through the destruction of the world to promised safety. Similarly, just as enormous images in tapestry of the Nine Worthies or classical heroes reflected flatteringly upon their patrons in terms of piety or military prowess, the monumental *Story of Noah* cast Sigismund (and other European rulers who commissioned copies of the set) in the proprietary role of preeminent steward of nature, steward of both natural knowledge and natural resources. For the princely patron of natural history, Noah was a superlative model.

In their attempts to recover the perfect knowledge of nature lost at the Fall, early modern patrons and humanists looked to the story of Noah for direction. Don Cameron Allen identified more than fifty separate commentaries on the story of Noah published during the sixteenth and seventeenth centuries.³³⁵ These commentaries, far from arousing only theological interest, actually provided a foundation for early modern explorations of nature. Later medieval and early modern illustrations of the story of Noah were exercises in zoological taxonomy. “Taxonomy,” as Paulo Berdini has observed, “far from being an objective and rational attitude that could evade exegetical scrutiny, was at the very center of it, particularly during the Renaissance, when theologians and scientists struggled over the authority and use of Scripture in the study and history of the natural world.”³³⁶ It was clear that collecting and classifying animals and other

³³⁴ Hollstein vol. 21, p. 86 and vol. 22, p. 99.

³³⁵ Allen, bibliography, pp. 192-207.

³³⁶ Paolo Berdini, *The Religious Art of Jacopo Bassano: Painting as Visual Exegesis* (Cambridge: Cambridge UP, 1997) p. 90.

natural specimens would allow the production of new compendia of flora and fauna, and the formation of the major sixteenth- and seventeenth-century collections was described as emulation of Noah's divinely ordained work.³³⁷ The Medici, the Iberian and Central European Habsburgs aimed to "mirror and rival the comprehensive understanding of the natural world once possessed by Adam or by Noah."³³⁸ Indeed, following his visit to Ulisse Aldrovandi's museum in 1635, the papal legate Cardinal Ubaldo praised the famous naturalist as "another Noah."³³⁹ The Ark, like the ideal natural history collection, was encyclopedic; all of nature could be studied beneath its roof.

The Ark also represented an anomalous, short-lived return of prelapsarian harmony, since God had ordered that none of the animals prey upon each other for the duration of the flood (the only such reprieve in history). As a floating microcosm, the Ark thus could serve as a powerful metaphor for tolerance (natural order mirroring civic order) in a period of ubiquitous religious violence. Clearly, apart from its scientific value, such a grandly illustrated story of Noah would have reflected well upon Sigismund August and later patrons of the series in a variety of ways. No other narrative from the bible or antiquity so emphasized the teeming diversity of creation and its rediscovered harmony under the guardianship of a wise steward. We need not insist upon evidence that Sigismund engaged in a concerted propaganda campaign to conflate his own figure with that of Noah, such as broadsheets or other printed matter. Certainly the commission of such a magnificent and costly set of tapestries is evidence enough of the Polish king's interest in the symbolic and social implications of the story of Noah. Indeed, the Wawel Genesis tapestries,

³³⁷ Bennett and Mandelbrote, p. 8. The case of John Tradescant's the elder's Ark at Lambeth (c. 1630) is the most obvious example; see Arthur MacGregor, *Tradescant's Rarities: Essays on the Foundation of the Ashmolean Museum 1683 with a Catalogue of the Surviving Early Collections* (Oxford UP, 1983).

³³⁸ Bennett and Mandelbrote, p. 8.

³³⁹ Paula Findlen, "Courting Natural History," p. 69. As Findlen notes, among the approximately 1600 names recorded in the guest book Aldrovandi reserved for eminent visitors is the "Carver for the King of Poland," an indication that members of Poland's Wasa dynasty followed Sigismund August's precedent and maintained an interest in natural philosophy.

along with their accompanying heraldic and verdure tapestries, comprise the most lavish art commission, the most significant act of patronage, made by Sigismund during his long reign.

Sigismund Augustus presided over the largest and certainly one of the most ethnically and religiously diverse states in sixteenth-century Europe, but the story of Noah understandably appealed to powerful patrons in other states as well. It is no surprise that Sigismund's *Noah* tapestries were adapted and rewoven for several other European monarchs during the sixteenth and seventeenth centuries, most notably for Philip II of Spain. The great popularity of the Wawel *Noah* cycle was arguably foreshadowed by the popularity of the *Voyage to Calicut* series (Tournai, c. 1504) among an earlier generation of princely patrons. This twenty-six-piece set was commissioned by Manuel of Portugal to advertise the success of recent royal expeditions to India and the New World, led by Vasco da Gama (1469-1524) and Pedro Álvarez Cabral (1467-1520). The *Calicut* tapestries feature many exotic beasts, including camels and giraffes (fig. 4), and served to glorify Portugese seafaring power and the rich natural resources the king's new territories contained.³⁴⁰ Adaptations were woven for Emporer Maximilian (the *Savage Peoples and Animals* series, 1510) and for Henry VIII.

Philip II was the first to commission a copy of the Polish king's *Noah* tapestries, ordering a twelve-piece set in or around 1556.³⁴¹ The tapestries were, ironically, casualties of a storm at sea; Philip's so-called "ahogados" or drowned tapestries sank off the coast of Toledo on September 9, 1559, before ever being displayed at the Spanish court. A few were salvaged and sent back to Pannemaker's workshop in Brussels as guides for the weavers, who immediately undertook a replacement set, even more lavishly encrusted with gold and far more expensive than the first. Designer Michiel Coxcie had prepared new cartoons for Philip; one of these, *The*

³⁴⁰ Jardine, *Worldly Goods*, pp. 397-399; Brotton and Jardine, *Global Interests*, pp. 117-119.

³⁴¹ Buchanan p. 136.

Embarkation of the Ark, survives at the Palacio Real in Madrid (PN inv. C.1, c. 1555). The painting is remarkable for the sheer quantity and diversity of mammal and bird species represented; prominent are those known primarily through royal gift exchanges, menageries, and natural history collections: civet cats, a North American turkey pair, leopards, a unicorn, and elephants. And once again, in Coxcie's cartoon (less so in the finished tapestry), Noah's magnanimous and inclusive gesture recalls the majestic figure of God in contemporary depictions of Creation, venerable in his bearded old age, towering majestically over the swarming hoards of the animal kingdom. Noah, the preeminent steward and collector, commands specimens of every known and valued creature to file in under his roof.

Philip II's *Noah* tapestries must have called attention to his prolific activity as a patron of natural history.³⁴² While his scientific pursuits are only beginning to receive the attention they deserve from scholars, there is ample evidence that Philip, ruler of the largest empire of the history of the world at that time, represented a modern Noah to his contemporaries. He oversaw the cultivation of vast botanical gardens with species of plants imported from around the globe; suites of rooms and a twenty-foot tower built within the Escorial palace for the distillation of plant essences and alchemical experimentation; and numerous expeditions to the New World to collect exotic birds and quadrupeds, which were then observed and displayed in menageries at Philip's various residences.³⁴³ Compendia of plant and animal illustrations such as the *Codex Pomar* (c. 1590), reveal that Philip, like his contemporaries in Prague, Florence and other better-

³⁴² Javier Puerto, *La Leyenda Verde. Naturaleza, Sanidad e Ciencia en la Corte de Felipe II (1527-1598)* (Castille and León: Consejería de Educación y. Cultura 2003); Fernando Checa, *Felipe II, Mecenas de las Artes* (Madrid: Nerea, 1993).

³⁴³ Jorge Cañizares-Esguerra, "Iberian Science in the Renaissance," *Perspectives on Science* 12:1 (2004) p. 107. On Hernández, see Simon Varey, Rafael Chabrán, and Dora B. Weiner, eds., *Searching for the Secrets of Nature: The Life and Works of Dr. Francisco Hernández* (Stanford UP, 2000).

studied courts, devoted extraordinary resources to the exploration and classification of the natural world, and regarded such work as both prestigious and divinely endorsed.³⁴⁴

For example, the three thousand zoological and botanical descriptions completed by naturalist and physician Francisco Hernández, currently titled the *Mexican Treasury*, reveal Philip's contribution to natural history as a patron of expeditions. Though not published within his lifetime, Hernández's text and illustrations circulated in Europe in various forms and proved influential for later natural histories of the Americas.³⁴⁵ Philip first sent Hernández to survey the natural history of New Spain in 1570; this is roughly coincident with the production of Philip's second set of *Noah* tapestries, which were executed by Pannemaker between 1563 and 1565, and arrived at the Spanish court in 1567.³⁴⁶ Philip's directions to Pannemaker reveal that his patronage of tapestry and of natural history overlapped – in other words, that the king regarded tapestry as a fitting medium for mapping and contemplating zoological taxonomies. The king ordered new and innovative borders for this replacement set of *Noah* tapestries, eschewing floral motifs and grotesques in favor of full-fledged landscapes populated with wild animals (fig. 75).³⁴⁷ These borders emphasize the diversity and ferocity of the animal kingdom, as exotic parrots and birds of prey sail and perch along the upper section, predators stalk their prey in mountainous landscapes along the left and right sides, and fish, reptiles, and waterfowl (along with a few putti) inhabit the aquatic world of each tapestry's lower edge. Philip's "four elements" borders, as they are known, served to highlight the contemporary relevance of the

³⁴⁴ José María López Piñero, *El Códice Pomar (c.1590), El Interés de Felipe II por la Historia Natural y la Expedición Hernández a América* (Valencia: Instituto de Estudios Documentales, 1991). Philip created the first botanical garden in Spain in 1550 at his palace at Aranjuez; a map of the garden is published by Piñero.

³⁴⁵ Silvia de Renzi, "Writing and Talking of Exotic Animals," in *Books and the Sciences in History* (Cambridge and New York: Cambridge UP, 2000); Simon Varey, ed., *The Mexican Treasury: The Writings of Dr. Francisco Hernández* (Stanford University Press, 2000).

³⁴⁶ Buchanan pp. 142-5.

³⁴⁷ For a discussion of Philip's second commission of the Noah series, see Buchanan. Cardinal Perrenot de Granvelle oversaw the production of the tapestries; his correspondence can be found in C. Weiss, *Papiers d'Etat du cardinal de Granvelle d'après les manuscrits de la Bibliothèque de Besançon*, vols. ** (Paris 1846).

biblical story they frame: portraits of natural abundance, they frame a Christian narrative explaining the origins and justification of that abundance. Philip asserted the continuing importance of Noah's work by surrounding his story with images of exotic birds and animals, some likely painted from his own menageries. Philip thus identified himself as a steward and master of nature, as the royal seals in both upper corners of the borders confirm.

Numerous other tapestry patrons requested re-editions of the Noah tapestries, while "four elements" borders became widely popular for tapestries of many subjects, appearing in various forms well into the seventeenth century.³⁴⁸ Philip took the unusual step of purchasing the cartoons for his Noah tapestries, to ensure that no other patrons might obtain a copy of the series; nevertheless, the king's sister, Margaret of Parma, received permission to purchase a set in 1567, and three pieces survive in Barcelona from a set ordered by Don Fernando of Toledo. The workshop of Frans Geubels also produced a set of Noah tapestries from Philip's cartoons between 1570 and 1580. During the seventeenth century, numerous versions of the set were woven for patrons across Europe.³⁴⁹

However, the *Story of Noah* tapestries have been completely overlooked by historians investigating relationships between early modern natural history and art. For example, scenes from Genesis painted by Brueghel, Friedrich Brentel, Roelandt Savery and others brim with naturalistic portraits of exotic animal species, frequently hierarchized into strata according to the four elements or another ordering device. The paintings have been described as pictorial catalogs of nature, and as evidence of the encyclopedic impulse prevalent in early modern culture.³⁵⁰ A

³⁴⁸ The Bayerisches Nationalmuseum in Munich, for example, owns a set of four tapestries depicting *The Story of Abraham* after cartoons by Barend Van Orley (inv. T3790, T3876-7, T3880), which feature a variation on the "four elements" border, entirely made up of animals from the Wawel and Isola Bella tapestries.

³⁴⁹ See Buchanan, Crick-Kuntziger, Blažková, Duverger, and Cavallo, op.cit., as well as Maria Hennel-Bernasikowa in Giuseppe Bertini and Nello Forti-Grazzini, eds., *Gli Arazzi dei Farnese e dei Borbone* (Colorno: Palazzo Ducale, 1998) pp. 116-9.

³⁵⁰ Kolb, "Cataloguing Nature as Art" op. cit.

recent art historical study claims that “Brueghel’s accurate description of animals within a paradise landscape (in his *Entry of the Animals into the Ark* of 1613, J. Paul Getty Museum, Los Angeles, fig. 96) did not have any direct precedent.” The study cites a twelfth-century mosaic cycle in the San Marco Basilica in Venice as “the first and only monumental work to represent the Entry of the Animals into Noah’s Ark.”³⁵¹ On the contrary, monumentally-scaled re-editions of the Wawel Noah tapestries were displayed at numerous courts across Europe during the later sixteenth and seventeenth centuries. This kind of zoological painting arguably grew out of an earlier demand among princely patrons for tapestries illustrating the same events, tapestries similarly overflowing with painstakingly rendered zoological imagery but produced in a far more prestigious medium.

The Wawel Noah cycle and its numerous re-editions serve to demonstrate how incorporating the medium of tapestry must inevitably complicate existing art historical narratives of the development of natural history illustration in the Renaissance, particularly its development in a courtly setting. One such narrative holds that nature painting was defined for much of the sixteenth century by drawing, book illustration, and manuscript illumination (typified by the oeuvre of Hans Hoffman or Joris Hoefnagel), while the arrival of the seventeenth century brought a shift of interest among court artists (such as Jacques de Gheyn and Roelandt Savery) away from the graphic arts and toward oil paintings of floral and animal subjects.³⁵² Yet lavish commissions for zoologically-themed tapestries from Brussels, such as the purchases made by Sigismund Augustus and Philip II between 1548 and 1565, complicate this account of a shift from miniatures on paper to oil painting, whether landscape or still life. The presence of highly

³⁵¹ Kolb, *Jan Brueghel*, p. 6.

³⁵² Hendrix, “Natural History Illustration at the Court of Rudolf II,” p. 165.

naturalistic plant and animal imagery in tapestry decades before it appeared with any frequency in oil painting has not been considered carefully enough.

Depicted in sixteenth-century prints and paintings as well as tapestry, the story of Noah and the Flood united religion, science, symbolism and allegory in a narrative that early moderns regarded as historical fact. The story of Noah accounted for the early history and origins of man and animals, as well as the creation of fossils. Sixteenth-century natural philosophers unanimously regarded the story of Noah and the flood as an historical event, and labored both to understand the logistics of Noah's journey using the weights, measures and other specifics given in the Bible, and to incorporate strange New World discoveries into the familiar narrative. Thus throughout the sixteenth century, difficulties in the biblical text were seen as catalysts for inquiry rather than grounds for skepticism. Numerous attempts were made to establish the dating and geography of the deluge; Joseph Justus Scaliger (1540-1609), for example, calculated that the flood occurred 1467 years after Creation (*De Emendatione Temporum*, Frankfurt 1583).³⁵³ Four lengthy verse accounts of the story of Noah were produced in the latter half of the sixteenth century, including the Huguenot Guillaume de Salluste Du Bartas' *La Sepmaine; ou, Creation du monde*, which addresses questions about the source of the floodwaters and the necessary dimensions of the Ark, and was published in 1578.³⁵⁴ By that time, a sizeable canon of Christian theological texts was devoted to the logistics of Noah's floating menagerie, and fresh questions were raised with growing frequency: what were the carnivorous animals fed? Were fish or insects taken aboard? How did those animals sacrificed by Noah immediately upon disembarkation manage to propagate their species? Beginning with Alfonso Tostado in the fifteenth century, there also developed a tradition of imaginatively reliving Noah's experiences:

³⁵³ Browne p. 114 and Allen p. 84.

³⁵⁴ For additional references, see Allen, pp. 142-7.

And because Noah took care of the animals and gave them food which was kept in the apotheca on the second level, there was a stairway from the habitation of Noah to this place so that he could descend and take up food. So he gave them food, walking between the asps, dragons, unicorns, and elephants, who thanks to God did not harm him but waited for him to give them nourishment at the proper time. The Divine pleasure saw to it that there was great peace among these animals; the lion did not hurt the unicorn, or the dragon the elephant, or the falcon the dove. There was also a vent in the habitation of the tame animals and another in that of the wild animals through which dung was conveyed to the sentina.... One could also believe that the odour of the dung was miraculously carried off so that the air was not corrupted.³⁵⁵

In his *Commentaria in Moysi Pentateuchum* (Antwerp 1569), Hieronymus Oleaster demanded where waters sufficient to inundate the entire earth might have come from, and where did they go after the Deluge?³⁵⁶ Questions like these would provoke a much more widespread debate among scientists during the seventeenth century. Yet already at the time of the Wawel tapestries' commission and initial display, the narrative of the Flood and the Ark, along with its attendant mysteries and questions, was firmly established as the dominant framework for discussions of animal taxonomy and origin. If we are to try to see the Noah tapestries in the Polish and Spanish royal collections as they were seen by sixteenth-century viewers, we must keep in mind these earnest questions prompted by the period's exegetical inclinations.

Like the Creation and the moment of their naming, animals were believed to have been divided hierarchically on board the Ark, organized onto multiple decks (humans, "clean beasts," then carnivores and reptiles, with amphibious creatures often imagined to be swimming alongside the vessel). At Wawel (fig. 59), the beasts are shown gathering at the Ark in similarly divided kingdoms, with birds descending from the sky in fish-like schools, land animals filing

³⁵⁵ *Commentaria in Genesim, Opera* (Venice 1728), I, pp. 125-52. Translated in Allen p. 76.

³⁵⁶ *Commentaria in Moysi Pentateuchum* (Antwerp 1569), Hieronymus Oleaster, cited in Allen, p. 85.

into the vessels from the right, and a rainbow-hued group of winged and crawling reptiles approaching from the left.³⁵⁷ Eventually, “[i]n the truly learned commentaries on the Deluge,” as Allen observed, “it became increasingly fashionable to name all the animals on the Ark.”³⁵⁸ Formalizing such a passenger list was not simply a theological effort; it signified the desire for a complete catalog of all known animals. Creatures that were hybrids (like mules) and those thought to be generated through putrefaction were traditionally excluded, but with the introduction of new American species, space inside the boat rapidly grew scarce. As zoological knowledge expanded exponentially in the sixteenth century, the Ark became a kind of testing ground for the validity and the worth of new (as well as familiar but increasingly dubious) animal species. Were creatures that did not seem to reproduce sexually (and thus could not be paired) really estimable animals? What about creatures that seemed to straddle the boundary between human and beast, such as centaurs and satyrs? The quest for an authoritative list of the Ark’s passengers challenged early modern scholars to develop criteria with which to distinguish between genuinely different species and degenerate strains of known species. “The Bible did not mention these [New World] animals,” Browne notes. “[Y]et the authors’ attempts to defend the story of Noah’s Ark showed consummate skill in assessing the means of migration, population statistics, and reproductive rates and demonstrated a fine appreciation of the distinctive features of the natural world.”³⁵⁹ Justus Lipsius (1547-1606) even suggested that a land bridge had allowed American animals to escape the Flood in Noah’s day.³⁶⁰

Alfonso Tostado’s remarkable imaginative self-projection into the Noah story – he walks by Noah’s side among the animals at feeding time, intuiting the elephants’ gratitude and sniffing

³⁵⁷ For disagreements among early Christian writers about the distribution of animals within the Ark, see Allen, *Legend of Noah*, p. 71.

³⁵⁸ Allen p. 80.

³⁵⁹ Browne p. 119.

³⁶⁰ Ibid.

the miraculously odorless air in the ship's hold – parallels the experience of a viewer standing before the Wawel Noah tapestries, as it is described by Orzechowski, who invokes almost all five of the senses. At the building of the vessel, Orzechowski writes, positioning his reader before the tapestry at Wawel, “you could almost hear the workers’ voices and the sound of axes at work.” After the floodwaters recede, the viewer recoils from “the flabby corpses of the drowned, putrid in the water and stinking. Nobody will ever be able to imagine anything closer to reality.”³⁶¹ Both Tostado’s and Orzechowski’s accounts reveal the literalness and immediacy with which Noah’s story was experienced in the sixteenth century. Viewers of the King Sigismund’s *Noah* tapestries were meant to feel nothing less than vicariously present at the events surrounding the Flood.

Yet the courtly audiences who comprised the Noah tapestries’ first viewers enjoyed a proximity to real exotic animals that *we* may find hard to imagine. The exchange of animals as gifts between courts and the systematic collection of rare and exotic species, particularly among Habsburg patrons, peaked during the second half of the sixteenth century, exactly the period in which zoological imagery in tapestry also reached the height of its popularity. Moreover, in a period in which exotic animals were shipped in surprising numbers around the globe to be traded, purchased or exchanged as courtly gifts, mysteries such as the size, shape, and capacity of the Ark took on practical as well as merely abstract theological significance. A civet cat pictured in the foreground of the Michiel Coxcie’s cartoon *The Embarkation of the Ark*, for example, also appears in identical form in one of the larger Wawel verdure tapestries (fig. 88) and in *Noah’s Sacrifice* (fig. 62). It is no accident that the civet cat is given such a prominent place in Coxcie’s tapestry cartoon for Philip II; prized for *algalia*, a fragrant musk produced by their glands, civet cats were captured in Central Africa and exchanged frequently as gifts among

³⁶¹ Szablowski p. 49

Habsburg courts between 1560 and 1612.³⁶² Catherine of Austria (one of the earliest patrons to display her collections of exotica in special rooms, as a *Kunstammer*, and the owner of ten civet cats between 1550 and 1554) sent two of the creatures to the King of Belez as a gift in 1552; three civet cats appear in a “memorial list of animals weapons and arms sent to the Imperial court” in Spain in 1577; and the Infanta Isabella Clara Eugenia took four of the animals with her from Spain to Brussels for Archduke Albrecht in January 1601.³⁶³ The species is depicted in the famous “Museum of Rudolf II” (cod. min. 129 and 130, Österreichische Nationalbibliothek); it carried, like many other exotic animals imported from new colonial territories, both medicinal promise and princely cachet.

If the lordly and proprietary figure of Noah functioned as an analogy for the royal patron and collector, similarly, the rarity and diversity of the animals so painstakingly depicted in tapestry testified to the patron’s wealth and reach. Species were carefully selected for inclusion in woven biblical scenes of the animal world; many would have recalled live or preserved specimens from the patron’s own collection. For example, lions provide a more or less conspicuous counterpoint to the heroic human figures in several of the Wawel *Noah* tapestries (figs. 59-60). At both the Polish and Spanish courts, leonine imagery would have recalled not only vaguely royal associations, but live specimens kept in the royal menageries and used

³⁶² Almudena Pérez de Tudela and Annemarie Jordan Gschwend, “Luxury Goods for Royal Collectors: Exotica, Princely Gifts and Rare Animals Exchanged Between the Iberian Courts and Central Europe in the Renaissance (1560-1612)” *Jahrbuch des Kunsthistorischen Museums Wien*, Band 3 (Mainz: Verlag Philipp von Zabern, 2001) pp. 1-128.

³⁶³ Tudela and Gschwend, p. 10, fn. 73, and p. 15; p. 42; p. 90. For the extensive collections of live animals maintained by Albrecht and Isabella in Brussels, including a rhinoceros pen, multiple aviaries with New World birds, a large group of South American monkeys, ponds of exotic fish, a *falconnerie*, and several camels, see also Arianne Faber Kolb, *Jan Breughel*, pp. 14-16, with citations. On sixteenth-century princely menageries more generally, see Delaunay, op. cit., esp. “La divulgation des ‘oeuvres de nature’ dans la zoologie du XVIe siècle,” pp. 145-152. Charles V kept a zoo; see J.M. Massing, “The Quest for the Exotic: Albrecht Dürer in the Netherlands,” in Jay Levenson, ed., *Circa 1492: Art in the Age of Exploration* (New Haven: Yale UP, 1991) pp. 115, 298-9. For a discussion of the design and function of royal menageries in the seventeenth century, see Masumi Iriye, “Le Vau’s Menagerie and the Rise of the Animalier: Enclosing, Dissecting and Representing the Animal in Early Modern France” (PhD dissertation, University of Michigan, 1994); by this time, animals in menageries were also being used for dissections; see Findlen, “Courting Natural History,” p. 66.

occasionally in processions and combats. In the summer of 1577 and again in February 1578, Philip II presented Rudolf II with several tame lions, which joined a cheetah, leopards and civet cats in the Habsburg menageries at Schloss Ebersdorf and at Prague.³⁶⁴ Other animals pictured in Philip's Noah tapestries would have recalled some of the king's most prestigious gifts and purchases, illustrating the breadth of his territories: a rhinoceros, the "marvel of Lisbon," was presented to Philip and publicly shown in Madrid in 1584, while an elephant was presented to the king's son Philip III in Lisbon the previous year.³⁶⁵ Moreover, the marching columns of animals in embarkation scenes from the Noah story, like certain depictions of Adam's naming of the animals in Eden, must have recalled annual urban processions for many viewers; whether civic, religious, or royal, many sixteenth-century processions in the Habsburg Netherlandish territories as well as France included allegorical wagons built in the form of large and exotic animals.³⁶⁶ Sometimes live animals processed under the auspices of the crown, as when an elephant, a diplomatic gift from Catherine of Austria, triumphantly entered Vienna on May 2, 1552.³⁶⁷

Thus the Wawel tapestries were designed and woven at the beginning of an exploding vogue for animals as collectible specimens and as princely gifts. This must partly account for the appeal of *Story of Noah* tapestry cycles to royal patrons. Descriptions and illustrations of New

³⁶⁴ Tudela p. 43-6, esp. fn. 115 and 143.

³⁶⁵ Tudela p. 58-9.

³⁶⁶ For example, a painting in the Musées Royaux des Beaux-Arts in Brussels by Denjis van Alsloot, depicting the 1615 Ommegang procession through the city's Grand Place, includes a matter-of-fact representation of a tremendous winged dragon led on a leash. Kolb mentions that the same procession in the same year also featured four camels from the archducal menagerie and a full aviary mounted on a wagon; see *The Entry of the Animals* p. 15. For somewhat similar imagery found, under the banner of mythology, in sixteenth-century Flemish tapestry, see Thomas Campbell, "New evidence on 'Triumphs of Petrarch' tapestries in the early sixteenth century. Part I: The French court," *Burlington Magazine* (June 2004): 376-385, and "Part II: The English court," *Burlington Magazine* (Sept. 2004): 602-608. See also Emily Peters, "Den gheheel loop des weerelts (The whole course of the world): Printed Processions and the Theater of Identity in Antwerp during the Dutch Revolt," PhD dissertation (University of California at Santa Barbara, 2005).

³⁶⁷ Tudela and Gschwend, pp. 15-17. For exotic animals as , see also Belozerskaya, *The Medici Giraffe*, op. cit.

World species by naturalists such as Conrad Gesner and Spanish travelers such as José de Acosta (1540-1600) whetted patrons' appetites for rare animals, both in the flesh and in naturalistic representations that could further amaze through the richness of their materials or the credibility of the likeness. The appearance of numerous exotic species in the *Noah* tapestries produced for both Sigismund and Philip II demonstrates that this interest was well-established by mid-century.

Evident throughout the Wawel tapestries' plentiful representations of plants and animals, of course, is close empirical observation. This form of attention provided the foundation for new taxonomies still in development in this period, and it posed a serious and ultimately fatal challenge to the traditional biblical account of natural history that the tapestries so grandly depict. In the seventeenth century, Kircher would attempt a full-length scientific defense of Noah's story (the *Arca Noë*, 1675), including a thorough reconstruction of the vessel, an inventory of all the beasts it housed, and the detailed mechanics of their care and feeding. In fact, the *Arca Noë* was just one of many seventeenth-century treatises addressing the logistical problems associated with Noah's journey.³⁶⁸ The continuing popularity of the Wawel *Noah* tapestries throughout the first half of the seventeenth century testifies to the centrality of the Deluge story to early modern explanations of natural processes and narratives of the progress of natural knowledge. As Francis Bacon observed, "For man by the fall fell at the same time from this state of innocency and from his dominion over creation. Both of these losses however can even in this life be in some part repaired; the former by religion and faith, the latter by arts and sciences."³⁶⁹ Bacon recognized the promise of natural knowledge contained within the Noah story and its echoes of the story of Creation. Meanwhile the story of Noah's Ark provided a

³⁶⁸ See Allen and Browne, op. cit.

³⁶⁹ Francis Bacon, *Novum Organum*, II.52.

model for early modern patrons and scholars seeking to recover the lost perfect knowledge once enjoyed by Adam.

CONCLUSION: TOWER AND TEMPLE

To walk successively through Sigismund's many chambers of Flemish tapestry would be to experience the Creation, the Fall, and man's subsequent attempts at redemption within a simulated natural landscape of astonishing richness and variety. Indeed, at times the biblical narrative would be nearly overshadowed by the abundance of animal scenes and the enveloping presence of the inhabited forest.

Why would such a monumental narrative of natural knowledge, and such a profusion of botanical and zoological imagery, have appeared suitable for the Jagiellonian court? Certainly Sigismund II Augustus, like other rulers across sixteenth-century Europe, was emulating a Habsburg model of magnificence in which wealth and political power were demonstrated through the purchase and display of costly Flemish tapestry cycles.³⁷⁰ Sigismund's tapestries also reflect the prestige increasingly associated with the objects and imagery of natural history at sixteenth-century courts. As Paula Findlen has observed, "Unlike the traditional components of natural philosophy, natural history was tactile and visual, requiring no specialized knowledge in order to participate."³⁷¹ Accordingly, exotic animals were assembled into menageries, exchanged as gifts, and paraded through cities; court artists memorialized the fruits of palace gardens in oils; and entire decorative programs were formulated around proto-scientific botanical and zoological imagery, such as a grotto designed by Bernard Palissy for the Tuileries, to be filled with shells and reptiles cast from life, or the grotesque *spalliere* woven for Cosimo d'Medici in 1547, the subject of this dissertation's first chapter.³⁷²

Finally, of course, the Wawel tapestries comprise a kind of winter garden. Biblical events, scenes of animals in conflict and repose, heraldic weavings with the king's initials: these

³⁷⁰ Jardine and Brotton, p. 70

³⁷¹ Findlen, "Courting Natural History," p. 60.

³⁷² On the grotto, see Daston and Park, pp. 282 and 431, fn. 79.

share a seemingly continuous green landscape and a frame ornamented with leafy bunches of fruit and flowers, providing visual relief for the winter months which the Polish court spent indoors. Like all early modern gardens designed to illustrate or allude to paradise, the Wawel tapestries represent a spiritual endeavor. Sizeable gardens were nearly always conceived as sites for the restoration of lost learning, both Adam's perfect understanding of the natural world and the medical plant lore of antiquity, and they were cultivated and enjoyed as living catalogues of Creation. More generally, it was in large part through a religious imperative that princes built collections and subsidized naturalists and expeditions, sponsored treatises and filled their courts with zoological and botanical specimens and imagery: to recover what Adam had forfeited.

Thus with his tapestry purchases of the late 1540s and 1550s, Sigismund Augustus was bidding for membership in an elite circle of European rulers who advertised their authority and means through the display of magnificent Flemish weavings. At the same time, many such elites signaled both their piety and their erudition through patronage of natural history, in the form of gardens, collections of rarities, or sponsorship of lavish treatises and encyclopedias. The tapestries woven for the Polish king reveal his conflation of these two areas of patronage into one massive purchase and one medium. The tapestries give splendid pictorial form to the familiar Old Testament narrative of the garden, ark, tower and temple – that is, the preeminent metaphor for the pursuit of natural history in early modern Europe. They illustrate the biblical justification for sixteenth-century princes' patronage of natural history.

Sigismund's grand tapestry cycle concludes with a chamber of four weavings illustrating the construction and demise of the Tower of Babel, as told in the eleventh chapter of Genesis. The first tapestry in the series, *The Construction of the Tower* (fig. 65, 495 x 810cm), shows teams of laborers preparing building stones and hauling them by wagon and by hand toward the

sprawling foundations of the tower. The gigantic figure of Nimrod, described as a “mighty hunter,” oversees the work, brandishing an axe and accompanied by a loyal dog.³⁷³ An inscription reads NEMROD PRIMUS IN ORBE TIIRANVS EXTRVIT IMESAM EX LAPIDE COCTILI TVRRI DEVS EDIFICATIV CONFVNDIT LINGVAS OPVS RELINQVITVR IMPERFECTVM. GEN IX (Nimrod, the first mighty ruler in the world, is building an immense tower of brick, God confounds the builders’ language, and the work remains unfinished).³⁷⁴ The four-part scenes of the tower’s erection and destruction, although set in a landscape cleared of most greenery and dominated instead by tools and machines, fits very much within the narrative of natural knowledge presented by the other Old Testament tapestries at Wawel. *The Wrath of God* (fig. 66, 425 x 430cm) is a scene of terror and confusion among the laborers, as the great king flees beneath the inscription, DESCENDIT AVTEM DOMINVS VT VIDERET CIVITATEM ET TVRRIM GENE. II (And the Lord came down to see the city and the tower). The two remaining tapestries in the set, *The Confusion of Tongues* (fig. 67, 491 x 300cm) and *The Dispersion of Mankind* (fig. 68, 494 x 278cm) depict the consequences of Nimrod’s offense as chaos and displacement.

In early modern commentaries on Genesis, the story of Babel illustrates how mankind’s ambition and hubris, in a sort of echo of Adam’s trespass in the garden, had offended God.³⁷⁵ The rise and collapse of Babel Tower precipitated both the scattering of peoples across the earth and the confusion of languages, hindering communication and stunting mankind’s quest for knowledge.³⁷⁶ Further, with the destruction of the Tower, God obscured man’s access to the

³⁷³ Hennel-Bernasikowa, *Arrasy*, p. 78.

³⁷⁴ Ibid.

³⁷⁵ See George Boas, *Primitivism and Related Ideas in the Middle Ages* (Baltimore and London: Johns Hopkins University Press, 1948) pp. 185-205.

³⁷⁶ Bennet and Mandelbrote pp. 8-10; Bono pp. 56-78. See also Myriam Martin-Jacquemier, *L’Âge d’Or du Mythe de Babel 1480-1600: De la conscience de l’alérité à la naissance de la modernité* (Mont-de-Marsan: Editions InterUniversitaires, 1999).

perfect Adamic language, which many claimed had survived in fragmented form in the speech of Noah and his descendants. Sixteenth-century commentators identified a number of consequences of this event. It was imperative, first of all, to study languages, including their history and roots, and attempt to reconstruct the original Adamic tongue, which embodied a direct link between words and things and whose “grammar reflected natural relationships unambiguously.”³⁷⁷ The rediscovery of many ancient texts during the fifteenth and sixteenth centuries, and the exegetical work of humanism more generally, represented an opportunity to reverse the curse of Babel and restore universal communication and a complete understanding of the natural world.

Turning to early modern interpretations of the confusion of tongues at Babel helps to explain the profusion of zoological imagery prevalent throughout Sigismund’s cohesive tapestry collection. Historian Peter Harrison sees the growing emphasis on language in early modern discussions of the Fall as a clue that interest was shifting from controlling the interior realm of man’s mind to controlling nature and the external world.³⁷⁸ The idea of language(s) – degenerate and perfect, lost and regained, pictorial and spoken, often occult – served as a powerful metaphor within both moral and natural philosophy. We have touched upon the link between the study of language and the development of taxonomies in the natural sciences during the sixteenth century, a link especially evident in Gesnerian zoology.³⁷⁹ Sixteenth- and seventeenth-century efforts to devise a lexicon of the passions from their external appearances further reveal early moderns striving to recover Adam’s dominion over nature and find ways to control each other. Giambattista della Porta’s physiognomic treatise and its many imitations, for example, which

³⁷⁷ Bennet and Mandelbrote p. 9. Marie-Lucie Demonet suggests the great number and scope of projects concerned with the nature and origins of language during the sixteenth century in *Les voix du signe. Nature et origine du langage à la Renaissance (1480-1580)* (Paris: Champion, 1992).

³⁷⁸ Harrison, “Reading the Passions,” op. cit.

³⁷⁹ See Bono p. 186 and Jean Céard, “De Babel à la Pentecôte: la transformation du mythe de la confusion des langues au XVI^e siècle,” *Bibliothèque d’Humanisme et Renaissance* 42 (577-94).

were basically concomitant with the production and initial display of the Wawel tapestries, also represent the search for a lost universal language centered upon the study and representation of animals. As we have seen, the rediscovery in 1422 of Horapollo's *Hieroglyphica*, understood to be an Egyptian work, led many in the sixteenth century to believe that it was a key to the original Adamic language, that lost perfect identification of words and things.³⁸⁰ Henry Estienne (d. 1598) claimed that hieroglyphs originated with Adam in Eden. Efforts to recover the lost Adamic language would gain even greater momentum in the seventeenth century.³⁸¹ Thomas Browne (1605-1682), for example, maintained that Egyptian hieroglyphs were "of greater Antiquity than letters; and this indeed might Adam well have spoken, who understanding the nature of things, had the advantage of naturall expressions." Only the Egyptians, Browne argued, had escaped the confusion of tongues at Babel.³⁸² The story of Babel Tower thus forms a fitting conclusion to the biblical narrative illustrated in the Wawel tapestries.

The vivid pictorial description of plants and animals evident in the tapestries was desirable not only because of the growing interest in empirical observation during the sixteenth century, but also in the context of Neoplatonist philosophy, which elevated knowledge gained through contemplation above that acquired through reasoning. Interest in the works of Marsilio Ficino and in Neoplatonist thought at the Jagiellonian court is well documented; correspondence survives between Ficino and Sigismund the Elder's tutor Callimachus.³⁸³ Ficino's Florentine Academy grounded their influential aesthetic writings upon a theory of intelligible beauty formulated by Plotinus. Boas offers a partial translation of Plotinus' definition of knowledge, and

³⁸⁰ Bono, p. 176, fn. 11. Theories linking the Adamic language to "Egyptian" or even "Chinese" hieroglyphs remained prevalent in Europe until Francis Bacon refuted these notions, arguing that hieroglyphs may resemble their referents pictorially but do not retain any trace of the divine mind. See Martin Elsky, "Bacon's Hieroglyphs and the Separation of Word and Thing," *Philological Quarterly* 63 (date?) 449-460, and Singer, op. cit.

³⁸¹ See *ibid* and Almond pp. 126-142.

³⁸² Thomas Browne, *Pseudodoxia Epidemica* 5:20; Almond p. 133.

³⁸³ See Harold B. Segel, *Renaissance Culture in Poland: The Rise of Humanism, 1470-1543* (Cornell UP, 1989) pp. 72-77. See also Ulewicz, p. 223.

the passage reveals much about how important images were to natural knowledge in the early modern period, and how all natural knowledge was colored by nostalgia for an original perfect language. Plotinus wrote,

It seems to me that the Egyptian sages, either working by right reasoning or spontaneously, when they desired to represent things through wisdom [*Sophia*], did not use letters descriptive of words and sentences, imitating the sounds and pronunciation of propositions, but drew pictures, and carved one picture for each thing in their temples, thus making manifest the description of that thing. Thus each picture was a kind of understanding and wisdom and substance and given all at once, and not discursive reasoning and deliberation.³⁸⁴

Here is the idea, so appealing to Renaissance patrons, of knowledge housed in a kind of grand architectural emblemata, a theater of nature, in effect a temple of knowledge. I have argued that the abundance of zoological and botanical images found in the Wawel tapestries, not only in the verdures but throughout the Old Testament scenes as well, transformed palace rooms into a kind of monumental emblemata, signifying the natural knowledge that – as Sigismund’s biblical tapestries narrate – mankind had been given and had lost.

The Wawel verdures (like the Isola Bella tapestries and many other Flemish weavings featuring zoological imagery) drew from a well-known canon of animal hieroglyphs for their subjects. By situating these symbolic animals in a naturalistic forest, the tapestries purported to offer a glimpse of divine truth as it is manifested in nature. The tapestries invited viewers to read their landscapes *as* the Book of Nature, to decode nature’s moral lessons through zoological “signs” of obscure but respected ancient provenance. We have also seen how the Paracelsian

³⁸⁴ Boas pp. 22, 28-9. When Marcilio Ficino translated Plotinus, he linked the Platonic understanding of knowledge even more explicitly to emblematic images of the natural world: “The Egyptian priests, when they wished to signify divine things, did not use letters, but whole figures of plants, trees and animals; for God doubtless has a knowledge of things which is not complex discursive thought about its subject, but is, as it were, the simple and steadfast form of it.” See also Wittkower and Gombrich, *op. cit.*

view of man and nature emphasized hidden signatures, legible only to the initiated and embedded in the plants and animals making up the landscape. For sixteenth-century viewers, the landscape itself was a parable. Viewers of the Wawel tapestries would have approached their mysterious animals and intricate botanical detail in search of moralized meaning, encouraged by the weavers' unprecedented naturalism to scrutinize the landscape ever more closely.

Sigismund's tapestries must be ranked among the grandest surviving illustrations of nature as a book of secret signs created during the Renaissance. No other sixteenth-century European monarch seems to have commissioned a single cohesive group of Flemish tapestries extensive enough to furnish an entire building. Sigismund's tapestry collection is unique in that it forms one complete woven decorative program, encompassing furniture, doorways and windows, arched recesses, and friezes. Even a tapestry presented as a gift to the king in 1560 by courtier Krzysztof Krupski (fig. 106) conforms to the larger royal tapestry program. Surrounding a gold and crimson medallion with Krupski's arms is a lush forest landscape populated with parrots, deer, rabbits, a lizard, and other animals.³⁸⁵ The Wawel tapestry collection reveals that its patron conceived of his newly remodeled palace – or its formal spaces, at any rate – as a single holistic environment, top to bottom.

The Egyptian sages (as imagined within Neoplatonist philosophy) did not use words, but “drew pictures, and carved one picture for each thing in their temples.” For early modern elites, natural knowledge was very often housed in encyclopedic and pictorial “temples” like this, whether in a real space filled with real objects (the *Kunst- und Wunderkammer*, the botanic garden, the *theatrum mundi*) or paper museums featuring “one picture for each thing,” such as the 179-folio *Museum* of Rudolf II (cod. 129 and 130, Österreichisches Nationalbibliothek

³⁸⁵ The tapestry bears the mark of Anton Leyniers, member of one of Brussels' preeminent families of weavers, and active roughly between 1540 and 1570.

Handschriften- und Inkunabelsammlung, Vienna) and illuminated emblemata such as Jacob Hoefnagel's *The Four Elements* (c. 1575-80, National Gallery of Art, Washington DC).³⁸⁶ Monumental, moveable chambers like the Wawel and Isola Bella tapestries brim with natural particularities but are literally framed by gilded allusions to classical learning, whether emblematic medallions or borders of grotesques. Such tapestry cycles must *also* have comprised temples of knowledge for their initial viewers.

In the temples of learning constructed by early modern patrons – *studioli*, cabinets of curiosities, or chambers of zoological and botanical tapestry – natural knowledge could ostensibly be grasped – as Plotinus recommends – purely visually. In such spaces, connoisseurship and natural knowledge would have fused. The Medici *spalliere* discussed in Chapter One and the Wawel tapestries belong together under this rubric of the early modern temple of natural knowledge. Both zoological emblems (prized for their clever abstraction of natural-moral phenomena) and naturalistic depictions of flora and fauna (prized for their verisimilitude) represented the distillation of natural knowledge into a precious, complete, and often either miniaturized or monumentalized form, aimed especially at elite patrons. In this way, Sigismund Augustus' purchase of a massive unified collection of Flemish tapestries signaled his participation in a wider European enthusiasm for exercising connoisseurship upon nature.

The last Jagiellon king's public persona had, since his birth, been carefully crafted around the Italian ideal of the learned humanist, in direct contrast to the more nativist values held by the Polish gentry, with whom the king competed for political power. Affiliation (real or perceived) with the humanist exegetical projects originating in Italy was an important and contentious part of Sigismund's royal identity, and by extension the identity of his court. Sigismund's tapestry

³⁸⁶ Conversely, on the *Kunstammer* or encyclopedic collection as an "emblem" of the world, see Julius von Schlosser, pp. 73ff, and Horst Bredekamp, *Antikensehnsucht und Maschinenglauben. Die Geschichte der Kunstammer und die Zukunft der Kunstgeschichte* (Berlin: Wagenbach, 1993).

patronage of the late 1540s and 1550s may be seen as a contribution to and affirmation of that public identity, for his tapestries reflect innovative interpretations of biblical events and feature subtle allusions to classical learning. The tapestries illustrate the Christian master narrative of man's acquisition and loss of natural knowledge, a narrative that served as both metaphor and historical fact in the period. Perhaps one might even say that the profusion of zoological and botanical imagery in the tapestry program for Wawel Castle foreshadows, if inchoately, a larger epistemological shift described by historians of Renaissance science, a gradual shift of attention away from texts and exegesis to scrutiny of the stuff of nature itself.

CHAPTER THREE
AN ECOLOGY OF THE PASSIONS: THE ISOLA BELLA TAPESTRIES (C. 1575)

AN INTRODUCTION TO THE ISOLA BELLA TAPESTRIES

A set of seven spectacular animal tapestries, previously known as the *Tenture de la Licorne*, hang in the Borromean palace of Isola Bella in northern Italy (figs. 107-113). Today six of the tapestries line a dim and chilly hallway that leads, past a grate, onto an elaborate seventeenth-century garden, a fantastical Baroque simulation of paradise (fig. 114).³⁸⁷ Though they were not commissioned for their current location, the tapestries form a fitting décor for the narrow low-lit passage, since, as I will argue, they can be seen to represent early modern ideas about the wracked condition of the fallen Christian soul.

Art historians have dated the series to the third quarter of the sixteenth century, partly through comparison with the Wawel verdure, for no documents relating to the tapestries' commission or initial purchase survive. The weavings can be definitely linked to the Borromeo family as far back as 1682, the year which a family inventory lists “7 *Altra Tappezzaria con... Animali et Boscazeggia*.”³⁸⁸ Evidence suggests that Charles de Guise, Cardinal of Lorraine (1525-1574) may have been the original patron, and that before coming into the possession of the Borromeo, the tapestries almost certainly belonged to Jules Cardinal Mazarin (1602-1661). Thus the set is linked to at least two prominent early modern Catholic ecclesiastics. It has not been attributed to any particular workshop, for neither of the set's two surviving weaver's marks has been identified. However, the extremely fine quality of the weave, the incorporation of gold and

³⁸⁷ The palace and gardens occupy the island almost entirely, and were commissioned in 1632 by Carlo III Borromeo for his wife, Isabella D'Adda; they were designed by architect Angelo Crivelli to suggest a floating barge in the Lago Maggiore.

³⁸⁸ “1682 Inventario di Milano.” Unpublished manuscript in the Archivio Borromeo, Isola Bella. I am grateful to Mr. Alessandro Pisoni for bringing this unpublished document to my attention.

silver thread, and the skill evident in the design suggest a major Flemish workshop and a powerful patron.

All seven tapestries depict fierce, highly anthropomorphized animals interacting in forests of stunning botanical detail and variety. Together the tapestries represent a teeming, threatening, inhabited forest; the Isola Bella set certainly does not offer a vision of nature as peaceful and harmonious. Snarling lions combat magnificent unicorns, families of panthers hunt and disembowel startled monkeys, harrowingly fierce reptiles slither up tree trunks and through the underbrush, and birds of prey lurk in the high branches. A number of the beasts are posed to best display their anatomical weaponry, baring their sharp beaks or teeth and claws, and crying out or roaring. Many of the tapestries' animal motifs were known to early modern viewers from the writings of Pliny, Aelian, Horapollon, and the Physiologus, a third-century Greek compendium of allegorical animal tales that later formed the basis for various medieval bestiaries. The tapestry borders contain eleven mythological figures with their animal attributes.³⁸⁹ For example, Europa and the bull (fig. 115) and Phryxus with the golden fleece (fig. 116) appear in the center of the lower borders.³⁹⁰ Each tapestry in the set also features three different grisaille medallions in its borders, bearing the image of an animal or animals and a Latin inscription.³⁹¹ The weavings are all the same height but have different widths, a strong indication that they were designed to encircle the same room.

³⁸⁹ A series depicting *The Story of Alexander* in the Patrimonio Nacional, Madrid, attributed to Jacob Geubels, features almost identical borders (MRAH photo archive no. 1550.106).

³⁹⁰ The complete list of figures includes Hercules and a lion; Diana with a hound; Hygea with a serpent; Orpheus with a genet; Prometheus with an eagle; Leda and a swan; Europa with a bull; Phryxus with a golden fleece; Neptune (Amphitrite) with a dolphin; Romulus and Remus with a wolf; and supporting each cartouche, the dogs of Cerberus.

³⁹¹ The twenty-one emblems, which have been described in detail by Viale, will not be exhaustively discussed here. Several of the medallions are miniature replicas of animal motifs from within the central panels of the Isola Bella series. A number of others appear in the borders of other Flemish tapestry cycles produced in Brussels in the mid-sixteenth century; for example, there are many similarities with the emblematic borders of a cycle illustrating *The*

This chapter situates the Isola Bella tapestries within a Christian iconographic and literary tradition in which the passions are imagined as wild beasts, unleashed from their subservience to man, and thus to reason and virtue, upon Adam's consumption of the apple. In each of the seven landscapes, allusions to the redemptive Passion of Christ coexist with representations of the dangers of human passions. This layering of meaning complicates the tapestries' iconography, as the animals do not divide consistently into good and evil camps. At the same time, such a highly nuanced iconographic program is not surprising in a work of art so costly and laborious, one that was passed down as a legacy within the families of several powerful early modern ecclesiastics. During the sixteenth and seventeenth centuries, the tapestries presumably were experienced within the palaces of these politically prominent cardinals, that is, in a space as richly appointed as the residence of any highly placed courtier, an environment close to the center of French political power, but one that carried unique overtones of the sacred.³⁹²

The first half of this chapter is meant to establish that the Isola Bella tapestries are indeed representations of the passions. Once that is established, it is possible in the second half of the chapter to move beyond seeing the relationship between beasts and passions in the tapestries as a simply metaphorical one, and to probe the beast-passion relationship in terms other than the strictly theological, for example drawing upon early modern discourses of natural history,

Story of Romulus and Remus, attributed to Pieter Coeck Van Aelst and Jan Tons II, c. 1550, now in the Musées Royaux des Beaux Arts, Brussels.

³⁹² Unfortunately, little information is available on the artistic patronage of Charles de Guise. No record survives of Charles' tapestry acquisitions while in Italy at the Council of Trent, and his substantial correspondence includes virtually no mention of his activity as an art patron. See the *Lettres du Cardinal Charles de Lorraine (1525-1574)*, ed. Daniel Cuisiat (Geneva: Librairie Droz, 1998). It is recorded that Francesco Salviati was engaged by him at the family estate of Dampierre in 1554-5; see Mercedes Ferrero Viale, "Quelques nouvelles données sur les tapisseries d'Isola Bella," *Bulletin des MRAH* 6:45 (1973) p. 107. Several years earlier, Salviati had designed the program of the Sala dell'Udienza in the Palazzo Vecchio for Cosimo I d'Medici, and possibly the set of ten grotesque tapestries woven the room as well. For biographical studies of Charles de Guise, see Carole Ann Putko, "The pursuit of power: Charles de Guise, Cardinal de Lorraine (1525-1574): a study in complexity, controversy, and compromise" (PhD dissertation, University of Southern California, 1996) and Thomas Elkin Taylor, "Charles, Second Cardinal of Lorraine (1525-1574): A Biography" (PhD dissertation, University of Virginia, 1995). For Mazarin as a tapestry collector, see Patrick Michel, *Mazarin, prince des collectionneurs. Les collections et l'ameublement de Cardinal Mazarin (1602-1661). Histoire et analyse* (Paris: Notes et Documents des Musées de France 34, 1999).

physiognomy, and medicine. First, however, it is necessary to survey the Isola Bella landscapes, and to examine their mysterious iconography, which has been extensively mapped by Mercedes Ferrero Viale.

As detailed landscapes of sophisticated construction, the Isola Bella tapestries recall the *Hunts of Maximilian*, which are among the most magnificent sets produced in Flanders in the first half of the sixteenth century (figs. 7 and 148), possibly for the Habsburg court in Brussels. By 1589, the twelve *Hunts of Maximilian* were certainly in France among the De Guise family collections, and thus the two series may plausibly have hung together within the now-demolished De Guise palace at Joinville.³⁹³ If we accept that the Isola Bella tapestries were produced in the last quarter of the sixteenth century, a gap of at least forty years separates them from the *Hunts of Maximilian*. Nevertheless, the two series share not only comparably precious materials and the same very fine weave but important stylistic and compositional elements; indeed, innovations in the depiction of the natural landscape that first appeared in tapestry with the *Hunts* remained unsurpassed at the time the Isola Bella scenes were designed. Large figures and painstakingly detailed foliage occupy the foreground, while the viewer's eye is led back into receding space between strategically placed obstacles, such as banks of earth and clumps of trees. Unlike the rather dark and thickly tangled forest of the Isola Bella weavings, most of the *Hunts* landscapes open up to broad fields and wide skies in the distance, and of course architecture plays a central role in their portrait views of the vicinity of Brussels. Maria Hennel-Bernasikowa has observed that sixteenth-century Flemish verdures employ vine-wrapped trees to frame clearings and groves like the painted wings of a theater stage. Indeed, in both the Isola Bella and *Hunts* series,

³⁹³ Arnout Balis, Krista de Jonghe, Guy Delmarcel, and Armaury Lefébure, *Les Chasses de Maximilian* (Paris: Réunion des Musées Nationaux, 1993) p. 46; Viale pp. 106-8. *The Hunts of Maximilian* seem to have accompanied the Isola Bella series from the De Guise family collection to that of Cardinal Mazarin in 1654 or 1655; then in 1665, *The Hunts* were acquired by the French crown from Mazarin.

thick trunks serve to anchor the swift and sometimes violent actions performed by the animal figures in the fore- and middle ground. In addition, the Isola Bella tapestries replicate some of the colorful marbled bark and crumbling, rutted earth, the oak and apple trees, the gnarled roots and the layered canopy of leaves, and the moss-covered stumps and curling red fern fronds of the *Hunts*. Scholars have found that much of the flora pictured in the *Hunts of Maximilian* is native to the Soignes region, such as holly and birch. The Isola Bella series, by contrast, also depicts many exotic plant species such as date palms, figs, and exotic fruit trees, and acknowledges no seasonal changes. This difference is not stylistic but rather central to the tapestries' respective subjects: the *Hunts* double as a zodiacal calendar, depicting not only actual members of the Habsburg court but recognizable views of the imperial hunting grounds. In this respect, the majority of sixteenth-century landscape verdures resemble the *Hunts*: the Wawel verdures, Game Park Set A in the Getty Photo Collection, the Contarini hunting tapestries in the Victoria and Albert Museum, and many other sets of inferior quality depict a pastoral landscape that is nevertheless partly domesticated, even when the architecture is fantastic and the figures mythological. In all of these sets, the viewer enjoys a temporary shift in perspective from the human to the animal, gazing over the shoulder of a stag or stork at a distant cluster of rooftops or a walled garden. What makes the Isola Bella verdures unusual, apart from their exceptional quality, is the marked absence of any human presence. The Wawel verdures retain a suggestion of man and civilization, with the rooftops and steeples of towns peeping over the horizon line. At Isola Bella, the familiar forest of Soignes has sprouted a wealth of exotic flora and grown exaggeratedly twisted and impenetrable; the underbrush has become thicker, the shadows longer, and the predators fiercer and more numerous.

The largest tapestry in the series (fig. 107, 412 x 650cm) depicts a violent battle taking place in the extreme foreground of a forest clearing. A motley pack of lions and panthers use their conspicuous fangs and oversized paws to bring down a unicorn, which braces its legs and rolls its eyes upward in terror. In fifteenth- and sixteenth-century tapestry as well as other media, the image of the white unicorn, with its dual connotations of ferocity and purity, provided a link (which in biblical terms was causal) between Christ's sacrificial Passion and the bestial passions with which man was condemned to struggle.³⁹⁴ The unicorn pictured here, though outnumbered, is no meek victim. The animal's exaggerated musculature matches that of the big cats, and its tremendous horn spears the hind leg of a fallen panther (fig. 117), whose unlikely serpentine spine and right arm raised in futile self-defense recall showily foreshortened figures by the Caravaggisti. A parrot flees above the heads of the wrestling beasts. In the lower left corner, a turtle family cowers before a tiny den formed by overhanging roots (fig. 118).³⁹⁵

The tapestry's inscription is adapted from the book of Ecclesiasticus: DEDIT DEUS HOMINI POTESTATUM EORUM QUAE SUNT SUPER TERRAM POSUITQUE ILLIUS TIMOREM SUPER OMNEM CARNEM ET DOMINATUS EST BESTIARUM ET VOLATILIUM. ECCL. XVII. BENEFICIENTIAM AGNOSCE O HOMO (God put the fear of man in all living beings, and gave him dominion over beasts and birds. Man, look and see what benefit you have received).³⁹⁶ As with each tapestry in the Isola Bella set, it is difficult to know what to make of this odd juxtaposition of text and image. The inscription addresses the viewer directly with a command to observe and to learn, and an affirmation of the dominion he has been

³⁹⁴ Margaret Freeman and Linda Sipress, *The Unicorn Tapestries* (New York: Metropolitan Museum of Art, 1974). See also Lise Gotfredsen, *The Unicorn* (New York: Abbeville Press, 1999).

³⁹⁵ This grouping of parent(s) and young in front of their cave is a compositional device that appears repeatedly, featuring a variety of species from dragons to panthers to lizards, in both the Isola Bella tapestries and the Wawel verdure.

³⁹⁶ Ecclesiasticus 17:4. All biblical transcriptions are from *The New Oxford Annotated Bible with the Apocrypha* (Oxford UP, 1977).

granted over all other creatures. Each message is paired, however, with a fearsome image in which man has no place, a wilderness marked by bestial otherness and abandon that offers no hint of human dominion or control.

The second largest tapestry (fig. 108, 412 x 600cm) depicts a pair of enormous ostriches sheltering under a grapevine. One of the birds glances down at three eggs nestled in the dirt at the base of a tree (fig. 119). The tapestry's inscription, like most of its imagery, is taken from the final chapters of the Book of Job: DESERIT IN TERRA OVA SUA UT IN PULVERE FOVEANTUR NEC COGITAT PEDIBUS EA DISSIPARI ET A BESTIIS CONCULCARI POSSE. ETC. JOB. XXXIX. PROVIDENTIA DEI OMNIA GUBERNATUR (For she leaves her eggs to the earth, and lets them be warmed on the ground, forgetting that a foot may crush them, and that the wild beast may trample them. The wisdom of God governs all.).³⁹⁷ In the distance, two stags lock horns, an ostrich bravely chases off a more powerful horse, and a lion family looks out from their craggy den; an eagle devours its prey in the branches above. The foreground brush hides a hare (fig. 120), which resembles artist Hans Hoffmann's innovative painting of the same animal tucked into the forest undergrowth (1585, J. Paul Getty Center, Los Angeles).³⁹⁸

The next largest weaving in the series (fig. 109, 412 x 565cm) depicts a charging unicorn spearing a lion, but the combat between these two beasts is somewhat minimized in scale and thus importance. Closer to the viewer, a magnificent mottled lobster – precisely rendered, down to the small bristly hairs on its two long antennae – rests in the muddy shallows among broken oyster shells, remains of an earlier meal (fig. 121). Nearby, a fierce-looking bird of prey tears

³⁹⁷ Job 39:14-15.

³⁹⁸ Hoffmann's painting was based in turn upon a famous watercolor by Albrecht Dürer (1471-1528). The hare in the tapestry demonstrates, like the many versions of Dürer's armored rhinoceros woven into Flemish verdure during the sixteenth and seventeenth centuries, how the German artist's oeuvre served as a model for natural history illustration not only in painting and drawing but also in the medium of tapestry.

into the flesh of a fish it has caught (fig. 122), and the same emblematic mother ape flees clutching her two offspring. Beyond the trees, dozens of exotic animals, some of them copulating, approach the edge of a stream (fig. 123). The construction of the landscape in this tapestry is particularly sophisticated, featuring many layers of depth. The largest and most powerful animals (their bodies altered to better suggest those of humans, for example through exaggerated arm and shoulder musculature) are set back in the middle distance, placed daringly close to the physically smaller creatures (lobster, fish) in the foreground, but without disrupting the viewer's sense of scale. A stream, so transparent in the foreground that one may make out shells, roots, and a tremendous starfish below individual foamy wavelets on its surface (fig. 124), blurs as it winds backward, marking the landscape's gradual recession into space. This tapestry contributes much to the illusion that the complete Isola Bella chamber is a three-dimensional forest extending outward in multiple directions.

Two inscriptions appear in the tapestry's upper cartouche: SALVA ME EX ORE LEONIS ET A CORNIBUS UNICORNIUM HUMILITATE[M] MEA[M] PSAL. XI (*sic*) EREPTUM DE ORE LEONIS ET URSI LIBERABIT ME DEUS DE MANU GOLIAE I REG. 17 (Save me from the lion's mouth, for thou hast heard me from the horns of the unicorns; The Lord who delivered me from the paws of the lion and bear will deliver me from the hand of Goliath).³⁹⁹ It has been suggested that the odd position of the lion and unicorn makes the tapestry an allegory of the crucifixion.⁴⁰⁰ There are, however, other possibilities: one could argue that this unicorn resembles another shown lashing out at its pursuers and spearing a dog through the heart in one of the famous *Hunt of the Unicorn* tapestries (c. 1500, The Cloisters). In any case, the first inscription identifies lion and unicorn alike as man's symbolic foes, while in the distance, to

³⁹⁹ Psalms 22:21 and Samuel 1, 17:37.

⁴⁰⁰ Viale pp. 83-9.

further complicate the question of the tapestry's protagonist, a unicorn leads the other inhabitants of the forest to drink at a stream which it has selflessly purified with its horn, in keeping with the text of the *Physiologus*.

A family of lions occupies the central place in another tapestry in the *Isola Bella* series (fig. 110, 412 x 533cm). The scene feels almost domestic, as a lion nurses her cub (fig. 125), sitting among the scattered bones of previous meals and beneath the curling ferns (fig. 126) on the roof of her den. A pair of lizards peer at her from their own hole among the roots (fig. 127). On the left, a male lion drags home an antelope or stag (fig. 128). Above him, an ape leans down from the branches of an old oak tree (fig. 129), while a pheasant serves as a kind of pendant spectator on the right. Both creatures appear to watch the interaction between lioness and lizard below with great interest. On the right, in the distance, a rather staid battle is underway between an elephant and rhinoceros, described by many emblem authors as symbolic of the battle between good and evil. The tapestry's inscription is from the Book of Wisdom: O DOMINE PER TUAM SAPIENTIAM CONSTITUISTI HOMINEM SIC UT ESSET DOMINATOR CREATURAE ABS TE FACTAE. SAP. 9. NUMQUAM SAT MAGNA TIBI GRATIARUM ACTIO ("O God [of my fathers, and Lord of mercy, who hast made all things by thy word, and] by thy wisdom hast formed man, to have dominion over all the creatures thou hast made," with the addition, "We will never sufficiently praise you").⁴⁰¹ Once more, in the inscription, the viewer – man – is exhorted to recognize his privileged position as master of the animal kingdom. Yet the connection between this inscribed message and the splendid image of beasts below remains elusive.

The most fearsome tapestry in the set (fig. 111, 412 x 502cm) depicts two enormous colorful serpents, one twined around the trunk of a great tree and the other rearing vertically,

⁴⁰¹ Book of Wisdom IX: 1-2.

splaying its fangs in the direction of parrots that swoop and call from the tree limbs.⁴⁰² On the left, a panther feigns death to attract a group of curious monkeys, who gather around its still body unsuspectingly (fig. 130); another panther, in the tapestry's foreground, has already successfully snatched its prey in this fashion (fig. 131). The inscription is adapted from the book of Ecclesiasticus (39: 35-37) and warns, *BESTIARUM DENTES ET SCORPY ET SERPENTES AD VINDICTAM ET EXTERMINIUM IMPIORUM CREATA SUNT. ECCL. XXXIX. CAVETE IMPY* (The teeth of beasts, and scorpions, and serpents, were created to destroy the impious). The panther's deadly ruse was described by Aelian, and appears elsewhere in the *Isola Bella* series as a grisaille medallion (fig. 132). It is also depicted in one of the four largest verdure woven for Polish king Sigismund Augustus and Wawel Castle (fig. 80). It has been suggested that the panthers in this tapestry represent "the Church," which "allows its followers (the apes) to sin but – as seen on the right – devours them eventually, that is to say damns them to eternal death."⁴⁰³ Yet the panther is also described as "Christlike" by the Physiologus, for it was known to emit a sweet fragrance that drew all other beasts to it. The animal's marked ferocity in most (though not all) of the *Isola Bella* tapestries complicates any simple characterization.

The smallest tapestry at *Isola Bella* (fig. 112, 412 x 453cm), like others in the series, is crowded with dense, luxuriant foliage, the trees and plants in full flower and carefully distinguished by species. Throughout the series, oak, ash, apple, and date palm trees feature mossy, multihued bark of varying texture. The designer(s) clearly wished to emphasize botanical variety, a tradition in tapestry from the era of the *mille fleurs*. Closer to the forest floor grow clusters of curling ferns, climbing vines, iris, chamomile, strawberry plants, herbs, swamp reeds

⁴⁰² The same composition of serpents and birds is represented in miniature and in grisaille in one of the medallions in the border of another tapestry in the *Isola Bella* set.

⁴⁰³ Viale pp. 89-91.

and water grasses. Throughout the series, the forest is composed in layers, and recedes through isolated areas of sunlight like a deep tunnel, leading the eye back through space. In this tapestry, the viewer is again positioned low to the ground in the shade and underbrush, challenged as in hide-and-seek to pick out a dozen animals hunting each other, among them the familiar leopards and apes (fig. 133), a panther chewing on the rear flank of a male lion (fig. 134), an otter devouring an eel (fig. 135), a chameleon or salamander, a turtle, a parrot, and, overlooking the scene from the top of an overgrown hillock, a young goat. In the bestiary tradition, all of these animal species carried a variety of moralized connotations, some conflicting. The tapestry's inscription reads O[MN]IS NATURA BESTIARUM VOLUCRUM ET SERP.[ENTIEM] MAR.[INORUM] DOMATUR AB HOMINE. GIAC III.LAUD DEO (For every kind of beast and bird, of reptile and sea creature, can be tamed and has been tamed by humankind).⁴⁰⁴ It is drawn from the Book of James.

The seventh tapestry, one the most beautiful in the Isola Bella set (fig. 113, 412 x 528cm), depicts the mouth of the stream that winds through the other six weavings. A roaring lioness wades breast-deep into the clear water, which runs off of her back and neck in rivulets (fig. 136). Two serpents parallel the lioness' left-to-right path across the water, one squeezing beneath an arched tree root to shed its skin, while the other opens its mouth to release its venom so that the stream will not be poisoned (figs. 137-138).⁴⁰⁵ The scene also features a panther (fig. 139), an eel, fish (fig. 140), various water birds (fig. 141), and a fig tree. The tapestry's inscription combines two biblical quotations admonishing the viewer to turn to animals as moral exemplars: ESTOTE ERGO PRUDENTES SICUT SERPENTES ET SIMPLICES SICUT COLUMBAE. MATH. 10. VADE AD FORMICAM, O PIGER, ET CONSIDERA VIAS EIUS.

⁴⁰⁴ James 3:7.

⁴⁰⁵ Curley pp. 16-19.

PROVERB 6 (Be clever like the serpents and innocent like the doves. Math 10. Look to the ant, thou sluggard, consider his ways and be wise. Proverb 6).⁴⁰⁶ While the gaping jaws and fearsome human-like visages of the lioness and serpents prevent the scene from appearing genuinely peaceful, this tapestry depicts no actual combats between animals.

Frequently Flemish landscape tapestries construct a visual analogy between the valor or cruelty of human or mythological hunters in the distance and that of animal predators in the foreground (figs. 142-143), but no such pairing occurs in the *Isola Bella* set. Unlike many of the game park and hunting tapestries woven by Flemish workshops in this period, many of inferior quality, the *Isola Bella* tapestries offer no sign of human presence. No spires appear along the horizon line to indicate a nearby castle or town, as in the otherwise comparable *Wawel* verdure, and no gentleman rider or rustic appears in the middle distance to lend the scene a bucolic air. The viewer is transported deep into the forest and positioned low in the brush, with only the Latin inscriptions for interpretive guidance. Man is invoked by the tapestries, summoned by the inscriptions affirming his superiority over the beasts, but any human presence in this wove forest remains implicit and bound up with the presence of the viewer; man never appears in the landscape.

The limited scholarly attention the tapestries have received has generated as many questions as answers. The tapestries were first published by Marcel Roethlisberger in 1967 in an article that broadly surveyed the set's iconography, offered transcriptions of the inscriptions, and proposed simply and plausibly that the tapestries represented conflicts between "brute forces" which man, by the grace of God, might overcome.⁴⁰⁷ Five years later, Mercedes Ferrero Viale published a painstakingly researched article which asserted that the *Isola Bella* set represents a

⁴⁰⁶ Matthew 10:16 and Proverbs 6:6.

⁴⁰⁷ Marcel Roethlisberger, "La teneur de la Licorne dans la collection Borromée," *Oud Holland* (1967) pp. 85-115.

Christological narrative of sin and redemption, beginning with a depiction of paradise (fig. 113) and culminating with an epic “battle between good and evil” in the tapestry depicting a unicorn attacked by large cats (fig. 107). By her own admission, only five of the seven tapestries work as episodes in this narrative; the remaining two she entitled “Wisdom” (fig. 108) and “Divine Providence” (fig. 110). Viale’s formidable list of references spans a millennium and includes scriptural sources, bestiaries, commentaries and exegetical writings ranging from patristic to late medieval sources, as well as several sixteenth-century emblemata. Her study catalogs a rich body of symbolic meanings that have been ascribed to individual animal species throughout the Christian tradition. Yet by its very scope and thoroughness, it also demonstrates how fluid and inconsistent the vocabulary of animal symbols could be, even within the Christian canon. Creatures that appear prominently in the tapestries, such as the unicorn, chameleon, serpent, and various birds, figured as symbols of both virtues and vices in texts and images leading up to the seventeenth century; their meaning depended heavily upon context. Lions and panthers in the *Isola Bella* appear interchangeably as victims and villains, hunters and prey, as maternal and as lustful. It seems that, despite historians’ best efforts, the tapestries must confound any strict Physiologan assignation of good or evil to individual animal species. There simply is no single text or bestiary that provides a key to deciphering the animal symbols in these weavings; rather, they represent an amalgam of moralized animal types and behaviors, old and new, with the whole seven-piece chamber, the whole carefully simulated forest, being greater than its individual parts or animal vignettes.

Sixteenth-century natural history publications and practices do not figure at all in the limited previous scholarship on the tapestries. The series clearly requires a more historically focused analysis, one that draws upon images and ideas in circulation at the time of its creation

and the first decades of its display. This chapter of the dissertation will argue that the Isola Bella weavings offer an extended meditation on the passions framed as the close empirical observation of nature, reflecting early modern anxieties over the potential of the passions to serve as gateways to knowledge as well as sin. Though distinct disciplines, moral and natural philosophy shared a fundamental aim in the sixteenth and early seventeenth centuries. Both sought to recover prelapsarian control of nature by learning to read and to control the passions, long envisaged as wild beasts. I argue that the Isola Bella tapestries demonstrate how animals, and by extension the passions, were pictured and perceived in the early modern era with real fascination but also anxiety and profound ambivalence. The viewer is invited to identify with the tapestries' scenes of inhabited wilderness in a rich variety of ways, but only within limits. The tapestries, like Christian theological writings and early modern natural histories, insist upon the privileged status of the human, even as they warn against the risk of falling into bestiality. This reading of the tapestries is supported by a variety of early modern discourses on the passions: medical, moral, zoological, and political.

The two previously published studies of the Isola Bella tapestries acknowledge the centrality of the theme of the passions to the set. Both studies, however, assume a sort of self-evident equivalence between images of beasts and the undifferentiated human passions (or between certain beasts, such as the lion, and the Passion of Christ). They do not investigate how or why animals like those pictured in the tapestries were consistently associated with the passions in the early modern period. Previous studies also do not take into consideration how this powerful association between beasts and human bestiality changed over time, though in fact the later sixteenth and early seventeenth centuries brought tremendous change in European attitudes toward animals and the way animals were represented, classified, and described. In this chapter I

will analyze the ways in which the tapestries' rich zoological imagery reflects changing approaches to animals evident in early modern moral and natural philosophy. Drawing upon recent innovative work on the passions by scholars of early modern literature such as Gail Kern Paster, I will argue that the *Isola Bella* weavings represent an ecology of the passions, which were understood as physiological and psychological phenomena afflicting man and beast alike. Indeed, in Galenic medicine and in sixteenth- and seventeenth-century writings more generally, the humoral passions were understood not only to permeate individual bodies but to percolate throughout the larger "humoral environment," a physical consequence of original sin. The passions comprised another layer in the web of similarities, affinities, resemblances, and antipathies that bound the natural world together.

The *Isola Bella* tapestries, lacking heroic human actors, are, in a sense, nothing but landscape. They do not represent an event or a narrative, but rather a sort of perpetually tumultuous environment. This has made them mysterious and difficult to decipher. Yet considering the tapestries in light of early modern physiological theories of the passions helps us to better understand how these monumental landscapes may have functioned as didactic art. In this chapter I argue that the *Isola Bella* tapestries, in keeping with early modern Christian theology, depict conflict in nature as a reflection of inner moral conflict, the legacy (indeed, the defining trait) of postlapsarian man. This inner conflict was not only understood as spiritual, but physiological as well (the passions worked as perturbations of both body and mind), and we will see in the tapestries the implicit superimposition of the fallen human body, wracked by passion, upon the natural landscape.

"Animal Spectacle," the first of the chapter's five remaining sections, considers the *Isola Bella* tapestries alongside a variety of other early modern representations of animals, including

animal-themed entertainments popular in the sixteenth century and depictions of these spectacles in Flemish prints. I argue that, rather than the narrative of redemption proposed by Viale, the *Isola Bella* tapestries – like illustrated fable books and staged combats – might be more productively approached as non-sequential emblems of the unruly passions. Next, “Interior Landscapes of the Passions” situates the tapestry series within a Christian theological tradition that has long equated wild beasts with the unruly passions, and demonstrates how the tapestries can be seen to illustrate the tormented condition of postlapsarian man, an interior state of confusion and upheaval which was nevertheless divinely ordained. Having established that the riotous *Isola Bella* landscapes were indeed designed to be representations of the unruly passions, my discussion then moves beyond strictly religious and literary sources to consider early modern texts that have played no virtually part in the study of tapestry. The chapter’s remaining sections probe the tapestries’ depiction of the passions as animals in a forest by considering the set in light of early modern medical and physiognomic treatises, natural history publications and Paracelsian thought. “The Anthropomorphized Menagerie,” for example, situates the *Isola Bella* tapestries alongside the revived science of physiognomy, which promised to reveal the various inborn proclivities and appetites of men and women by matching their physical appearance to that of selected animals. The section attempts to explain the curiously humanlike appearance of many of the animals in the *Isola Bella* weavings, a feature which sets the series apart from other Flemish animal tapestries of the period, as a signal to the viewer that the tapestries’ real subject is human, not animal, nature. The fourth section, “Swellings and Rebellions: The Postlapsarian Body,” surveys early modern physiological theories of the passions, which conflated spiritual and physical health by imagining the passions as eruptions and imbalances within the body. The last section of the chapter suggests that the set represents an ecology of the passions, blurring the

distinction between the human body and the landscape, and surveys examples of physiological and medical metaphors for spiritual health found in the Isola Bella tapestries.

Finally, a word about the unknown date of the tapestries, and the dates of the literary sources cited in this chapter. Tapestry scholars agree in assigning the Isola Bella tapestries an approximate date of 1565 and a Brussels origin, based upon style and comparison to the Wawel verdures, which can be firmly dated to the 1550s. However, there is no documentary proof, no inventory or contract, to confirm this. There are, on the other hand, a number of surviving tapestries that replicate either whole designs or particular animal motifs found in the Isola Bella weavings. These include both high and lower quality tapestries.⁴⁰⁸ These duplicate weavings do not point to a more specific date for the Isola Bella; we must be satisfied dating the series to the second half of the sixteenth century. (Although it seems at least possible that the surviving pair of weaver's marks on the tapestries might remain unidentified because they are not, after all, from sixteenth-century Brussels workshops, but from a later center of production.) What the duplicate weavings do reveal is that Isola Bella landscapes and some of their individual motifs were still being woven, and for princely patrons, at least as late as the 1610s. Thus these animal motifs clearly held appeal for early modern viewers into the seventeenth century. Since my examination of the Isola Bella tapestries is concerned with iconography, and with the meanings that their animal scenes may have held for early modern audiences, in my discussion I consider but I do not overly privilege the experience of the tapestries' first viewers. In sketching the

⁴⁰⁸ I have found too many examples to list comprehensively here. Select tapestries include a series of verdures woven by the Pastrana workshop of émigré weaver Francis Tons, now in the Bilbao Fine Arts Museum, and published by Margarita Garcia Calvo in "Tapestries of the Bilbao Fine Arts Museum," *Boletín B05 del Museo de Belles Artes de Bilbao* 1 (2006) pp. 67-90; a tapestry with the mark of Jacob Geubels sold at Sotheby's Zurich on December 10, 1996 (lot 230); a tapestry sold at the Parke-Bernet Galleries, New York on May 18-19, 1949 (estate of Eleanor Medill Patterson), lot 286; and an early seventeenth-century tapestry signed by Jan II Raes at the DeWit Manufactory in Mechelen, published in Delmarcel et al, *Flemish Tapestries, Five Centuries of Tradition* (Mechelen/Malines: Stichting DeWit 1995) pp. 48-9, no. 13.

intellectual currents of the period I have felt entitled to draw from written treatises on zoology and the passions published as late as the first half of the seventeenth century.

The only extensive previous study of the iconography of the set, that published by Mercedes Ferrero Viale, treats the interactions between animals as conflicts between good and evil, and proposes a narrative sequence leading from paradise through sin to salvation. Yet, as I will argue, the tapestries might be more productively approached as non-sequential emblems of the unruly passions, in keeping with a long literary and pictorial tradition, classical and Christian, in which animals act as representatives of intangible human qualities, illustrating the virtues and vices, for example, or the consecutive stages of a human life. This section of the dissertation briefly discusses a selection of sixteenth-century images and real and fictional animal performances that reflect the continuing importance of this tradition in sixteenth century, in an effort to provide a context for the mysterious tapestries. The section offers an answer to the question, unposed by previous scholars, who have studied the series largely in isolation: to what might the Isola Bella tapestries be compared?

As we saw writ large in the Wawel tapestries, the biblical narrative of Creation served as the most important framework for exploration of the natural world and of man's own nature in the early modern period. Moral weakness in Eden had brought a loss of human dominion over nature. Consequently mastery of the passions, to which numerous medieval and early modern writers referred as "beastly and sensual" and "wild beasts that are never tamed," would restore that dominion and the perfect understanding of plant and animal natures that went with it.⁴⁰⁹ Peter Harrison has examined how animals served as a living lexicon of the passions for early modern observers. Harrison's studies of early modern theological and philosophical approaches to animals do not touch upon images at all, but in his analyses of the ways in which animals were

⁴⁰⁹ Peter Harrison, "Reading the Passions: The Fall, the Passions, and Dominion over Nature," in Stephen Gaukroger, ed., *The Soft Underbelly of Reason: The Passions in the Seventeenth Century* (London: Routledge, 1998) p. 53.

absolutely integral to early modern beliefs about human knowledge, the mastery of nature, and control of the passions, we find an excellent framework for reconsidering the tapestries at Isola Bella.

As was also discussed in the previous chapter, early modern writers regarded both Noah's Ark and man as a microcosm, each containing all of nature inside, serving as a kind of comprehensive vessel. The idea of man as a paragon, the epitome of nature, comprising all creatures within himself, dates at least from the apocryphal writings of Philo of Alexandria, which describe man as "every kind of animal."⁴¹⁰ Church Fathers such as Origen, Gregory, and Ambrose of Milan also define man as a microcosm, encompassing all of nature as the beasts embody his passions. In the same way, sixteenth-century Christian writers such as the mystic Jacob Boehme (1575-1624) looked at man and saw a chaotic internal menagerie: "in briefe as many creatures are upon the earth, so many and *Various* properties likewise are there in earthly man."⁴¹¹ Indeed, until the end of the seventeenth century, commentators on Creation and the Fall continued to argue that "Man alone has as many Passions as all the Beasts put together," as William Ayloffe put it in his *Government of the Passions* (1700).⁴¹²

Such a deeply ingrained metaphor must have informed both the design and reception of animal tapestries, or at least the highest quality examples, since a princely commission was more likely to have a thoughtful iconographic program. The only (to my knowledge) surviving image of *pugnae ferarum* or animal tapestries in use, a sixteenth-century engraving by Frans Hogenberg illustrating the abdication of Emperor Charles V in Brussels (ca. 1558, fig. 144), suggests that

⁴¹⁰ Philo, *The Laws of Allegory*, II.22, in *The Works of Philo: Complete and Unabridged*, translated by C.D. Yonge (Peabody, Mass: Hendrickson, 1993), p. 40; quoted in Peter Harrison, "The Virtues of Animals in Seventeenth-Century Thought," *Journal of the History of Ideas* 59:3 (1998) n. 12. See also Philip C. Almond, *Adam and Eve in Seventeenth-Century Thought* (Cambridge UP, 1999), especially "The Perfection of Man," pp. 33-64.

⁴¹¹ Harrison, "Virtues of Animals," p. 466.

⁴¹² William Ayloffe, *Government of the Passions* (London, 1700), quoted in Harrison, "Virtues of Animals," p. 467.

this was indeed the case. Studies of Renaissance tapestry often refer to Hogenberg's illustration of the ceremony, which had occurred three years before, as a demonstration of how Flemish tapestries dominated formal courtly space. The emperor, one of the most prolific tapestry patrons of the sixteenth century, is seated on a dais before his kneeling son and successor Philip II, beneath a baldachin bearing the family arms. He is flanked by enormous animal-landscape tapestries left and right. These prominently placed weavings closely resemble the *Isola Bella* tapestries and *Wawel* verdure: on the left, a forest grove with a stag and several other large animals can be seen. On the right, a tiger pursues an ape that is clinging to the branches of a tree, while startled birds take flight. The event pictured in the print is Charles' ceremonial relinquishing of worldly life and his transition to a contemplative one.⁴¹³ Cardinal Antoine Perrenot de Granvelle (1517-1586), who was responsible for procuring many of the emperor's most famous tapestry sets from Flemish workshops, stands to the left. As the inscription explains, the ceremony marked the emperor's withdrawal from affairs of state, and the public beginning of his preparations for death through devotion to the "contemplation of Divine things."

L'empereur Charles le 5. cognoissant par la defaillance des forces corporelles approcher le fin, fait aßembler les Etats du Pais-bas en la ville de Bruxelles, resignant la Seigneurie et Gouvernement desdictz Pais entre les mains du Roy Philippe son Filz et heriter: D'oudbientost après se partit, faisant voile en Espagne la ou il se defpestrà entierement des solitudes mondaines et à la contemplation des choses Divines: L'an 1555, le 25e d'Octobre. (The Emperor Charles V, in the knowledge that his bodily strength was approaching its end, assembled the States of the Low Countries in the city of Brussels, resigning the rule and government of that land into the hands of King Philip his son and heir: Immediately afterward, he journeyed to Spain,

⁴¹³ Charles' rejection of secular pursuits and his embrace of Christian asceticism was performed in multiple ways before and after his retirement to the remote Spanish monastery of Yuste. See Stephanie Schrader, "'Greater than he ever was': Ritual and Power in Charles V's 1558 Funeral Procession," in *Nederlands Kunsthistorisch Jaarboek/Netherlands Yearbook for History of Art* 49 (1998) pp. 69-94.

where he put aside entirely all worldly concerns in favor of the contemplation of Divine things:

the year 1555, 25 October.)

The room's zoological decoration may be a fiction: a written account of the event indicates that a series of *Gideon* tapestries decorated the great hall in Brussels.⁴¹⁴ Nevertheless, the artist who created a record of the abdication ceremony for widest circulation included animal tapestries, although he could have chosen any subject for the weavings so prominently ornamenting the room. Heraldic tapestries on either side of the hall celebrate the family line, but the animal landscapes flanking Charles might refer to the emperor's spiritual life. Hunting scenes would have been inappropriate (referring plainly to one of the pleasures of this world). The heroic feats of an ancient or biblical ruler would have been plausible, but Charles was not celebrating his reign or conquests; he was announcing his retreat, his retirement from the world. Why would he choose massive landscapes populated with wild beasts as most appropriate for the occasion? Hogenberg's illustration of the emperor's retirement suggests that wild landscapes with animals offered a potentially rich vocabulary for representing for the patron's (or the viewer's) physical and spiritual self. Splendid woven scenes of wild animals combined the Christological narrative of the sacrificial hunt with a familiar Physiogolan moralizing perspective on nature; and these pictures of unspoiled nature provided a contrast to the worldly affairs of men that Charles was leaving. The emperor appeared before his subjects in Brussels to publicly announce his transition to a contemplative life, a turning inward to prepare his soul for impending death. The *Isola Bella* tapestries, a similarly lavish series of forest landscapes undoubtedly intended for an aristocratic patron, also arguably portray the interior struggles of the Christian soul.

⁴¹⁴ Guy Delmarcel, *Flemish Tapestry* (New York: Harry Abrams, 1999) p. 17. The *Story of Gideon* tapestries, now lost, were commissioned by the Burgundian duke Philip the Good in 1449 to serve as decoration for the ceremonies of the Order of the Golden Fleece. Produced in Tournai at a cost of almost 9,000 gold écus, the *Story of Gideon* has been called "the most expensive artistic project of the era," and for sixteenth-century Habsburgs the set epitomized the splendor of the court of their Burgundian forebears.

The link between wild beasts and human appetites, traced by Harrison in the literature of the sixteenth and seventeenth centuries, can also be found in popular images and spectacles of the period. Printed emblem and fable books of the later sixteenth and early seventeenth century frequently employ animals as representatives of human desires and behaviors. Beginning with the Dutch fable book *De warachtighe fabulen der dieren* (1567), illustrated by Marcus Gheeraerts the Elder (1516-1604), the frontispiece of collections of zoological emblems and Aesopian moral tales frequently depict an elevated, curtained stage. The popularity and influence in the later sixteenth century of *De warachtighe fabulen der dieren*, the first original emblem book printed in the Low Countries, is hard to overstate.⁴¹⁵ The work had been translated into Latin, French, and English by 1590; its emblematic illustrations were mentioned by Karel Van Mander, recopied widely in printed books, and imitated by various painters.⁴¹⁶ The title page of the *Esbatement moral des animaux*, for example, a “theater of animals” published in Antwerp in 1578 by Philips Galle, features Gheeraerts’ depiction of an ape, bear, wolf, donkey, and other animals flanking a kingly lion (fig. 145). Trodding the boards before a crowd of human onlookers is the menagerie of animals found in the fables that follow. The central scene is surrounded with an ornate border of animal emblems complete with Latin inscriptions, signaling the allegorical mode, just as in the Isola Bella tapestries. The beasts are posed in mid-performance, paws outstretched toward the audience and mouths open in speech or song, above an inscription from the book of Psalms.⁴¹⁷ The distinction between the audience of human viewers and the cast of animal performers is as absolute as the line marking the edge of the stage.

⁴¹⁵ D. Geirnaert and Paul J. Smith, “Tussen fable en emblem: *De warachtighe fabulen der dieren* (1567),” *Literatuur* 9 (1992) pp. 22-33. See also Richard Barnes’ introduction to the facsimile of Arthur Golding’s *A Moral Fable Talk* (originally 1586), the English translation of Arnold Freitag’s *Mythologia ethica* of 1579 (San Francisco: Arion Press, 1988).

⁴¹⁶ Paul J. Smith, “Fable and Emblem in he Fall of Man(1592) by Cornelius van Haarlem,” pp. 283-4.

⁴¹⁷ Psalms 148:7-10.

Significantly, the design of the Isola Bella tapestries enforces a similar distinction: the human audience is invoked through the inscriptions but completely excluded from the world pictured in the weavings.

In the same way, the title page created by Aegidius Sadeler (1570-1629) for the *Theatrum Morvm*, a fable collection published in Prague in 1608 (fig. 146), depicts a crowd of people expectantly peering over a balustrade at a variety of creatures assembled in a pit, including an elephant, a lion, an eagle with its wings outstretched, an ape, a bull, a goat and an ermine or ferret.⁴¹⁸ Here the inscription bisecting the scene and separating the human and animal worlds is drawn from Genesis. Like each of the Isola Bella tapestry inscriptions, it declares man's mastery over all the beasts that inhabit the sea, air, and land.⁴¹⁹ As a title page, the image (like the term *theatrum*) announces the contents of the upcoming text like the opening of a circus or spectacle.⁴²⁰ The beasts have been gathered together in one circumscribed space, and the reader, like the spectators pictured behind the balustrade, waits to see what will happen as the animals begin to interact. Each fable that follows in the *Theatrum Morvm* purports to offer a snapshot of a species' true nature, and a lesson in virtuous living for the audience.

It is possible to draw an analogy between the fictional theaters erected within these publications and monumental animal tapestries like those at Wawel and at Isola Bella. In both, beasts are unleashed to enact an edifying entertainment, and their spectacular "natural" behaviors are scrutinized for moral guidance.⁴²¹ An English anthology of animal fables compiled by Arthur Golding (1536-1605) is introduced as

⁴¹⁸ Hollstein vol. 21, p. 80 and vol. 22, p. 90, fig. 390.

⁴¹⁹ Genesis 1:26.

⁴²⁰ Blair pp. 168-9.

⁴²¹ Jason Scott-Warren has made a similar argument linking English plays and the bear- and cockfights that were routinely staged in London in the same theaters at the end of the sixteenth century. He suggests that the comedy of humors, a dramatic genre named for Galenic medical theories, in which certain characters are marked by a single defining personality trait or proclivity, held the appeal as the baiting of animals in an arena: the audience paid to see,

that is to say

A most delectable Garden of morall philosophy, conveyed in fables, by speeches attributed to brute beasts. Wherein the labyrinth or maze of man's life is set forth: and the way of virtue, by most beautiful precepts (as it were by Theseus's clue of yarn) is directed.⁴²²

The collection of animal tales is, all at once, characterized as a conversation, a garden, and a map, and is embellished with an allusion to the antique (Theseus and classical mythology). Like the frontispiece illustrations by Gheeraerts and Sadeler, Golding's description casts the animal fable collection less as a narrative, and more as an environment or an event or spectacle. These characteristics allow us to draw an analogy between the early modern fable collection and a chamber of animal tapestries. Although, as we will see, they differ in important ways, both the Wawel and the Isola Bella sets may be understood as variations on the dramatic space imagined by Golding and other sixteenth-century fable compilers. Each comprises "a most delectable Garden of morall philosophy" framed by allusion to classical antiquity. The tapestry series are elaborately imagined, insular environments, quite distinct from the larger world, where nature may be enjoyed for its beauty and also observed closely for signs of the divine. In the design of the Isola Bella set, the tangled layering of flora and fauna further creates the impression of an enveloping "labyrinth."

There is a complicated process of identification and differentiation at work between man and beast in both the prints and, as we will see, the tapestries, a process that typifies early modern approaches to animals more generally. On the title pages to fable collections like those

with "quasi-scientific objectivity," the "peculiar nature" of a man or a species of beast framed and exposed. See Scott-Warren, "When Theaters were Bear-Gardens, or, What's at Stake in the Comedy of Humours," *Shakespeare Quarterly* 54:1 (Spring 2003) pp. 63-82.

⁴²² In Greek mythology, Theseus carried a ball of yarn into the Minotaur's labyrinth, letting it unravel as he went, and so was able to find his way out again.

illustrated by Gheerearts and Sadeler, a crowd of men and women gathers to watch wild animals enact human virtues and vices. Thus in a sense, the beasts assembled on the stage and in the pit serve as mirrors, reflecting back the audience's inner selves. In keeping with the Christian theological tradition, these images of animals assert a fundamental, unbridgeable difference between human and animal, even as they warn their viewers against the persistent risk of succumbing to bestiality.

The printed, illustrated zoological treatise, such as Gesner's *Historia animalium* (1551-87, Zurich), was a sixteenth-century innovation, closely related in format and origin to the printed fable book and *emblemata*. Both sorts of publications reflected the early modern belief that learning to control the passions was a central step in regaining lost natural knowledge as well as spiritual grace; conversely, studying natural history, particularly zoology, provided insight into the workings of the human passions. If animals were seen by some to lack the mediating faculty of reason, this only meant they displayed their passions more legibly for man to see.⁴²³ Learning to read the signs of the passions on the faces and bodies of animals became a central goal for moral and natural philosophy during the later sixteenth and early seventeenth centuries, acknowledged even by authorities such as Martin Luther and Francis Bacon.⁴²⁴ This goal lay at the heart of the production of natural knowledge at the time of the design, production, and display of the Wawel and Isola Bella tapestries. As zoologist Conrad Gesner put it in the introductory epistle to his encyclopedia of animals, "[T]here want not instructions out of beasts, by imitation of whose examples, the lives and manners of men are to be framed by another and a better practice, which thing is manifested by learned and wise men."⁴²⁵

⁴²³ Harrison, "Reading the Passions," p. 56. See also Paster, "Melancholy Cats," p. 124.

⁴²⁴ Harrison, "Reading the Passions," p. 55.

⁴²⁵ Gesner/Topsell, "The First Epistle," n.p.

The Isola Bella tapestries, being monumental landscapes, exceed the customary formal bounds of emblems. In the tapestries, moralizing animal symbols are fleshed out, enlarged to an impressive scale, and treated to an exceptionally lavish portrayal (the high warp count and metallic thread of the Isola Bella tapestries was usually reserved for histories, such as the lives of saints and heroes). In contrast to most iconic printed emblems, whose backgrounds are schematic or nonexistent, the tapestries situate animal actors within a cohesive natural setting, a unified dramatic space in which multiple symbolic actions purport to take place simultaneously, in a single moment witnessed by the viewer. Thus the tapestries' persistent suggestion of theater, or at least of a living tableau, is not just compositional, a function of their enveloping size, prominent foreground spaces for dramatic action, and trees that mark both spatial recession and side "wings."⁴²⁶ The tapestries also offer a colorful, monumental staging of non-narrative animal symbols. The viewer ostensibly wanders into a sylvan grove to glimpse a battle between a lion and unicorn, an eagle devouring a fish, and the flight of a panicked mother ape (fig. 109) all happening at once. Those literate enough were expected to gather spiritual instruction from the scene, like the attentive crowd of onlookers Gheeraerts and Sadeler placed in front of their animal actors. Of course, the audience permitted to see the Isola Bella tapestries, which presumably hung in the palaces of two French cardinals, would have been far more select.

Importantly, Sadeler's image of an enclosed pit of contentious beasts is not wholly imaginary. It alludes to the live animal combats regularly staged at early modern European courts, and occasionally for larger audiences in the center of cities.⁴²⁷ Animal combats, both live and imagined, served as a familiar allegory for the unruly passions in sixteenth-century Europe.

⁴²⁶ Hennel-Bernasikowa makes a similar observation about the placement of tree trunks in the Wawel verdure; see "Geneza artystyczna," p. 13.

⁴²⁷ For more extensive recent studies on staged animal combats in early modern Europe, see Erica Fudge, *Perceiving Animals: Humans and Beasts in Early Modern English Culture* (London: Macmillan Press, 2000), as well as Scott-Warren, *op. cit.*

Their appeal extended to both elite and popular audiences. The Isola Bella tapestries, far more splendid than a printed book and overwhelming in size, resemble these violent staged spectacles in important ways. Lions, bulls, boars, foxes, stags, horses, wolves, dogs, and even hares and porcupines would be released into an enclosure to rend or be rent apart before an audience, in celebration of a festival, joyful entry, or wedding. These combats were intended as edifying entertainments, with pleasing connotations of imperial Rome. A combat staged by the Medici in 1514 on the feast of San Giovanni, for example, saw the square in front of the Palazzo della Signoria transformed into an artificial forest, with a fountain at the center surrounded by manmade groves containing dens in which animals could temporarily hide.⁴²⁸ The live animals were expected to perform in a preordained way, enacting the virtues of a patron, or the cunning or cowardice of his enemies. Like the animal actors on Gheeraerts' stage and in Sadeler's pit, then, the animals were intended as mirrors for the human audience. The beasts occasionally refused to follow the script and had to be prodded to fight with lances (such as those held by the unidentified master of ceremonies in Sadeler's illustration), but it hardly mattered. A satisfactory moral could be extracted from almost any outcome. Witnesses wrote of the courage and tenacity of lions that demonstrated their wildness by attacking, and praised the temperance of those that did not. Either way, the city of Florence (whose mascot was a lion) was cast in a flattering light, its virtues "proven" by the behavior of its mascots.⁴²⁹

Generally speaking, and as we will see in this chapter, the bodies and behaviors of animals in the early modern period served as flexible templates upon which moralizing messages of all kinds could be imposed. Staged combats between live beasts were living emblems,

⁴²⁸ Lazarro, "Animals as Cultural Signs," pp. 204-5.

⁴²⁹ Lazarro, "Animals as Cultural Signs," p. 204. Written testimonies reveal that lions also repeatedly failed to perform the roles assigned to them at combats staged by James I in England at the turn of the seventeenth century; see Scott-Warren pp. 73-74.

emblems spectacularly performed. Similarly, the Isola Bella tapestries depict massive predators with exaggerated fangs and claws, and prey that actively cry out and bleed crimson blood; their landscapes teem with creatures, very few of which appear sedate or at rest. The tapestries combine the color and spectacle of familiar live entertainments with the princely connotations of fine Flemish weaving, making a splendid moral arena of the forest and bringing it indoors.

Evidence suggests that the Isola Bella tapestries belonged to two prominent French ecclesiastics during the sixteenth and seventeenth centuries. The tapestries are believed to have belonged to Charles de Guise, Cardinal of Lorraine (1524-74), a controversial advisor to three French kings and a participant at the Council of Trent (1545-63), during the latter half of the sixteenth century. In the mid-seventeenth century, the set was apparently purchased from the De Guise family by Jules, Cardinal Mazarin (1602-61).⁴³⁰ The tapestries have belonged to the Borromeo family since at least 1686, further evidence of the set's appeal to powerful Catholic patrons. The tapestries' provenance, then, suggests that their mysterious zoological imagery was purposefully paired with biblical inscriptions in order to convey a religious message.

This section of the dissertation surveys the theological and historical grounds for interpreting the Isola Bella tapestries as a meditation on the passions. It also considers how the constituent parts of the set – the life-sized animals, the highly developed landscapes they inhabit, the inscriptions, the grisaille medallions, the mythological borders – might be seen to function together to convey a cohesive theme, in the absence of a structuring narrative. The goal of this section is two-fold: to propose an interpretation of the tapestries' iconography that is appropriate to its first patrons, and to lay groundwork for discussing the seven Isola Bella landscapes together as an ecology of the humoral passions.

The Isola Bella tapestries invoke a human presence that is pervasive but largely invisible, and this is the first clue that their underlying subject may not be animal but rather human nature. We have already noted that man, though technically absent from the tapestries, is nevertheless invoked in multiple formal ways. First, a sixteenth-century viewer would have been struck by the discrepancy between extravagant quality of the tapestries and the total absence of human figures.

⁴³⁰ Viale pp. 106-111.

Bucolic scenes of animal life in tapestry rarely merited such labor and expense. The tapestries' costly material and fine weave, then, would serve as a tip-off that despite their lack of historical or overt biblical imagery, they were not intended as mere ornamental greenwork. Furthermore, the tapestries' border of mythological figures accompanied by their respective animal attributes (Europa and the bull, Leda and the swan, Hercules and the lion) suggests to the viewer that an equivalence between human traits and animal species is at work in the tapestries.

In addition, as noted previously, the wild beasts in the central scenes are noticeably and at times oddly anthropomorphized. The Isola Bella tapestries are absolutely exceptional for the care lavished on the visages of lions and certain other animals, a feature that differentiates them even from the Wawel verdure, a royal commission. The pair of serpents (figs. 137-138) feature uncannily human faces, with forward-looking eyes, prominent ears, well-developed brows and what seem to be prominent, angular cheekbones. Pointedly anthropomorphic expressions also animate the faces of the ambushed unicorn in the largest tapestry (fig. 117) and the inquisitive lioness shown nursing a cub (fig. 125). The revival of the ancient science of physiognomy in the sixteenth century reflected the widespread belief that the passions had identical physical manifestations in man and beast. Physiognomic treatises such as Bartolommeo della Rocca Cocles' *Physiognomia* (Strasbourg 1533) and Giovanni Battista della Porta's *De humana physiognomonia* (1586) offered a method for discerning the temperament and instinctive behaviors of men by identifying their physical resemblance to certain animals. Physiognomy will be discussed more fully later in this chapter. For now, it suffices to say that the Isola Bella tapestries, like early modern physiognomic illustration, conflate the physical appearances of man and beast. For example, the lion in one of the larger tapestries (fig. 147) has been given a strangely recessed hairline and curling locks, as well as a discernable spine, ribcage, and upper

arms with impossible yet articulated deltoid and bicep muscles. As it happens, the lion's dense, powerful body was of particular interest to both naturalists and physiognomists. For instance, zoologists Conrad Gesner and Wolfgang Franzius (*Historia animalium sacra*, 1612) both describe the complex language of lions' tails as the "barometer" of their passions. Similarly, emblems by and adapted from Andreas Alciato link the thrashing of a lion's tail with the rise of its "yellow bile and black gall" in a fever of rage.⁴³¹ This special fascination with the capacity of lions' bodies to express (human) emotions is clearly reflected in the Isola Bella tapestries, where the unknown designer(s) and weavers have deliberately exaggerated the creature's rippling, powerful back and flanks and enlarged the paws.

Thus there are pictorial suggestions of human presence in the Isola Bella tapestries, though no human figure actually appears. These hints are affirmed by the tapestries' biblical inscriptions, which address the human viewer directly. The inscriptions repeatedly declare man's privileged position as the master of all the beasts. They are paired, however, with tremendous scenes of animal abandon and ferocity. The result, I wish to argue, is a tapestry series conceived as an extended and dramatic warning against excesses of passion. The woven animal combats at Isola Bella represent that chaotic internal menagerie described by numerous early modern churchmen and philosophers, the uproarious conflict of desires afflicting the Christian soul. "We cannot really know ourselves," Saint Ambrose had written, "without knowing the nature of all living creatures."⁴³² As Harrison has observed, early modern analogies linking the passions with animals originated in part with the fourth-century writings of John Chrysostom, who declared,

[T]he beasts have each, as one may say, one single passion, and that by nature Man, when he has cast away the dominion of reason, and torn himself into a commonwealth of God's devising,

⁴³¹ See Harrison, "Virtues of Animals," fn. 30.

⁴³² Ambrose, *Hexameron*, VI.ix.55 (p. 368) and VI.x.75 (p. 282). Quoted in Harrison, "Virtues of Animals," p. 465.

gives himself up to all the passions, is no longer merely a beast, but a kind of many-formed motley monster.⁴³³

Animals rebelled against human authority following man's original sin; according to the prevalent macrocosm-microcosm principle, human passions then "rebelled against a wounded reason."⁴³⁴ This interior tumult is visualized in the tapestries as ferocious animals locked in bloody combat. What the Isola Bella tapestries depict as landscapes can be also understood as the spiritual and emotional struggles carried out unseen in the postlapsarian Christian soul. The tapestries are, paradoxically, glimpses of animal nature but illustrations of the *human* condition after the Fall. Seen in this way, Frans Hogenberg's choice of similar animal tapestries as a backdrop for the spiritual retirement of Emperor Charles V (fig. 144) seems perfectly appropriate.

Having identified a theological basis within early modern Christianity for equating the passions and wild beasts, and, in the previous section, having examined a variety of other sixteenth-century representations of animals as metaphors for human behavior, we are now ready to revisit each of the puzzling Isola Bella weavings in turn. The remainder of this section will discuss each tapestry in light of the Christian mystical vision of postlapsarian man as a tumultuous microcosm of the natural world.

The command inscribed on the largest of the Isola Bella tapestries (fig. 107) can be understood as a message of reassurance in the face of the bestial violence pictured below: "God put the fear of man in all living beings, and gave him dominion over beasts and birds. Man, look and see what benefit you have received." Beneath the text, the tapestry's terrifying confusion of

⁴³³ Quoted in Harrison, "Reading the Passions," p. 50.

⁴³³ Ambrose, *Hexaemeron*, VI.ix.55 (p. 368) and VI.x.75 (p. 282). Quoted in Harrison, "Virtues of Animals," p. 465.

⁴³⁴ Harrison, "Virtues of Animals," p. 466. See also Richard Sorabji, *Animal Minds and Human Morals: The Origins of the Western Debate* (Duckworth and Cornell UP, 1993), esp. chapter 14, "Augustine on Irrational Animals and the Christian Tradition," pp. 195-207.

musculature, teeth, and exaggerated claws serves as a reminder, more impressive for its enveloping dimensions, that only divine grace can sustain man's mastery of both nature and his own unruly passions. To succumb to the anarchic worldly passions – or as Chrysostom had it, to “cast away the dominion of reason” – appears a terrifying fate indeed: it is to be rent apart, abandoned to animal forces.

The three emblematic medallions in the border suggest that the tapestry's theme is the necessity of both Christ's Passion and man's internal struggle with his overriding passions.⁴³⁵ The lions in the tapestry's central panel recall the attacking hounds in tapestries such as the *Hunts of Maximilian* (fig. 148) as well as animal combat compositions dating as far back as antiquity.⁴³⁶ In medieval hunting imagery and in narratives of the chase, an implicit analogy is often drawn between the violent capture of the quarry (such as a stag or unicorn) and the martyrdom of Christ: in *The Hunt of the Unicorn* (Cloisters), for example, the viewer is invited to take pleasure in the creature's noble and necessary death. Christ's death recovered for mankind dominion over the passions – the wages of sin – named in the Isola Bella tapestry's cartouche, and pictured throughout the Isola Bella set, as wild beasts. Thus the first tapestry in the set can be understood, on one level, to represent the violence of the passions, and at the same time, to allude to the central act of redemption in Christian theology. The cartouche above the fearsome grappling beasts reminds the viewer that Christ's martyrdom obtained for him the

⁴³⁵ The left and central medallions cast the unicorn as a victim of its fellow beasts. On the left, a goat is suckled by a serpent with the inscription PRO LACTE VENENUM (For the milk, poison); the unicorn is described in the *Physiologus* (and depicted elsewhere in the Isola Bella set) dipping its horn into a stream to purify the water so that all other beasts may drink. In the tapestry's central panel, the unicorn's kindness (like the goat's) is repaid with death. Similarly, legend held that the unicorn's cumbersome horn interfered with its ability to graze, so that it relied upon other beasts for help in feeding; see Roethlisberger p. 86. The tapestry's central medallion depicts a unicorn bending vainly toward the ground with the inscription DURUM ALIENA VIVERE OPE (It is hard to live on the resources of others). Finally, the right hand medallion depicts a lion pursuing a bull with the inscription NON TOTIS VIRIBUS (None but those as strong), indicating that lions select only worthy prey.

⁴³⁶ Giambologna produced a famous pair of bronze statuettes of lions attacking a horse and a bull, which were themselves modeled on Greco-Roman precedents; see Lazarro, “Animals as Cultural Signs,” pp. 207-8. The same archetypal composition appears in the seventeenth-century Gobelins tapestry, *Le cheval rayé* (fig. 3).

grace required to overcome his bestial appetites: “Man, look and see what benefit you have received.”

Previous scholars have tended to assume that the lion and unicorn also must be the main actors in another of the Isola Bella tapestries (fig. 109), but in fact, the tapestry depicts a variety of violent conflicts between animals, with several foregrounded more prominently than the battling lion and unicorn. For example, a lobster feasting upon oysters is given pride of place in the tapestry’s central panel, while an eagle tearing into the body of a tremendous fish looms large in the foreground.⁴³⁷ The tapestry does not privilege the fight between the larger beasts, but rather surveys a larger wilderness teeming with conflict, full of bloodthirsty beasts of every type. The danger depicted here seems to be that of being *consumed*, as bestial violence again represents the threat of violent passion.⁴³⁸ The tapestry’s inscription, like others in the set, promises deliverance from this danger through divine grace. The mother ape fleeing with her young on the left side of the tapestry also offers a warning against excessive passion. In an emblem published by Joachim Camerarius (fig. 149) as well as many early modern zoological treatises, the female ape is described as embracing her favorite offspring with such vehemence that she suffocates him. The tapestry’s disturbing imagery makes most sense if it is approached as a multivalent representation of the passions, of both the bestial impulses that threaten postlapsarian man, and the redemptive Passion of Christ. The latter part of the tapestry’s

⁴³⁷ The emblem of a lobster appears in the borders of the Getty Game Park Set A and in the Vienna *Romulus and Remus*, with the motto ASTU SOLLERTIA MAJOR (skillfulness greater than cunning). Guy de Tervarent suggested that the emblem originated with Vincent of Beauvais, who describes oysters opening their shells to bask in the sun, while a predatory lobster uses its pincers to insert small stones into the shells and then feast upon the oysters’ tender flesh; see Tervarent pp. 22-3.

⁴³⁸ Though there is not room here to consider the denaturalization of carnivorous eating in the early modern period, it is worth noting that a number of moralists and religious commentators insisted that the prelapsarian world was vegetarian, and that both man and animal began eating flesh as a legacy of the Fall; see Almond’s discussion “Meat or Vegetable?” pp. 118-126. Moreover, Ken Albala’s study, *The Banquet: Dining in the Great Courts of Late Renaissance Europe* (Urbana and Chicago: University of Illinois Press, 2007), gives an idea of the great importance of the Church calendar specifying meat and meatless days to sixteenth century eating practices.

inscription is drawn from the First Book of Samuel; the passage from which it is taken precedes the account of David battle with Goliath and it twice invokes consumption by wild beasts to indicate death and defeat. The inscription offers a straightforward plea for salvation from the consuming passions, which are envisioned again as ferocious beasts: the central scene depicts, on the most basic level, the frightening disorder of conflicting brute forces. Beyond this, the tapestry's trio of emblems combines to highlight the vulnerability of the powerful lion, a Physiologan symbol for Christ.⁴³⁹

The smallest tapestry in the Isola Bella series (fig. 112) depicts a panther gnawing cruelly on the hindquarters of a conspicuously male lion. In sixteenth-century texts ranging from Gesner's *Historia animalium* to Della Porta's physiognomy, the panther was imagined as a female foil to the archetypal male lion. A particular passion seems to be highlighted here – lust – and the tapestry's message is one of swift vengeance for sin: all three emblematic medallions promise divine punishment for carnal pleasure. In the left medallion, a porcupine prepares to launch his needles at an attacking lion with the motto NON LEDARE INVULTE (It is harmful to delay); on the right, a predatory reptile fascinates a bird alongside the motto LETI EST CAUSA VOLUPTAS (Pleasure causes death); and the lower medallion features the wounded lamb of Christ with the words NON LEDAR INVULTE (I will avenge all injury). Once more, metaphors linking physical and spiritual health play an important role in the iconography of this piece, conveyed in large part through the menagerie of symbolic beasts surrounding the panther and lion pair, and these will be more fully analyzed later in this chapter. On a basic level,

⁴³⁹ Though king of the beasts, the lion was not regarded by naturalists or emblem authors as invincible. In the lower medallion, the lion cowers before a rooster, in keeping with descriptions given by Pliny and the Physiologus (DUM TIMORE TIMEO, While I am feared, I fear); see Tervarent pp. 29-30. In scriptural accounts it was of course the crowing of a cock that led to Christ's capture. Moreover, the lion in the tapestry's central panel is shown mortally wounded, just like the deer pierced by an arrow depicted in the left medallion beneath the words MEUM IMMEDICABILE (Mine is incurable). Christ's wounds were known as those that have no cure, even as they represented the remedy for all the sins of mankind.

however, the tapestry clearly partakes of the Christian tradition envisioning overriding passions as wild beasts, and associating sensual pleasures with bestiality. The tapestry's principal inscription ("For every kind of beast and bird, of reptile and sea creature, can be tamed and has been tamed by humankind") functions in the same way as the other inscriptions in the set, announcing the human viewer's divinely ordained superiority over the beasts, while warning him of the ever-present risk of falling into bestiality.

Early modern Christian theology, Catholic and Protestant, held that it was a consequence of the Fall that man forfeited his dominion over animals, and they began to serve as instruments of his punishment and correction.⁴⁴⁰ The prelapsarian perfection of Adam's reason and full knowledge of nature were overturned; the passions overwhelmed reason and animals turned wild. The tapestry depicting a gigantic pair of serpents (fig. 111), like the tapestry depicting the lustful lion and panther pair, takes this account of God's just vengeance as its primary subject. The serpents are named in the tapestry's inscription as instruments of divine justice: "The teeth of beasts, and scorpions, and serpents, and the sword taking vengeance upon the ungodly unto destruction." All three medallions reiterate the cautionary message. On the left, a watchful bird accompanies the warning CAUTE VIVENDUM (Live prudently); on the right, two bounding hounds appear with the words EX ME DISCE LABORUM (From me, learn effort), serving as an illustration of a relentless hunt; and in the lower medallion, a stork consumes a poisonous serpent with the motto NE CUIQUAM NOCEAT (Let it harm no one). The fearsome beasts depicted in this panel were unleashed at the moment of original sin to pursue and torment the impious.

⁴⁴⁰ Harrison, "Virtues of Animals," p. 464. See Augustine, *City of God*, XI.22, trans. Marcus Dods (Edinburgh: Clark, 1950), p. 365. Godfrey Goodman's *The Fall of Man or the Corruption of Nature* (London, 1616) reiterates this idea, along with many other seventeenth-century moralizing texts. Harrison provides additional examples, p. 484, fn. 4.

Thus the Isola Bella series can be seen to illustrate the specific condition of *postlapsarian* man, an interior state of confusion and upheaval which was nevertheless divinely ordained. Man is portrayed in the tapestries as a fractious microcosm, brimming with conflicting animal forces. To recall John Chrysostom's words: the man who "gives himself up to his passions" resembles an amalgam of unruly beasts, a "motley monster" that is nevertheless "of God's devising." This vision of interior tumult after Adam's fall remained quite consistent within the Christian canon well into the seventeenth century. As Bishop Edward Reynolds put it in *A Treatise of the Passions and Faculties of the Soule of Man* (1640),

[A]s long as Man continued intire and incorrupt, there was a sweet harmonie between all his Faculties, and such an happie subordination of them each to other, as that every Motion of the Inferiour Power was directed and governed... But, once Man had tasted of that murthering Fruit, and poyson'd him and all his Posteritie; then began those Swellings, and inward Rebellions, which made him as lame in his Naturall, as dead in his Spirituall Condition. Whence Passions are become, now in the state of Corruption, Beastly and Sensual, which were before, by Creation, Reasonable and Humane.⁴⁴¹

The interior rebellion of the passions was imagined as chaotic tussling of untamed beasts, as in an illustration from Giovanni Batista Andreini's *L'Adamo, sacra rappresentatione*, published in Milan in 1617 (fig. 97). The fateful moment of decision described in Genesis, the moment of Adam and Eve's taking of the "murthering" fruit, was the very moment at which man's passions became "Beastly." The moment is therefore crucial to the animal/passion metaphor at the heart of the Isola Bella series, so it comes as no surprise that one of the tapestries in the set makes pictorial reference to this event (fig. 110).

⁴⁴¹ Edward Reynolds, *A Treatise of the Passions and Faculties of the Soule of Man* (London, 1640), pp. 61-4.

The tapestry depicts a lion family group: the male drags home sustenance for his mate, who cowers, suckling her cub, within a dim den whose symmetrical centrality and low, overhung arch suggest a hut or hearth. Such familial lion groups were a surprisingly common motif in Flemish tapestry of the sixteenth and early seventeenth centuries; a tapestry from the Getty Game Park Set A includes a similar group, as does a tapestry with emblematic borders sold in Antwerp in 1985 (MRAH 1550.549).⁴⁴² A panther group with the identical composition appears among the Wawel verdure as well (fig. 93). The widespread appeal of this motif and its appearance in numerous tapestry series suggest that the motif had a recognizable emblematic meaning.

In the Isola Bella tapestry, the male lion's strangely recessed mane is echoed by that of the ape watching developments cautiously from the trees above; together the two anthropomorphized animals can be said to represent the opposing poles of wisdom and foolishness.⁴⁴³ Both internal temptation and external danger are evoked in the tapestry, through the anthropomorphic fear or concern on the visage of the lioness and the numerous pictorial suggestions of a nuclear human family. The scene suggests a number of possible plotlines, which were perhaps intended to remain subtle rather than explicit. The reptiles suggest a threat to the

⁴⁴² The same lioness and cubs appear in a verdure in the collection of the Stadhuis Middelburg as well; see M. J. Onghena, "Vlaamse wandtapijten in het Stadhuis te Middelburg (Zeeland)," *Artes Textiles* 8 (1974) p. 24. Another tapestry, variously attributed to the workshops of Willem de Pannemaker and the unnamed weaver of the Valois tapestries, depicts a similar lioness before an elaborate pergola, surrounded by her cubs, with a bearded lion hovering nearby; see A. Van den Kerkhove, "Un Essai d'Identification, Le Peintre-Cartonnier Joos Van Noevele, Beau-frère de Willem de Pannemaker," *Bulletin des Musées Royaux d'Art et d'Histoire* 6:45 (1973) p. 250. Finally, the same lioness appears in a tapestry from a private collection in Turin, published by Viale, p. 113. Finally, another of the Wawel verdure depicts a very similar lioness in reverse, shown with a pair of cubs in a den; see Morelowski p. 315, fig. 19.

⁴⁴³ The medallions on the Isola Bella tapestry reinforce the central scene's message about the dangers of excessive passion; two of the three medallions draw directly from lion lore. On the right, a pair of lions hunt apes, whose blood they devour as a cure for a raging fever. The central medallion depicts a lioness deceived by her reflection in a river; believing she sees her own cub in the mirrored surface, she will linger, unable to flee the approaching hunter. Finally, on the left, a fish caught in a tempest at sea remains unharmed by the violent waves; like fevers and deceitful shadows, the "tempest of ungoverned passions" served as an "ubiquitous topos of early modern psychology." See Katherine Rowe, "Humoral Knowledge and Liberal Cognition in Davenant's *Macbeth*," *Reading the Early Modern Passions*, pp. 169-191. The fish, like the Christian or the Stoic, remains safe and unmoved by the dangerous upheaval all around it.

home (or realm) while the master is away; lions were, after all, said (by Pliny and the Physiologus) to sleep with their eyes open in a state of perpetual watchfulness. Beyond illustrating a generic nuclear family, the encounter in the tapestry between lioness and reptile (directly under a central tree laden with fruit) visually recalls the narrative of Eve, the serpent, and original sin. The moment portrayed seems full of suspense: the space between the heads of the lioness and lizard is charged, while in the treetops, the ape on the left and pheasant on the right lean symmetrically forward as if awaiting a word. Could the allegorical battle between elephant and rhino (commonly associated in the period with the conflict between good and evil), shown occurring in the distance, also signify a moment of decision? Interestingly, the composition is quite similar to one of the Wawel Old Testament tapestries, depicting the consequence for humanity of the original sin (fig. 51). A postlapsarian Eve sits with her babies under the sheltering eave of a rude hut; according to Genesis, following her banishment from the garden, she was placed under the authority of her husband and burdened with the pains of birth. She is surrounded by an untamed, rugged landscape brimming with wild animal species, while Adam, forced after the expulsion to labor for his family's survival, tills the soil. The similar composition of the lioness tapestry at Isola Bella subtly reminds the viewer that it was Eve's momentary temptation by the devil that caused the rebellion of the beasts, and of the passions.

Once again, in Christian theology the confusion of desires and impulses left in the wake of departed reason was, like man's expulsion from paradise, part of the divine plan. This is the state portrayed in the Isola Bella landscapes, which substitute a menagerie of threatening beasts for the tangle of intangible desires and affections, while their inscriptions repeatedly admonish the viewer that he is privileged with the means to overcome his passions and appetites. The movement of overriding passions (linked, as we will see later, to the animal spirits) could be

riotous, but always followed a plan, as Chrysostom writes, “of God’s devising.” Animal behavior – the strange predations and rites of reproduction among the wild beasts – was likewise understood to be wholly governed by divine will.

Another of the Isola Bella tapestries draws its imagery from the Book of Job to convey this theme quite clearly (fig. 108). Two ostriches wander negligently near a nest of eggs that sits unprotected on the open ground, beneath an inscription that reads “For she leaves her eggs to the earth, and lets them be warmed on the ground, forgetting that a foot may crush them, and that the wild beast may trample them. The wisdom of God governs all.” Chapter 39 of the Book of Job, from which the inscription is drawn, honors the boldness and cruelty of beasts – in other words their wildness – which distances them from man but moves them closer to God. The biblical passage lists examples of wild animal ingenuity and virtue that remain beyond man’s capacity to influence or even understand. Wild goats and hinds, the rhinoceros, the horse, the eagle, and of course the ostrich, all depicted in the tapestry, are described in the Book of Job as hunting, mating, and rearing their young in inexplicably cruel ways. Yet it is the ostrich’s submission to the unfathomable divine will that allows the animal to transcend the fallibility of human free choice. Thus in this tapestry, animals serve less explicitly as embodiments of the passions; instead, the ostrich and its wild companions are intended to demonstrate the pervasive wisdom of God, present even in nature’s most belligerent and fiercest creatures (and, according to micro-macrocosmic correspondence, even in the fractious, chaotic interior of fallen man). The trio of zoological emblems in the border reiterates the message of the tapestry’s central panel and cartouche: “The wisdom of God governs all.”⁴⁴⁴ All three emblems, as well as the tapestry’s central image, take up the theme of animal instinct and agency, or lack of agency.

⁴⁴⁴ The left medallion features a well-known emblem: a mother ape carries her two young, embracing her favorite offspring with such vehemence that she smothers it in a moment of passion, and is left with only the less favored

Finally, the seventh and last Isola Bella tapestry (fig. 113) depicts the mouth of the stream that winds throughout the other six weavings. A roaring lioness wades breast-deep into the clear water, which runs off of her back and neck in rivulets. The tapestry concludes the Isola Bella series' meditation on the passions with an allegory of the resurrection and the attainment of spiritual calm. It represents victory through divine grace over the "disorder and unruliness" wrought in man by the rebellious passions. Conflating baptism and resurrection, the tapestry illustrates Augustine's well-known description of a sanctified soul: "Then the wild animals are quiet and the beasts are tamed and the serpents rendered harmless: in allegory they signify the affections of the soul."⁴⁴⁵ The passions, unleashed and unruly throughout the rest of the Isola Bella series, are here imagined as conquered and quieted.

Mercedes Ferrero Viale was right to observe that the wading lioness tapestry depicts no bloodshed among animals. However, it does not contrast strongly enough with the other six to represent, as she suggests, a peaceful *prelapsarian* paradise.⁴⁴⁶ The complete Isola Bella series is premised on man's loss of dominion over nature and the passions at the moment of original sin. The wading lioness tapestry was more likely intended as the conclusion to the set, to the extent that the tapestries were designed with a narrative order in mind. The inscriptions from Matthew and Proverbs provide what might be heard as a parting directive: "Be clever like the serpents and

baby; see Camerarius, Viale, Tervarent. The emblem's ironic inscription reads PRAESENTIA CORDI (Close to the heart). The emblem thus echoes the ostriches' divinely ordained neglect of their own offspring pictured in the tapestry's central panel: in both cases, divine will mandates that a despised child survives. The other two emblems depict pious but dumb beasts specially attuned to divine commands: an ostrich gazing at the constellation of Pleiades (ALTA CERNENS TERRENE SPERNIT, Looking high makes one disdain earthly things) and an elephant (NON SINE NUMINE, Not without divine permission).

⁴⁴⁵ Augustine, *Confessions* XIII.xxi, rans. Henry Chadwick (Oxford 1991), quoted in Harrison, "Reading the Passions," p. 51.

⁴⁴⁶ Viale pp. 107-8.

innocent like the doves. Math 10. Look to the ant, thou sluggard, consider his ways and be wise.”⁴⁴⁷

The tapestry’s iconography is overwhelmingly redolent of rebirth. Water falls off of the shoulders of the lioness in an obvious allusion to the sacrament of baptism. The tapestry is also full of resurrection imagery derived from the text of the *Physiologus*. Two serpents parallel the lioness’ left-to-right path across the water, one squeezing beneath an arched tree root to shed his skin. The *Physiologus* chapter on serpents not only quotes precisely the same passage from the Book of Matthew that is woven into the top of the tapestry, but links the serpent’s molting process with new life: when it grows old, the snake reputedly fasts for forty days and then rubs against a rock to remove its old skin, and thus “we, too, throw off for Christ the old man and his clothing through much abstinence and tribulation.”⁴⁴⁸ The tapestry thus continues the series’ emphasis on restraint and rejection of the pleasures of the flesh. The serpent pictured on the left releases into the air his venom (“the poison which he bears in his head”) before entering the water, and in like manner, says the *Physiologus*, “when we hear the divine and heavenly word in church, we ought not to bear poison along with us (that is, wicked earthly desires).”⁴⁴⁹ The young fig tree on the right of the tapestry also serves as a symbol of Christ’s resurrection and the rebirth it accorded. Before figs have been scraped, according to the *Physiologus*, insects live within them in darkness, but

when the fig is broken open, however, with an iron tool... they see the splendor of the blazing sun
and moon and stars and say, ‘We were in darkness, sitting in shadow’... Gather them on the first

⁴⁴⁷ In the *Opus Majus*, Friar Roger Bacon (c.1214-1294) interpreted the scriptural passage quoted in the tapestry as a parting directive to Christ’s apostles, and an affirmation that the beasts are to be read like a holy text from the landscape: “[O]ur Lord meant by these words that as the serpent exposes its whole body for the protection of its head, so the apostles were to suffer persecution for the sake of Christ, who is their head. Every creature, individually and generically...has its place in Scripture. The former are facts in nature designed to illustrate the truths contained in the latter... more clearly than any philosophic toil can do.” Quoted in E. P. Evans, p. 58.

⁴⁴⁸ Curley p. 16.

⁴⁴⁹ Curley p. 19

day, and on the third day the fruit will be mature and there will be food for men. My Lord's side was pierced, that is, opened with the lance and the sword, and blood and water came forth.⁴⁵⁰

A spotted panther wanders through the forest to the left of the lioness, and the lengthy account of that animal's character in the *Physiologus* includes the claim that it falls asleep for three days at a time, and that its name means "gathering all things."⁴⁵¹ Finally, in the *Physiologus*, the eel depicted in the foreground of the tapestry is said, when old and going blind, to turn facing east to recover its sight from the rising sun.⁴⁵²

The natural world is mapped in *Genesis* by strata, situating animals in a hierarchy by element from lowest to highest. This tapestry similarly organizes animals by element, and creates a vivid contrast between the clear lapping water and the scaly fish and reptiles that cluster at its edge in the foreground. The pointed visual contrast in the tapestry between purity and filth, and the prominence of these "creeping things," is explained by another passage from the *Physiologus*, a description of the ibis, one of the many waterfowl shown feeding along the shore and alarmed by the entrance of the lioness.

There is an animal known as the ibis which according to the law is unclean beyond all other birds since it always feeds on carrion along the shore of the sea or rivers or swamps... He cannot swim in the depths but only where unclean little fish dwell, and is found outside the most deep places.

Learn how to swim spiritually so that you may come into the deep river, intelligible and spiritual, and to the depth of the wisdom of the power of God... [B]y avoiding the deep water where you might get spiritual food, and going along the shore and wandering, you will be fed on dead and stinking carrion. The Apostle said of these, 'Now the works of the flesh are plain:

⁴⁵⁰ Curley p. 41.

⁴⁵¹ Curley p. 43.

⁴⁵² Curley pp. 66-7.

impurity, adultery, fornication, immodesty, lust, idolatry, drunkenness, avarice, and covetousness.’ These are the carnal and deadly foods by which souls are nourished to suffering.⁴⁵³

The lioness wades deep into the clear center of the stream, drawing the viewer’s eye away from its swampy perimeter, the mire of the passions and “works of the flesh.”⁴⁵⁴

The tapestry concludes the Isola Bella series’ meditation on the passions with a landscape replete with imagery of resurrection and renewal. It represents not the Stoic ideal of *apatheia*, a state characterized by the absence of all passion, but rather control of the carnal appetites and earthly desires, attained through divine grace. The tapestry illustrates Augustine’s well-known description of a sanctified soul: “Then the wild animals are quiet and the beasts are tamed and the serpents rendered harmless: in allegory they signify the affections of the soul.”⁴⁵⁵ In this, arguably the concluding tapestry in the Isola Bella set, the rebellious beasts of the forest are indeed shown quieted, and the fearsome serpents in the foreground relinquish their venom and throw off their old skin. Augustine imagined postlapsarian man as inhabited by a host of threatening wild animals: “in allegory, they signify the affections of the soul.”

Though the iconography of the Isola Bella tapestries is exceptional overall, a set of early sixteenth-century woven fragments illustrating a *Hunt of the Frail Stag* in the Metropolitan Museum of Art (Southern Netherlands, 1495-1510, fig. 150) has also been linked to Augustine’s teachings. The fragments, along with several French illustrated manuscripts featuring versions of the same narrative, may be regarded as early precedents for the Isola Bella set. The weavings, which also bear explanatory verses in French, depict mankind as a stag, released by Nature into “the woods of this transitory life,” to be assailed by a series of hounds and female

⁴⁵³ Curley p. 25

⁴⁵⁴ It was widely believed that eels, frogs, salamanders and other reptiles were generated from mud and water in the process of putrefaction; see Giovanni Battista Della Porta, *Natural Magick* (1558, English 1658), pp. 30-31.

⁴⁵⁵ Augustine, *Confessions* XIII.xxi, trans. Henry Chadwick (Oxford 1991).

personifications representing the moral and physical weaknesses of the flesh, such as Ignorance, Vanity, Desire, Rashness, Cold, Heat, Age, and Grief.⁴⁵⁶ The aim, according to one of the inscriptions, is to deliver a cautionary message against the dangers of the worldly passions to viewers “whose life on earth is brief/ Who, to a short and deadly hunt/ Like the stag, are subject...”⁴⁵⁷ The medieval tradition of metaphorical chase imagery represented by the *Frail Stag* fragments must be seen as a precedent for the representation of the passions in the Isola Bella tapestries, and particularly the Augustinian ideal of the quieted passions portrayed in the seventh and last Isola Bella tapestry.

The Christian canon contains numerous medieval accounts of holy men and women retreating to the wilderness to keep company with wild beasts; these stories testified to the possibility that exceptional piety could restore Adam’s unique dominion over the beasts to a saintly few.⁴⁵⁸ Furthermore, as we have seen, in one sixteenth-century artist’s conception, a pair of magnificent animal tapestries quite like those at Isola Bella provided the ideal backdrop for the retirement of Emperor Charles V to a life of spiritual contemplation. Perhaps the Isola Bella tapestries served a similar function, hanging in the palaces of French cardinals during the sixteenth and seventeenth centuries. A chamber dominated by the seven Isola Bella landscapes would have offered these powerful churchmen a meditative and magnificent space in which to keep company with wild beasts. Surmounting the tapestries’ threatening scenes of animal violence, biblical inscriptions announce the divine grace that will enable the faithful to transcend bestiality. The tapestries draw on popular early modern entertainments such as staged animal combats for their drama and spectacle. Yet the luxuriousness of the tapestry medium elevates

⁴⁵⁶ Cavallo pp. 347-358.

⁴⁵⁷ “Gens de griefve duree modaie/ qua chasses mortelle...soubdaie/ etes comme cerf asservis,” Transcription and English translation in Cavallo p. 353. See also Marcelle Thiébaux, *The Stag of Love: The Chase in Medieval Literature* (Ithaca and London: Cornell University Press, 1974).

⁴⁵⁸ Harrison, “Reading the Passions,” pp. 52-3.

this material taken from the humbler genres of verdure and animal fable, making it suitable for a princely ecclesiastic's court.

Up to this point we have considered the link between the passions and wild animals in the tapestries as primarily a metaphorical one, the illustration of a deeply ingrained religious and literary tradition.⁴⁵⁹ The remainder of this chapter will be devoted to probing the early modern association between the passions and animals, as it is reflected in the tapestries, beyond the realm of metaphor. In the next three sections I argue that the Isola Bella landscapes vividly illustrate early modern ways of imagining the workings of the body and relationships between the body and the natural world, including the world of animals. There is a concreteness, a literalness, to the iconography of the tapestries that has gone unnoticed in previous scholarship, which has drawn exclusively from religious and classical writings, neglecting early modern theories of the physiology of the passions and the violent impact the passions were understood to have upon human and animal bodies. We will see that, as richly detailed landscapes inhabited by fierce animals, the Isola Bella tapestries represent an ecology of the passions, imagined as humoral substances – or impulses – flowing throughout the natural world and throughout man, the microcosm of all nature.

The Isola Bella tapestries represent man's "other," a world of beasts populating an exotic and dangerous wilderness with no suggestion of human habitation or presence. To fulfill their didactic function, however, the tapestries depend upon the human viewer's identification with the wild animals depicted. The artist(s) who designed the tapestries seems to have employed,

⁴⁵⁹ Though there is not space in this study to survey it, the literary tradition linking the spiritual self with a tract of inhabited wilderness extends, of course, well beyond the Christina canon. Profane texts of the medieval and early modern periods, such as songs and narratives of the hunt, repeatedly posit a journey through a wilderness populated with dangerous beasts as an allegory for introspection, in which quarry entices a hunter into an "alien setting or psychic wilderness," and the struggles of the chase result in the transformation or even dissolution of his identity. If the chamber of Isola Bella tapestries, displayed as they likely were in the palaces of French cardinals, were intended to recall Christian mystics retreating to the wilderness to keep company with beasts, the tapestries may also be seen to recall the profane trope of the inner wilderness, a projection of the hunter's own nature. Marcelle Thiébaux has analyzed the hunt as a moralized literary structure in French, German and English poetry and manuals of the chase; see *The Stag of Love*, op. cit.

probably indirectly, physiognomic theories of expression to facilitate the viewer's identification with the animals. I have found no evidence that the Isola Bella series includes zoomorphic portraits of particular individuals. However, as I argue in this section, the tapestries' detailed, anthropomorphic depiction of animal faces is entirely unique in tapestry production, and it invites the viewer to imagine a range of passions animating the beasts and driving their actions. In a medium that relied heavily upon cutting and pasting a finite number of models from circulating pattern books, a number of the Isola Bella animals boasts an individually developed, startlingly specific visage and body.

As previously noted, the tapestry borders depict eleven mythological gods and goddesses accompanied by their respective animal attributes (for example, Europa and the bull, Leda and the swan, and Hercules and the lion). The human-animal pairs that make up the tapestry borders signal to the viewer an equivalence between human and animal types. The borders provide an initial hint that the beasts in the central scenes probably represent human attributes, and offer a reminder that defining human character through select identification with animals was an ancient tradition of fresh interest to early modern humanists.

The revival of the ancient science of physiognomy in the sixteenth century was premised upon a belief that the passions took identical physical manifestations in human and animal. Early modern discourses of the passions reflect an unprecedented physiological and by extension psychological identification with animals, which Conrad Gesner claimed shared with man a "similitude of body and affections."⁴⁶⁰ The head, as mirror of the passions, revealed the humoral affinities between man and beast.⁴⁶¹ The face was regarded by physiognomists as "an

⁴⁶⁰ Gesner/Topsell, "The First Epistle," n.p.

⁴⁶¹ Harrison, "Reading the Passions," pp. 55-56.

abridgement of all the outward parts,” the window to all “motions, inclinations, and habits.”⁴⁶²

The curiously anthropomorphized animal visages in the Isola Bella tapestries suggest that the viewer is meant to approach the beasts as physical embodiments of the passions. In particular, the representation of lions in the tapestries suggests a strong interest in parallels between the human and animal physiological experience of the passions.

Physiognomy gave physical, apprehensible form to the passions, which were often imagined as, if not exactly intangible, then largely hidden, invisible. The designer of the Isola Bella tapestries was faced with the task of translating the chronic turmoil of affections within postlapsarian man into a chamber of monumental landscapes, devoid of human figures. It seems likely that the strikingly human faces and bodies given to the Isola Bella animals are a result of the designer’s effort to cast the beasts as representatives of the human passions, through the rather loose familiarity with physiognomic theories common among sixteenth-century artists. In this section, I review the development of the science of physiognomy and its uses in courtly settings during roughly the same years as the production and initial display of the Isola Bella tapestries.

The science of physiognomy in the sixteenth and seventeenth centuries rested upon the dual belief that every species of creature had (at the “distribution of the temperaments”) been appointed a nature suitable to its needs and dominated by one or more of the passions, and secondly, that men whose features resemble those of certain animals share with those animals their proclivities and passions.⁴⁶³ Though physiognomic language often reiterated old

⁴⁶² Marin Cureau de la Chambre, *A Discourse on the Principles of Chiromancy* (London, 1658), p. 17.

⁴⁶³ Cureau de la Chambre (p. 214) explains this in his discussion of Aristotle’s physiognomic rules, which the ancient philosopher purportedly set down in the *Physiognomica*, translated in W. D. Ross, *The Works of Aristotle*, vol. VI (Oxford 1913) pp. 80 5a-814b. For the distribution of temperaments among males and females of each species, see Cureau de la Chambre, Chapter one, Article 5, especially p. 9.

associations between the ignoble passions and “bestiality,” both the science and its images were premised upon the idea that everyone was “animalistic”; the critical question was which animal suited which human. According to the Pseudo-Aristotle, slow and lazy men have thick noses and large eyes like cattle; men with narrow jaws are treacherous and cruel, like serpents; a person who walks erectly with head held high is, like a horse, both glorious and ambitious.⁴⁶⁴

The attention given to the facial structure of animals in the Isola Bella tapestries, and their anthropomorphized expressions of fear, rage, and other emotions, suggest that they were intended as roving embodiments of the passions. The tapestries are absolutely exceptional for the care lavished on the visages of lions and certain other animals, a feature that differentiates them even from the Wawel verdure, a royal commission. The head of the largest ostrich (fig. 108), for example, is cocked sharply over her eggs at an inquisitive angle; the weavers have carefully indicated the slit that serves her as an ear orifice, the rather gummier growth of feathers that comes down beneath her eyes like a human furrowed brow, and the grooves and indentations of her bony skull and flat, square beak. Even the sinews of her neck are visible below two fan-shaped rows of feathers that suggest a kind of whiskered cheek beneath her deep-set pale eyes. The whole portrait is topped by a distinct scaly bald patch on the bird’s crown. Described in sixteenth-century physiognomic treatises as vicious and unintelligent but graceful, the ostrich is depicted in the Isola Bella tapestry as grand and imposing, with powerful gnarled legs and withered knees, small jaunty heads and bouffant bustles for tails. The animal’s purported character is expressed in every detail of its physical appearance in the tapestry.

Whether in the small woodcuts published in early modern physiognomic treatises or in magnificent *pugnae ferarum* tapestries, using animals to illustrate the passions required artists to

⁴⁶⁴ See Baltrušaitis, trans. Richard Miller, *Aberrations: An Essay on the Legend of Forms* (Cambridge: The MIT Press, 1989) pp. 2, 10.

anthropomorphize their anatomies. In the Isola Bella set, a serpent boasts a humanlike furrowed brow, angular cheekbones, and even the implausible suggestion of a hunched shoulder, as it squeezes under a tree root, sloughing off its old skin (fig. 138). The human eyes of the ambushed unicorn in the largest tapestry (fig. 117) roll upward in fear, while its mane, beard, and mouth all recall a human head. In the smallest tapestry of the set, a panther depicted as tormented by lust is given an oversized mouth and flattened nose, a wrinkled brow, deep set rabid eyes, and multiple sets of coarse, bristling whiskers (fig. 134). Her feline face does not match any of those in the largest weaving (fig. 107).

Interestingly, it seems that the practice of physiognomy was as much a part of artistic practice and courtly entertainment in the sixteenth century as it was a scientific or medical method of examination. Discerning the passions and appetites of an individual through his/her physical similitude to certain animals was an activity that blurred distinctions between art and science. Physiognomic portraits cast the viewer in the omniscient role of the physician (the majority of physiognomic treatises were penned, like all writings on the passions, by prominent, often royal, physicians). The viewer scanned the depicted subject for external signs of internal movements and proclivities, and, helped along by clues provided by the artist, arrived at a diagnosis of character.

A brief survey of the development of early modern physiognomy reveals its dual origins in the practices of art and science. The zoomorphic practice of physiognomy derived from a Greek text attributed to Aristotle (first published in Florence in 1527), which offered a method for identifying the temperament and instinctive behaviors of men through an examination of their physical resemblance to certain animals.⁴⁶⁵ During the fifteenth century, Michele Savonarola

⁴⁶⁵ Pseudo-Aristotle, *Physiognomia* (Florence 1527). See also Moffit p. 17, and Baltrušaitis p. 127, n. 13 for further editions published in Paris, Frankfurt, Rome, and others before 1550.

(1384-1468) and Hieronymo Manfredi (*Liber de homine*, Bologna 1474) first attempted a definitive correspondence between physiognomic traits and the internal balance of the humors; soon, around 1500, theoretical manuals on painting and sculpture began to recommend that artists study physiognomy.⁴⁶⁶ Though in practice artists were more likely to be receptive to the larger themes of the science rather than its minute interpretive details, writers on art such as Pomponius Gauricus (*De sculptura*, 1504), Francesco Bocchi (*Eccellenza della statua del San Giorgio di Donatello*, Florence 1584), and G. P. Lomazzo (*Trattato dell'Arte*, 1584) all maintained that familiarity with the science of physiognomy was as indispensable for the figure painter and sculptor as geometry or astrology.

Building upon the work of physician Bartolommeo della Rocca Cocles (*Physiognomia*, Strasbourg 1533), Giovanni Battista della Porta (1535-1615) published the Latin first edition of his influential *De humana physiognomonia* in 1586, basically coincident with the weaving of the Isola Bella animal tapestries.⁴⁶⁷ The well-known woodcuts that illustrate Della Porta's treatise (fig. 151) juxtapose human heads with those of both common and exotic animals – many of the same ones represented in *pugnae ferarum* tapestries of the period – including birds of prey, a stag, an ape, an ostrich, even a Düreresque rhinoceros (fig. 152). With the many translations and editions of Della Porta's treatise, the science of physiognomy grew in nuance and became as much a courtly pastime as a tool in the toolbox of the natural philosopher or portraitist.⁴⁶⁸ In

⁴⁶⁶ Piers Dominic Britton, "Lionizing Leonardo: A Physiognomic Conceit in Vasari's *Vite*," *Source* 22:4 (Summer 2003) p. 10. The study of the admixture of the four humors was known as the theory of the complexions; just as four primeval elements were believed to constitute all of nature, human beings (and in some cases animals) could be classified among the four complexions or temperaments: the sanguine, the phlegmatic, the choleric, and the melancholic. See R. Klibansky, E. Panofsky, and F. Saxl, *Saturn and Melancholy: Studies in the History of Natural Philosophy, Religion, and Art* (London: Nelson, 1964). See also Michael W. Kwakkelstein, "Leonardo da Vinci's Grotesque Heads and the Breaking of the Physiognomic Mould," *Journal of the Warburg and Courtauld Institutes* 54 (1991), especially pp. 128-30.

⁴⁶⁷ Latin first edition published at Vico Equense. Later editions in Italian titled *Della fisionomia dell'huomo*.

⁴⁶⁸ At least thirteen re-editions in various European languages were published between 1588 and 1650. See Baltrušaitis p. 12.

Rome, clever physiognomic sketches, called *rittrattini carichi* or “loaded portraits,” were collected by courtiers and praised for revealing more of their subjects’ true character than realistic likenesses.⁴⁶⁹

The superimposed suggestion of a particular animal’s features could be used to justify an image or memory of a prince or courtier – whether he was pictured as noble or comical, sinister or magnanimous. It has also been proposed that the revived science of physiognomy may have addressed collective anxieties about social legibility in an era when traditional markers of class such as costume, language, and movement within a community were undergoing change. Peter Meller uncovered the physiognomic, zoomorphic bases for a variety of figural art works commissioned at the court of Cosimo I d’Medici, for example, in a seminal study of 1963.⁴⁷⁰ Since then other scholars have demonstrated the importance of this developing language of animal faces to a variety of courtly commissions, from portraiture to public monuments. Avigdor W. G. Poseq, for example, identified Bernini’s sculpture of an elephant bearing an obelisk, erected in Rome in 1667 for Pope Alexander VII Chigi, as a eulogizing “nonmimetic typological portrait” of the pope.⁴⁷¹ The droll zoomorphic portraiture and solemn public commemoration that coexist in Bernini’s elephant do not merely reflect an idiosyncrasy of that artist’s practice. The sculpture testifies to the high regard for physiognomic theories prevalent at many early modern courts, and the astute use that could be made of this science by a patron in the shaping of his public image.

If the larger, “four-footed” animals, “the most worthy, principal and excellent among all the creatures of this world next to men,” were closest to man in body and affections, then lions

⁴⁶⁹ Avigdor W. G. Poseq, “The Physiognomy of Bernini’s Elephant,” *Source* (2003) p. 41.

⁴⁷⁰ Peter Meller, “Physiognomical Theory in Renaissance Heroic Portraits,” in *The Renaissance and Mannerism: Acts of the Twentieth International Congress of the History of Art*, ed. I. E. Rubin (Princeton University Press, 1961) pp. 53-69.

⁴⁷¹ Poseq, op. cit.

were the most desirable analogue of all.⁴⁷² Historian John Moffitt has interpreted Lorenzo Lotto's *Portrait of Leonino Brembate* (c. 1527, Kunsthistorisches Museum, Vienna) as an early emblematic and physiognomic representation of the generalized "leonine temperament" and a pictorial pun on the name of the sitter, who holds a golden lion's paw in one hand and displays pointedly feline features. Titian's *Allegory of Prudence* employs the same conceit (c. 1565-70, National Gallery, London). It is significant that Gesner the naturalist also subjects the lion's face and head to a very careful examination, including its mane, forehead, upper eyelid, the thin lips as a 'token of fortitude,' the eyes "red, fiery and hollow."⁴⁷³ As usual, Gesner's observations reflect a preference for physiological and behavioral "facts" with metaphorical potential; he records, for example, that the lion has no joints in his neck and thus cannot look backward (note the exaggerated solidity of the neck and shoulders of the lioness in the *Isola Bella* tapestry depicting the mouth of a stream, fig. 136), and will never eat from the same food twice, due to the princely pride of his nature.⁴⁷⁴ Lions, being deeply concerned with honor, will wait until they are within a hunter's sight to begin fleeing, and will, out of modesty, refrain from looking at a woman's private parts.⁴⁷⁵

As Meller has shown, virility, magnanimity, and courage were commonly associated with the leonine temperament; in the *Vite*, for instance, Giorgio Vasari relied heavily upon this trope to convey the greatness of artists such as Leonardo and Michelangelo.⁴⁷⁶ Men with broad noses, stiff, bristling hair (often compared in word or picture to a flowing mane), deep chests, large hands and feet (corresponding to the powerful limbs and paws of the king of beasts), and broad

⁴⁷² Gesner/Topsell, "The First Epistle," n.p.

⁴⁷³ Gesner/Topsell pp. 459-460.

⁴⁷⁴ Gesner/Topsell pp. 460, 462-3.

⁴⁷⁵ Gesner/Topsell pp. 475.

⁴⁷⁶ The dedicatory epistle of Giovanni Piero Valeriano Bolzani's *Hieroglyphica, sive de sacris aegyptiorum literis commentarii* (Basel 1556) develops the same leonine theme with regard to Cosimo d'Medici. See Guy de Tervarent, *Les animaux symboliques*, p. 29 for additional references.

jowls were seen to be proud, generous, impetuous, and cruel, but fair.⁴⁷⁷ Rolled into this cluster of heroic human and animal associations were additional ideas about royalty, lineage, and the lionskin-clad conqueror Hercules, ubiquitous in humanist iconography, and quite popular in Flemish tapestry as well. For example, several tapestries are known from an undated, unattributed series illustrating the twelve labors of Hercules, in which the human hero is actually completely replaced with a lion, which performs the heroic feat named in each tapestry's inscription.⁴⁷⁸

Thus the lion was the most prestigious and the most desirable physiognomic type for males. The lion also served as a symbol of the firm rule of the self (and of the state), as in a woodcut designed by Cesare d'Arpino for Cesare Ripa's *Iconologia* (1593) depicting "Dominio di se stesso," or Self-Control (fig. 153). The muscular, bearded "leonine man" of the sixteenth-century physiognomic treatise, reminiscent of Hercules, mounts a profusely-maned lion in Arpino's illustration and holds it firmly by the reins. It is interesting that the recurrent image of Hercules taming a lion, whether by wrestling the animal to the ground, seizing it by the jaws or raising his club to strike it, could simultaneously signify the taming of passion and the fearsome power of the hero's rage (comparable to the lion's own).⁴⁷⁹

The same imagery informs princely tapestries of the period. In *The Triumph of Lust*, a weaving from one of the sixteenth century's most splendid series, *The Seven Deadly Sins*

⁴⁷⁷ See, for example, Moffitt pp. 17-8 and Britton p. 12. For Gesner's long list of "the epithets of lions," see Gesner/Topsell, p. 461. See also Martin Porter, *Windows of the Soul: Physiognomy in European Culture, 1470-1780* (London: Clarendon Press, 2005).

⁴⁷⁸ A weaving from this set was sold at Christie's on April 2, 2003: lot 15, sale no. 6752; another is illustrated by Roethlisberger, p. 104. The inscriptions on the tapestries are apparently adapted from chapter 24, "Monosticha de Aervmnis Hercvls," of the *Eclogarum Liber* of Ausonii. As further evidence of the close links between tapestry and the zoological emblem/fable books published in the third quarter of the sixteenth century, see emblem XCII in the 1579 and 1586 editions of Arnold Freitag's *Mythologia ethica*, illustrated by Marcus Gheeraerts, in Golding, *A Moral Fable-Talk*, op.cit.

⁴⁷⁹ In a remarkable passage in the *Historia animalium* (1551-8), zoologist Conrad Gesner calls these images to mind by comparing himself, in his capacity as a zoologist, to a lion-slayer. See Gesner/Topsell p. 456.

designed by Pieter Coecke van Aelst (ca. 1532-3) for Mary of Hungary, a lion-clad Hercules looks ruefully over his shoulder at the viewer while supporting his phallic club. He is surrounded by a host of other mythological figures who are tormented by passion, as Lust herself passes by on a golden chariot pulled by the beast of the Apocalypse.⁴⁸⁰ The inscription recalls the admonitions against excessive passion found throughout the Isola Bella series: CVRA PLACENS, PRAEDVLCE MALVM, TRISTISQ: VOLUPTAS, HEV VESANA FVRENS PECTOA COECAT AMOR (The pursuit of pleasure leads to misery and sorrow, for unbridled love blinds and deranges the heart).⁴⁸¹

We have already noted how, in the Isola Bella tapestries, the lion's dense, muscular body is given exaggerated pictorial form (figs. 117, 136, and 147). In several of the compositions the designer(s) and weavers have lavishly modeled the animals' rippling, powerful back and flanks and enlarged the paws. A viewer who had even a remote familiarity with physiognomic precepts would have understood such animals to be roving characters of the passions. The lion's powerful body was of particular interest to naturalists, too, and zoological publications of the period occasionally reiterate the theories found in physiognomic treatises at the same time. For instance, zoologists Conrad Gesner and Wolfgang Franzius (*Historia animalium sacra*, 1612) both describe the complex language of lions' tails as the "barometer" (Franzius' term) of their passions: by beating, arching, and dragging them, lions reveal their inner state at any moment. Franzius observes that

⁴⁸⁰ The figure of Hercules is believed to be a self-portrait by Van Aelst; see Campbell pp. 410-16.

⁴⁸¹ Campbell p. 411

[a] Lyon is a generous, proud, cruel, hasty Creature, and as Horses show their anger by hair, so do Lyons by their tail, which they strike against the ground when at any time they are angered; but when their passion is a little over, they strike their own backs with it.⁴⁸²

Similarly, emblems by and adapted from Andreas Alciato link the thrashing of a lion's tail with the rise of its "yellow bile and black gall" in a fever of rage.⁴⁸³

The explanations offered by emblematisers and zoologists for animal behavior – the lion thrashes its tail because of an overabundance of choleric heat built up in its body – remind us that the pictorial language of physiognomy rested upon humoral theories of the passions. Early modern humoral theories allotted blood, phlegm, and yellow and black bile in varying quantities to every creature in possession of a heart, making certain species sanguine and others melancholy, for example. These fluids, which formed the matter of the rest of the universe as well, provided a material basis for human *and animal* consciousness, or human and animal selves, shaping what Gail Kern Paster has called a shared "humoral subjectivity."⁴⁸⁴ The early modern sciences of zoology and physiognomy – both developed in large part by physicians – were both built upon a foundation of Galenic humoral theories.

However, approaching the Isola Bella tapestries through early modern physiognomic illustration – essentially a mode of portraiture – can only provide a partial account of how they function as representations of the passions. The tapestries are not portraits, after all, they are landscapes, landscapes of such astonishing richness and complexity that often the beasts they depict are visually subsumed within the surrounding forest. To account for the dominance of the landscape in the tapestries, it is necessary to expand our understanding of the humoral passions

⁴⁸² Wolfgang Franzius, *Historia animalium* (English translation *The History of Brutes*, London 1670) p. 41.

⁴⁸³ See Harrison, "Virtues of Animals," fn. 30.

⁴⁸⁴ Paster, "Melancholy Cats," pp. 115-6; see also Michael C. Schoenfeldt, *Bodies and Selves in Early Modern England: Physiology and Inwardness in Spenser, Shakespeare, Herbert and Milton* (Cambridge: Cambridge UP, 1999) p. 3.

from within the human/animal body to encompass the rest of the natural world as well. The Isola Bella tapestries, lacking heroic human actors, do not represent an event or a narrative, but rather a sort of perpetually tumultuous environment. This has made them difficult to interpret. Yet considering the tapestries in light of what Paster and Schoenfeldt have termed the humoral environment helps us to better understand how these monumental landscapes functioned as didactic art.

Insofar as previous scholars have acknowledged the passions as a central theme in the Isola Bella tapestries, they have assumed that the passions were simply reviled by early modern viewers as base and dangerous. Certainly, as we have seen, Christian commentators from Augustine to Erasmus approached the passions with trepidation. However, as more recent literary scholarship has demonstrated, the role of the passions in early modern thought, particularly when they were associated with ferocious animals, was more ambiguous. While much medieval and early modern writing about the passions, particularly within the Christian mystical tradition, conflates them with sin, the passions were understood more ambiguously by many writers as necessary disturbances. The next two sections of the dissertation will examine how the Isola Bella tapestries reflect an ambivalence toward the passions that was prevalent in the early modern Christian world, when the passions were defined simultaneously and somewhat contradictorily as reprehensible vices, requisite steps on the way toward redemption, and physiological events afflicting man and beast alike. While vividly depicting the violence and disorder wrought by unrestrained passion, the Isola Bella landscapes consistently emphasize hard-won self-control rather than undisturbed apathy. As French cleric and philosopher Jean François Senault would put it later (in *De l'usage des passions*, Paris 1641), “without shedding the *blood* of these savage Beasts, we *tame* them, to make them serviceable to *thy* *designes*.” By

identifying man's chaotic internal state with the grander natural order, the tapestries and their inscriptions treat the passions as integral to divine creation, and thus to natural history.

In the final section I will argue that, as richly detailed landscapes inhabited by fierce animals, the Isola Bella tapestries represent an ecology of the passions, imagined as humoral substances – or impulses – flowing throughout the natural world and throughout man, the microcosm of all nature. First, however, we must briefly survey the important theories and taxonomies of the passions in circulation at the time of the tapestries' production and initial display, moving from theological writings to political, medical, and physiological explanations of the movement of the passions. The passions consistently did violence to the bodies of their sufferers: they tyrannize, consume, blind, ravage, and compel the surrender of the higher faculties (reason, free will). Compared in early modern literature to scents or stench, mists and fogs, they changed a man's pallor with blushing or blanching, and carried the threat of contagion. Above all, as some recent scholarship has explored, the humoral passions were thought to pervade not only human and animal bodies but the larger landscape as well. Obviously it is beyond the scope of this study to provide a full account of the complex evolution and particular controversies of sixteenth- and seventeenth-century conceptions of the passions, variously termed *passio* (from the Latin *passus*, to suffer), *perturbatio* and *pathos* by medieval and early modern writers, copyists and translators.⁴⁸⁵ A select survey of works and ideas must suffice.

⁴⁸⁵ For a concise discussion of terms used to denote the passions, see Jürgen Hengelsbrock and Jakob Lanz, "Examen historique du concept de passion," *La Passion. Nouvelle Revue de Psychanalyse* 21 (Spring 1980), pp. 79-80. For more variations in period terminology, see Anthony Levi, *French Moralists: The Theory of the Passions 1585- 1649* (Oxford UP, 1964) pp. 14-15.

It is significant that one of the earliest commentators on control of the passions envisioned the problem as a struggle between man and beast: Plato compares the soul to a winged charioteer holding the reins of two horses, one good and the other evil.⁴⁸⁶ The passions were understood as physiological events, too, from a very early date: a basic account of their physiological manifestations, such as the observation that bodily organs tend to expand in joy and contract in fear, is found in the writings of both Augustine and Thomas Aquinas. Aquinas proposed an influential taxonomy of eleven basic passions ranging from the concupiscible (such as love and hate, desire and aversion) to the irascible (fear, hope, courage). In the early modern period, a variety of ancient and Christian classificatory systems competed with the Thomist system, including those proposed by Aristotle, Cicero, and Augustine. Early modern vernacular treatises drew from both the scholastic and Stoic traditions; the latter considered the passions as, in Zeno's words, "movements of the soul, unreasonable and against nature, or tendencies that exceed moderation."⁴⁸⁷

According to the Aristotelian model, prevalent before 1650, man and beast shared an organic soul, which was responsible for all bodily functions and all cognitive operations as well, with the exception of the uniquely human faculties of intellect and will.⁴⁸⁸ The intellect and will required no physical organs to function; they represented to early modern thinkers the presence of the divine in man, and set him apart from all inferior creatures. The faculties responsible for nutrition, generation, and growth, known together as the vegetative soul, were understood as common to all living things, while faculties such as sensory perception, memory, voluntary and

⁴⁸⁶ Levi p. 8.

⁴⁸⁷ "Des mouvements de l'âme déraisonnables et contre nature, ou des tendances qui excèdent la mesure," quoted in Hengelbrock and Lanz, p. 78.

⁴⁸⁸ Katharine Park, "The Organic Soul," in Charles B. Schmitt, ed., *The Cambridge History of Renaissance Philosophy* (Cambridge UP, 1988) pp. 464-484.

involuntary movement, and the appetites and emotions – grouped as the organic or sensitive soul – were generally thought to be shared with beasts. Thus the passions suffused man and animal bodies alike; what differentiated man was the divinely bestowed capacity for reasoned choice.

By the end of the sixteenth century, the vernacular *traité des passions* had evolved from the component treatises of Aquinas' *Summa theologiae*.⁴⁸⁹ The scholastic tradition had infused the passions with moral worth, allowing some human affections to be called virtuous and emphasizing the interaction between the will and the passions; in theological terms, every capitulation to unregulated instinct was a repetition of Adam and Eve's original sin.⁴⁹⁰ Within the Christian tradition, the study of the passions can be traced to patristic writings about Christ's agony in the garden, and Christian authors have always been particularly concerned with the division between passions of the body (necessary for the preservation of life) and those of the soul.⁴⁹¹ As Jürgen Hengelbrock and Jakob Lanz have observed, in the writings of Aquinas the passions came to pertain always

to an extra-rational, sensory domain, the domain of the soul... Like all natural movements, they are neither good nor evil. They precede the decisions of the free will... Their moral quality depends on the degree to which reason keeps them in order. If this is the case, they (the passions) appear to be virtues, if not, they are sinful.⁴⁹²

Milton too would regard the passions as necessary disturbances on the road to salvation. As he put it in the *Areopagitica* (1644), "Wherefore did [God] creat passions within us, pleasures round

⁴⁸⁹ Levi p. 22.

⁴⁹⁰ Hengelbrock and Lanz p. 80. See also Stephen Gaukroger's introduction to *The Soft Underbelly of Reason*, op. cit., p. 6.

⁴⁹¹ Gaukroger, op. cit., p. 1.

⁴⁹² "Les passions appartiennent par essence au domaine extra-rationnel, sensitif, de l'âme... En tant que mouvements naturels, elles ne sont ni bonnes ni mauvaises. Comme telles, elles sont aussi antérieures à la décision de la volonté libre... Leur qualité morale dépend de la mesure où la raison les maintient dans l'ordre. Si c'est le cas, elles appartiennent à la vertu, sinon, elles mènent au péché." Hengelbrock and Lanz p. 82.

about us, but that these rightly temper'd are the very ingredients of vertu?"⁴⁹³ In contrast, Neostoics such as Marsilio Ficino (*Theologia Platonica, de immortalitate animorum*, Florence 1482) characterized the passions as errors of judgment best eradicated altogether.

As "maladies" of the soul, the passions were invariably associated with physiological symptoms, from Petrarch's *De remediis utriusque fortunae* (composed 1354-60) to Robert Burton's *Anatomy of Melancholy* (London, 1621). Galenic medicine, as it was codified and practiced in the Renaissance, recognized three epistemological categories pertaining to the body: "natural things" or physiology, which derived from the temperature and commingling of the four humors; "unnatural things," studied under the rubric of hygiene; and "things against nature," including illnesses, their causes and symptoms.⁴⁹⁴ Plato had set a precedent by locating the various passions in specific parts of the body, fixing courage and anger near the heart, for example.⁴⁹⁵ Aristotle first linked physiology and the passions in animals, observing for example that timid, fearful beasts possess large, withered hearts while the same organ in hardy, courageous animals is frequently small and dense.⁴⁹⁶ Once the passions began to be located in the heart, physical effects such as paleness or a flush could be explained by agitation of the movement of the spirits, and by extension the blood and the humors.⁴⁹⁷ Sixteenth-century physicians such as Ambroise Paré (*La maniere de traicter les playes faictes tant par hacquebutes....*, 1561) and Jean Fernel (*Universa Medicina*, 1567) echoed the moral theologians' warning that the passions were extremely powerful forces that could either be properly

⁴⁹³ Roy Flanagan, ed., *The Riverside Milton* (Boston: Houghton Mifflin) p. 1010; see also Schoenfeldt, "'Commotion Strange': Passion in *Paradise Lost*," in Paster, Rowe and Floyd-Wilson, eds., *Reading the Early Modern Passions*, p. 52.

⁴⁹⁴ Jean Starobinski, "Le Passé de la Passion: Textes Médicaux et Commentaires," in *La Passion. Nouvelle Revue de Psychanalyse* 21 (spring 1980), p. 51.

⁴⁹⁵ Levi p. 8. See also Robert Burton, *The Anatomy of Melancholy, What it is: With all the Kinds, Causes, Symptoms, Prognostickes, and Several Cures of it. In Three Maine Partitions with their several Sections, Members, and Subsections. Philosophically, Historically, Opened and Cut up* (London, 1621).

⁴⁹⁶ Starobinski p. 53.

⁴⁹⁷ Levi pp. 234-5

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administered for good ends or allowed to wreak havoc on the body.⁴⁹⁸ Indeed, by the mid-seventeenth century, François, duc de La Rochefoucauld (1613-1680), could sweepingly attribute the spread of disease through human history to the proliferation of passions, symptoms of the drawn-out degeneration of man's prelapsarian physical perfection:

The golden age, which was exempt from the passions, was exempt from sickness. The silver age, which followed, would still conserve its purity. The bronze age gave birth to passions and pains of the spirit; they began to form, but still had the feebleness of childhood and its fickleness. But they would take on all of their force and all of their malignity in the iron age, and pour out into all the world, because of their corruption, the diverse sicknesses which have afflicted men throughout the centuries. Ambition produced sharp and frenetic fevers; envy brought jaundice and insomnia; it is idleness from which lethargy, paralysis and languor came; anger produced suffocations, boiling blood, and inflammation of the lungs; fear brought the throbbing and irregular beatings of the heart; vanity produced dementia; avarice, tinea and mange; sadness made scurvy and cruelty, stones; calumny and slander unleashed measles, smallpox and scarlet fever, and from jealousy came gangrene, pestilence and rage.⁴⁹⁹

As La Rochefoucauld's passage indicates, it was almost impossible to discuss the passions without implicitly or explicitly invoking the Fall, that transformative event that caused the

⁴⁹⁸ Paré, *La maniere de traicter les playes faictes tant par hacquebutes, que par flèches, & les accidentz d'icelles, comme fractures & caries des os, gangrene & mortification, avec les pourtraictz des instrumentz necessaires pour leur curation* (Paris, 1545) The method of curing wounds made by gunshot, also by arrows and darts, with their accidents, English trans. Walter Hamond, 1617.

⁴⁹⁹ "Si on examine la nature des maladies, on trouvera qu'elles tirent leur origine des passions et des peines de l'esprit. L'âge d'or, qui en était exempt, était exempt de maladies. L'âge d'argent, qui le suivit, conserva encore sa pureté. L'âge d'airain donna la naissance aux passions et aux peines de l'esprit; elles commencèrent à se former, et elles avaient encore la faiblesse de l'enfance et sa légèreté. Mais elles parurent avec toute leur force et toute leur malignité dans l'âge de fer, et répandirent dans le monde, par la suite de leur corruption, les diverses maladies qui ont affligé les hommes depuis tant de siècles. L'ambition a produit les fièvres aiguës et frénétiques; l'envie a produit la jaunisse et l'insomnie; c'est de la paresse que viennent des léthargies, les paralysies et les langueurs; la colère a fait les étouffements, les ebullitions de sang, et les inflammations de poitrine; la peur a fait des battements de coeur les syncopes; la vanité a fait les folies; l'avarice, la teigne et la gale; la tristesse a fait le scorbut; la cruauté, la pierre; la calomnie et les faux rapports ont répandu la rougeole, la petite vérole, et le pourpre, et on doit à la jalousie la gangrène, la peste, et la rage." La Rochefoucauld, "Reflexions diverses" XII, *Maximes* (1665), quoted in Starobinski pp. 54-5.

inward rebellion of man's desires, just as it caused the beasts to rebel against man and to begin preying upon each other. Well into the seventeenth century, discussions of the passions remained closely linked to, at times even indistinguishable from, discussions of sin.⁵⁰⁰ At the same time, the passage underscores the inextricability of physical and spiritual health, conflating emotional torments and the swellings, sores, palpitations and fevers they were thought to produce. As Thomas Wright put it, at the moment "[m]an had tasted of that murdering Fruit... then began those Swellings, and inward Rebellions," the physiological-political eruptions that signified the corruption of the passions.

Not all early modern writing on the passions was concerned with individual bodily or emotional experience, of course; many treatises on the passions approached them primarily as a social or even political problem. A sizeable literature analyzes the emergence of new ideas in the sixteenth and seventeenth centuries concerning the individual feeling subject and the nature of self-control, including Norbert Elias' description of the civilizing process and inculcation of interior modes of discipline at the absolutist French court, and Stephen Greenblatt's examination of gentlemanly self-fashioning.⁵⁰¹ Certainly, the passions play an important role in early modern literary works framed as advice for princes, which emphasize self-awareness and self-control as prerequisites for political success, while treatises aimed at a wider readership, such as Marin Cureau de La Chambre's *Les Caractères des Passions* (Amsterdam, 1640-1662), promised to teach male elites occupying positions of power the ability to detect and to manipulate the passions of others.⁵⁰² The early modern rhetoric of princely instruction rested upon a

⁵⁰⁰ Gaukroger p. 2.

⁵⁰¹ Norbert Elias, trans. Edmund Jephcott, *The Civilizing Process* (Oxford, UK and Cambridge, Mass.: Blackwell, 1994); Stephen Greenblatt, *Renaissance Self-Fashioning: From More to Shakespeare* (Chicago, University of Chicago Press, 2005). See also Charles Taylor, *Sources of the Self: The Making of the Modern Identity* (Cambridge Mass.: Harvard UP, 1989).

⁵⁰² Susan James, *Passion and Action: The Emotions in Seventeenth-Century Philosophy* (Oxford UP, 1997) p. 2.

fundamental analogy between government of a realm (including administration of one's household and command of servants) and government of one's passions. It was understood that a prince must refrain from injuring his subjects' trust by acting out of rage or greed, and he must skillfully manage the ambitions, jealousies, fears, and loyalties of the courtiers and counselors of his court and in foreign diplomacy.⁵⁰³

Cureau de la Chambre also argued that the passions constitute a direct physiological link between morals and health, and described how extreme passions disrupt the spirits' normal transmission of warmth from the heart to various parts of the body, endangering the body's wellbeing.⁵⁰⁴ These animal spirits, sometimes imagined as tangible fluid like the humors and at other times described in ethereal terms, were believed to flow outward from the heart to the limbs, connecting the mind's intention with the body's capacity for action. La Chambre summarizes the healthy transformation of desire into motion:

The appetite moves not but upon command of the estimative faculty, which orders what things are to be done... the said command consists in the image, or idea, which that faculty frames in itself; and... after such an image hath been therein produced, it is multiplicable and diffusive, as a light, into all the parts of the soul.

Now it is by the spirits that this communication is wrought... whereas the parts, which ought to execute what the estimative faculty commands, are remote from it, there is a necessity, the soul should have certain ministers, whose work it is, to carry about the resolutions she hath taken in her privy council, without which, as in a well-governed commonwealth, nothing either ought or can be done.

⁵⁰³ James p. 3.

⁵⁰⁴ Levi pp. 253-5. As Levi observes, Cureau de la Chambre substitutes the term "vital spirits" for the "animal spirits" denoted by most other writers of the period, blurring even further a mysterious fluid-air entity that already served in literature on the passions as an all-purpose causal agent and a nebulous bridge between body and soul.

And this is the proper employment of the animal spirits.⁵⁰⁵

Thus the animal spirits transport the soul's decrees to the extremities of the body, the arms and hands, legs and feet, which are prompted to carry out the soul's commands. The well-administered kingdom served as a ubiquitous metaphor for the self-disciplined, virtuous man in early modern treatises on the passions.

Pierre Charron asserted in *De la Sagesse* (Bordeaux 1601) that men and animals share the same passions because they are "next adjoining links, twisted within one another, in the great Chain of the Universe."⁵⁰⁶ Yet many sixteenth- and seventeenth-century thinkers were far more specific, explaining that the passions arose physiologically in animals in just the same way as in man. In his *Historia naturalium* (1612), for example, zoologist Wolfgang Franzius described the physical similarity:

There is a kind of a warm, spirituous breath in the blood of *Beasts* which is their soul, by which is performed all its actions and operations... The affections that happen in the blood are the same that happen in man. An Ass is foolish, a Horse is hot in love, and in war, and a Wolf unruly, a Lyon bold, a Fox crafty, the Dog docile, and so other creatures I could instance in... As to the sensitive and locomotive faculties that are in beasts, they have them analogously as they are in man; the external senses receive external objects, and so are carried to the brain, there causing joy or grief.⁵⁰⁷

Conrad Gesner's zoological treatises, published in the 1550s, also offer physiological explanations for the workings of the passions in the bodies of animals, building upon the familiar man-beast metaphors found in canonical Christian writings. Gesner asserted that men and

⁵⁰⁵ La Chambre, *L'Art de connoistre les hommes* (Paris 1660), trans. as *The Art of How to Know Men* by John Davies (London, 1665 and 1670) pp. 156-7.

⁵⁰⁶ Quoted in Harrison, "Virtues of Animals," p. 473.

⁵⁰⁷ Franzius pp. 9-13; quoted in Harrison, "Virtues of Animals," p. 469. Della Porta's treatise on *Natural Magick* (1558) offers a similar and quite wonderful explanation of love as the transmission of liquid passion from one body to another, via a process of diffusion and condensation, through the "glass" of the eyes. See English translation 1658 (London, printed by Thomas Young and Samuel Speed), pp. 230-232.

animals shared a “similitude of body and affections,” that is, the humoral organism and the passions that suffused and inflamed it.

In moral no less than natural philosophy, the humors were described as pervading and comprising both man and animal. In the *Apologie de Raymond Seybond* (1576), Montaigne wryly cites, as evidence of their superiority to man, the ability of certain animals to change their color at will by regulating the internal movement of their spirits. It is significant that Montaigne implicitly links control of the passions and of self with control of humoral flow. Man, a creature of “empty arrogance,” only changes color when he is diseased or humiliated:

The chameleon takes on the color of surroundings, but the octopus assumes whatever color it likes to suit the occasion, hiding, say, from something fearful or lurking for its prey. The chameleon changes passively, the octopus actively. We change hue as well, from fear, anger, shame and other emotions which affect the color of our faces. That happens to us, as to the chameleon, passively. Jaundice, not our will, has the power to turn us yellow.⁵⁰⁸

It is evident from Montaigne’s rueful observations that, even in popular belief, the animal spirits, the humors, the “warm, spirituous breath” imagined by Franzius, permeated human and animal bodies, by some accounts even circulating between them. Indeed, in keeping with Hippocratic and Galenic theories, the movement of the early modern passions was almost always imagined in hydraulic terms.⁵⁰⁹ The humors, the stuff of man and also of his environment, ebbed and flowed, warmed and cooled, swelled and contracted, grew viscous or thin, accumulated and percolated, engendering violent passions and dangerous physical symptoms when out of balance. Recently, scholars of early modern literature have begun to explore the implications of this hydraulic model, which encompassed human and animal bodies and the cosmos they inhabited. Gail Kern

⁵⁰⁸ Montaigne pp. 514 and 523.

⁵⁰⁹ Galen distinguishes between the passions and the humors, but warned of the physically transformative power of strong emotions. Galen, *Opera et Sexta Juntarum Editione* (Venice 1586). See also Stanley Jackson, “Galen--On Mental Disorders,” *Journal of the History of the Behavioral Sciences*, 5 (1969).

Paster, Michael Schoenfeldt and others have proposed a materialist reading of early modern descriptions of the flow of the passions into and out of bodies, imagined as “semipermeable, irrigated container[s] in which the humors moved sluggishly.”⁵¹⁰ In this way, we are able to understand early modern accounts of the circulation of the passions as much more than metaphors. The contagion of desire and its purging through tears; the clogging of intention and its physiological manifestations; the build-up of bile and its stain on the pallor; the delicate equilibrium of the liquid humors: these are not merely ubiquitous metaphors of early modern somatic consciousness. God’s punishment for the Fall had been laid not only upon the souls of men and beasts but upon their bodies, too. In his analysis of Adam and Eve’s unleashing of the humoral passions in Milton’s *Paradise Lost*, for example, Michael Schoenfeldt has written of early modern individuals as “microclimates,” suffused with turbulent desires whose seething interior life is manifested as the movement of moisture: as tears, blanching, blushing, and other uniquely postlapsarian afflictions.⁵¹¹ The postlapsarian state was understood partly in physiological terms: the postlapsarian body was volatile, wracked with conflicting desires, difficult to control. It is no surprise that the vast majority of early modern writing on the passions was done by physicians, including many highly placed Frenchmen: Ambroise Paré, Jean Fernel, Marin Cureau de la Chambre, Pierre Charron. Their treatises are replete with discussions of cures and ills, conflating moral and spiritual health by linking both to the circulation of the humoral passions.

We have seen that, as representations of the tumult of animal forces competing within postlapsarian man, the Isola Bella tapestries draw upon a long Christian tradition associating the passions with wild beasts. The central scenes of the tapestries depict the violence and cruelty of

⁵¹⁰ Paster, “Melancholy Cats,” p. 116.

⁵¹¹ Schoenfeldt, ““Commotion Strange,”” op. cit.

brutes, beneath an inscription that reminds the human viewer that only divine grace allows him to transcend his unruly passions and bestial appetites. “We cannot really know ourselves,” as Saint Ambrose had written, “without knowing the nature of all living creatures.”⁵¹² This sentiment lay at the heart of early modern thinking about the passions, which were more or less imagined as unruly beasts inhabiting the blood and inflaming the heart and mind. At this point it becomes necessary to ask, how concretely are such inflammations and eruptions depicted in the tapestries? Can the tapestries be seen to reflect early modern theories of the passions as humoral, that is physiological, phenomena? As representations of the passions, shouldn’t the tapestries be informed by the humoral theories that pervade sixteenth- and seventeenth-century writings on the passions?

⁵¹² Ambrose, *Hexameron*, VI.ix.55 (p. 368) and VI.x.75 (p. 282). Quoted in Harrison, “Virtues of Animals,” p. 465.

THE BODY AND THE LANDSCAPE: AN ECOLOGY OF THE PASSIONS

The Isola Bella tapestries comprise an ecology of the passions because they posit an implicit equivalence between the humoral body and the landscape that is not merely metaphorical. The tapestries visualize the bestial passions in the form of an inhabited forest. In *The Hunt of the Frail Stag* (fig. 150), a set of early sixteenth-century tapestry fragments discussed above as a precedent for the Isola Bella weavings, the pack of hounds that relentlessly pursues the stag (or man) represents a mix of bodily ills and spiritual maladies. The Isola Bella tapestries, too, use animal imagery to conflate spiritual and physical illness, but by the end of the sixteenth century, new scientific justifications had been developed to justify this conflation of the health of body and soul, and to legitimate the use of animals as representatives of human virtues and vices. The tapestries feature emblematic imagery of cures and ills that recalls the conflation of virtue and physick (medicine), or spiritual and physical health, also found in much early modern writing on the humoral passions. The iconography of the set also celebrates the inborn medical knowledge that animals were believed to possess, highlighting the need for equilibrium both in nature and in the humoral body.

As landscapes, the Isola Bella tapestries can be seen to represent an “ecology” of the passions that is very much informed by contemporary physiological explanations of the workings of the passions in man and animal. In this final section, I argue that the tapestries were conceived, woven and displayed as a monumental ecology of the passions, illustrating a convergence of moral and natural philosophy during the late sixteenth and early seventeenth centuries around the study of animals. The term “ecology” is intended to evoke a variety of associations linking the humoral passions with the natural environment before Descartes: an

intricate relational system of comprehensive scope; an economy of increasings and decreasings, growth and decay; a reciprocal antidotism and the imperative of balance or equilibrium; a rich diversity of types or species coexisting and competing within a single space.⁵¹³ Ecology is a concept that early moderns applied not only to the natural environment but also to the human body and mind. The notion of equilibrium is an important one in early modern treatises on the passions and for the Isola Bella tapestries, as is the opposing notion of imbalance. Early modern commentators on the passions persistently imagined man transcending all of the animals by uniting their disparate natures within his own. Moral and physical health was defined as the maintenance of a delicate equilibrium among all of these disparate parts. Indeed, man's privileged place within Creation, his superiority over the beasts, depended upon the preservation of this fragile interior ecology. As Merritt Y. Hughes observed, "[a]s a microcosm compact of animal passions, man could hope to be human only by achieving balance or 'mediocrity' among all his opposed brutal inclinations with the help of his peculiarly human reason."⁵¹⁴ And reason, any churchman would add, had been bestowed uniquely upon man so that he might overcome his bestial impulses and choose God with his free will.⁵¹⁵

The Isola Bella tapestries repeatedly admonish the viewer to make such a choice, while depicting the terrors that threaten those who risk falling into bestiality. We have seen that the Isola Bella tapestries illustrate the familiar principle of man as microcosm of nature by depicting his rebellious passions as beasts inhabiting richly elaborated landscapes. In this way, the

⁵¹³ The term ecology has been used before in relation to the early modern passions: Gail Kern Paster, "'Roasted in Wrath and Fire': The Ecology of the Passions," paper delivered at a meeting of the Shakespeare Association of America, Minneapolis, 2002. Also, Katherine Rowe refers to the pre-Cartesian "ecological disciplines" of the passions, "conceived broadly in terms of air, climate, diet, etc." See her "Humoral knowledge and liberal cognition in Davenant's *Macbeth*," in *Reading the Early Modern Passions*, p. 177.

⁵¹⁴ Merritt Y. Hughes, "Spenser's *Acrasia* and the *Circe* of the Renaissance," *Journal of the History of Ideas* 4:4 (October 1943) p. 393.

⁵¹⁵ See for example Marion Müller's study of Jean François Senault's *De l'usage des passions* (Paris 1641), in *'These Savage Beasts Become Domestick': The Discourse on the Passions in Early Modern England* (Trier: WVT Wissenschaftlicher Verlag Trier, 2004) pp. 113-135.

tapestries draw upon a long literary tradition within Christianity in which the postlapsarian passions and vulgar appetites are imagined as wild beasts. Throughout the series, the idea of man as a microcosm of volatile impulses, and the dangerous consequences of destroying the balance among them, are illustrated in rich zoological and botanical detail. The Isola Bella tapestries take man's postlapsarian state as their primary subject. They reflect Galenic theories of the humoral passions, situating them not within a human body, but within the natural landscape, picturing the passions as an array of animal species inhabiting and preying upon each other within a microcosmic circumscribed forest.

The approach proposed by Paster, Schoenfeldt and others makes it possible to re-imagine the passions as early moderns understood them: as powerful physical experiences, and as elements present in the natural landscape. Yet the scholars who have recently explored the humoral passions in early modern cultural production have done so through the close reading of literary texts, including the works of Shakespeare, Milton, and Spenser. Pictorial representations of the landscape (in any medium) have not yet been considered, even though the Isola Bella tapestries are not unique in sixteenth-century art for depicting the postlapsarian passions as a forest populated with animals. Between 1504 and 1510, for example, Albrecht Dürer completed at least four representations in different media of Adam and Eve standing with the forbidden fruit, surrounded by animals of various species, including a lion, a stag, a pheasant, and partridges, but more famously with an elk, a rabbit, and a cat. Erwin Panofsky perceived in these works the artist's "thorough familiarity" with "the theory that the Fall of Adam subjected mankind to the physical and moral effects of the Four Humors which hitherto had governed only the animals."⁵¹⁶ It is true that in the bestiary tradition, each species of animal was ascribed a temperament determined by some imbalance of the four humors: the fierce and overheated lion

⁵¹⁶ Erwin Panofsky, *Albrecht Dürer*, vol. 2, p. 3.

was always described as choleric, while the stag was perpetually melancholic, for example.²⁷²⁵¹⁷

However, in writing that the animals in Dürer's images "stand in" for the four humors, Panofsky stopped short of a full appreciation of how completely the humors were believed to pervade, indeed to *comprise*, both human beings and the whole overarching chain of created nature.

The lion, for example, did not merely symbolize the choleric temperament. The heat and dryness of its body determined its very character and its behavior, and the animal's surfeit of yellow bile linked it through the doctrine of correspondences to other matter, both animate and inanimate. Tracing a map of similitude reaching from a single beast outward to the heavens, Gesner locates the lion not just geographically but celestially and seasonally, stressing the animal's physical and hierarchical affinities with the sun:

There is a constellation in heaven called the Lyon... he is the greatest and most notable among the signes of the Zodiac...and when the Sun commeth to that signe which happeneth in the month of July, at which time the vehement heat of summer burneth the earth, and dryeth up the rivers. And therefore because the Lyon is also of a hot nature, and seemeth to partake [sic] of the substance and quantity of the Sun, he hath that place in the heavens. For in heate and force he excelleth all other beasts as the sun doth all other stars.

Gesner also perceives how the lion's affinity with the sun is manifested in the very structure and peculiar strengths of its body, which align with the sun's trajectory:

In his breastes and forepart hee is most strong, and in his hinder part more weak, so is the sunne, encreasing until the noone or forepart of the year.

The lion's mane, like the "streaming beames of the sunne," makes the beast "also... a signification of the sunne," but Gesner distinguishes between this kind of superficial resemblance and the more important humoral and cosmic correspondences. In a larger sense, the

⁵¹⁷ Ibid

lion *embodies* the choleric temperament and its attendant passions, “partaking” of the same “substance and quantity” as elements of the cosmos such as the sun.⁵¹⁸ The domestic hearth cat, by contrast, was thought to harbor an excess of black bile, in common with bears, lutes, bagpipes and sewage ditches. “A cat’s melancholy is a humor,” as Gail Kern Paster has written, “hence a temperature, a temperament, a disposition, and a liquid of specific consistency organizing its relations to the world.”⁵¹⁹ For early moderns, this liquid determinism governed the cosmos and was the wage of original sin. Scrutinizing the natural landscape entailed an ability to recognize among animals, plants, and minerals a network of sympathies, antipathies, and correspondences that were concrete and chemical. In his prints and paintings, Dürer located the trespassing Adam and Eve in an environment suffused with the still-obedient passions, a landscape of plants, stones, trees, beasts and human beings through which the volatile humoral passions were about to be unleashed. The lion, stag, and other animals that surround Adam and Eve as they contemplate the fruit of the tree of knowledge hint that the prelapsarian equilibrium of the humors is about to be thrown permanently out of balance, both within the human body and throughout nature.

Long before the invention of ecosystems, then, the natural landscape was imagined as both comprehensive and fluid.⁵²⁰ This view of the natural world is also evident in the texts of early modern natural history, particularly in Gesnerian zoology. Zoological treatises of the sixteenth century reiterate a resemblance linking man and beast that was both psychological and physical. Susceptible to the same diseases and responsive to the same cures, animals were worthy of careful study, Gesner claimed, “because of the similitude they carry with mankind in

⁵¹⁸ Gesner/Topsell p. 485.

⁵¹⁹ Paster, “Melancholy Cats,” p. 119.

⁵²⁰ Foucault, see especially “The Four Similitudes” and “Signatures,” in *The Order of Things*, pp. 17-30.

body and affections.”⁵²¹ While plants were studied primarily for their medicinal properties (the science of simples), animals were regarded as source material for human medicines (particularly blood and other fluids: lymph, venom, semen, milk) and as moral exemplars: the beasts were a living, roving vocabulary of the naked passions. Gesner regarded nature as a complex system of relations, suffused from top to bottom with divine grace. As described in his introductory epistle, all creatures inhabit the same hierarchical but entangled space. The epistle emphasizes the pervasiveness of divine grace over the humors, which play a larger role in Gesner’s individual chapters on species, but the impression that Gesner gives of nature as diverse but integrated system is no less vivid for that:

Divinity itself remains one and the same, without change and alteration, notwithstanding the manifold increasings and decreasings of all these creatures, which it uses as but Glasses and Organs; and according to diversity both of matter and form, it shines and appears in one and other more or less, even as we see in our own bodies, whose soul is disseminated into every part and member...

Gesner’s ideal is clearly informed by the principle of micro- and macrocosmic correspondence, and by the idea of man as paragon of the natural world. His vision of the “manifold increasings and decreasings of all... creatures” evokes a broad teeming sea of animal life that is, nevertheless, matched in “diversity of matter and form” by a single human body.

It follows that, in their harmonies, antipathies, and predations, wild beasts mirrored the balance or imbalance of the humoral passions within man. The *Isola Bella* tapestries are designed to highlight this inner-outer correspondence between unleashed passions and rebellious beasts, specifically through an emblematic iconography of ills and cures. The tapestries reflect a conflation of spiritual and physical health that is typical not only of early modern treatises on the

⁵²¹ Gesner/Topsell, “The First Epistle,” n.p.

passions, as we have seen, but also of early modern zoological publications. The Isola Bella tapestries have been only superficially linked by previous scholars to these important publications, which consistently connected animal behavior to the human passions under the rubric of “physick” or medicine, conflating the physiological and psychological.

First, it is revealing to consider how the Isola Bella landscapes are constructed: their tangled layers aptly illustrate the teeming microcosm described by Gesner. The crowded forest scenes seem designed to maximize visual layering, and seem to heave and crawl with life, because almost nothing in them can be seen in its entirety: in the foreground, ferns and grasses overlap with tangled flowering vines and underbrush; animals disappear behind tree trunks or peer from gaps in the foliage; smaller beasts are tucked, camouflaged, beneath twisted tree roots; above, birds cower, partly obscured in the forest canopy. Natural history illustration as found in the illuminations and the printed encyclopedias of the period always isolates individual species against a blank white page for close scrutiny. The tapestries, too, invite long and careful looking, yet their focus is not any particular species, but rather the sweep and overwhelming intricacy of the natural world itself. The viewer is subsumed within the forest like a hunter or like prey; the beasts he faces in the tapestries, though anatomically exact, are not splayed for his inspection and lack the easily legible contours found in illustrated zoologies of the period. The tapestries’ inscriptions offer a scriptural message of human superiority, repeating that man was created master over every kind of animal but, quite powerfully, this reassuring message of human exceptionalism is belied by the overpowering visual experience the tapestries provide.

Gail Kern Paster has suggested that imagining the humoral passions as the building blocks of creation, pervading both the body and the natural world, had profound effects for early modern conceptions and experience of the self. If one understands the Isola Bella landscapes as a

representation of the human self, then Paster's interpretation has some exciting implications. The pre-Cartesian humoral model of subjectivity posited that consciousness was "open, penetrable, fluid... less bounded and contained... less opposed to the world outside."⁵²² In the tapestries, the natural environment is depicted as astonishingly and richly complete: every leaf, twig and feather is depicted in naturalistic detail and, hanging together, the landscapes form a roughly continuous forest. Yet, because of the nature of the medium, it can be difficult to separate body from body, or to pick animals out from their surroundings. Individuals tend to dissolve into the whole; the experience of looking at the tapestries is one of searching, finding, and then losing again. The overall impression is one of tangled profusion. This is a very far cry from the orderly ranks of flora and fauna in the traditional *mille fleurs* verdure. To depict human beings within this picture field would be to cast man as separate but equal to the beasts in the landscape. To *invoke* man instead, as the tapestry inscriptions do, is to make the landscapes grandly-scaled portraits of him and his inner life. Man is the overarching subject of the tapestries, for he was understood as the epitome of nature, containing every species and element within himself, represented by nature's thousand separate and inferior parts.

Because Gesner's natural history was compiled using a wide range of literary sources as well as folk wisdom, his encyclopedia and the later zoological publications of his imitators offer an excellent window into the associations that sixteenth-century viewers might have brought to animal tapestries like those at Isola Bella. By the mid-sixteenth century, learning to control the passions had come to be seen as a central step in regaining lost natural knowledge as well as spiritual grace (as we saw in the Wawel tapestries); conversely, studying natural history provided insight into the workings of the passions. Historian Peter Harrison has compellingly argued that, beginning in the late sixteenth century, control of the passions – long regarded within the Stoic

⁵²² Paster, "Melancholy Cats," pp. 116-7.

tradition as false judgments and thus impediments to knowledge – was linked increasingly to control of nature. At the same time, the passions were studied as physiological as well as moral phenomena; envisioned as the movement of spirits or fluids through a body, the passions fell under the jurisdiction of the early modern physician. “Physick,” the emblematic rhetoric of cures and ills, reflected not only the sixteenth-century natural philosopher’s expanding interest in anatomy and physiology, but offered a category of metaphor that would accommodate a range of moralizing messages. Gesner and his fellow naturalists extracted both moral instruction and therapeutic recipes from each of the creatures they profiled, making “manifest what use and commodity ariseth out of every beast.”⁵²³ Indeed, “not anyone can be accounted an excellent or learned physician,” Gesner declares, “which hath not drawn (as it were from a fountain) his first instruction from books of nature.”⁵²⁴ Gesner and Franzius take pains to point out in the introductions to their encyclopedias that the study of animals will prove equally helpful to the physician and to the cleric.⁵²⁵ Indeed, moral and physical health were so conflated in the period, the distance between the two occupations could seem quite small. In the extremely influential writings of Paracelsus (1493-1541), for example, it was the physician who stood for the ideal man, having attained the perfect balance between knowledge and practice. As P. M. Rattansi explains, in the Paracelsian world view,

God had planted a remedy for each disease, and the physician’s insight into firmamental coordination enabled him to relieve suffering. The physician brought his vast knowledge of correspondences to the task of diagnosis; he read the condition of the urine in the macrocosm,

⁵²³ Gesner/Topsell, “The First Epistle,” n.p.

⁵²⁴ Gesner/Topsell, “The First Epistle,” n.p. It is worth noting that Gesner refers to his treatise itself as ‘a perfect body,’ made up “digested” information gleaned from both texts and firsthand observation, his own and others’.

⁵²⁵ “Some would have the consideration of Brutes be brought under Medicine, which I think belongeth more properly to Philosophy; for here in this treatise of Animals you have the nature, property, motions, generation, strength, shape and use of Brutes. But I shall a little show the use and benefit that this treatise will be of, not only to physicians, but also to all scholars, and more especially to Divines.” Franzius p. 1.

related the pulse to the firmament, chiromancy to the minerals, breath to the east and west winds, and fevers to earthquakes. He emulated the work of God, who in the greater world ‘himself practices medicine.’⁵²⁶

In Paracelsus’ famous teachings, and in Gesner’s microcosmic description of the natural world, the natural landscape and the human body are superimposed upon each other, and the physician must be ready to decipher the behavior of animals, the signatures of various plants, even astrological and meteorological phenomena, as easily as human symptoms. Every event in nature found its microcosmic equivalent in the human body.⁵²⁷ The Isola Bella tapestries, too, substitute an intricate landscape filled with plants and animals for the postlapsarian body, which was imagined as suffused with and tormented by passions, just as the tapestries’ woven forests are inhabited by volatile beasts.

Let us take a closer look at just one of the tapestries in the series. In the smallest tapestry at Isola Bella (fig. 112), the forest is composed in layers, and recedes through isolated areas of sunlight like a deep tunnel, while a stream curves backward, uniting the complete chamber of Isola Bella tapestries (like those at Wawel) into a roughly continuous landscape. The viewer is positioned low to the ground in the shade and underbrush, and must look carefully to pick out a dozen animals preying upon each other amid the foliage, among them a lion, leopards, apes, an

⁵²⁶ P.M. Rattansi, “Art and Science: The Paracelsian Vision,” in *Science and the Arts in the Renaissance*, ed. John W. Shirley and F. David Hoeniger (Washington: Folger Shakespeare Library, and London and Toronto: Associated University Presses, 1985) p. 55. Italics added. For a more extensive and accessible analysis of Paracelsian thought, see Walter Pagel, *Paracelsus, An Introduction to Philosophical Medicine in the Era of the Renaissance* (Basel and New York: S. Karger, 1958). See also Pamela Smith’s *The Body of the Artisan*, in particular “Paracelsus and the Articulation of Artisanal Epistemology,” pp. 82-93.

⁵²⁷ “[T]he storm begins when the air becomes heavy and agitated, the apoplectic attack at the moment when our thoughts become heavy and disturbed; then the clouds pile up, the belly swells, the thunder explodes and the bladder bursts; the lightning flashes and the eyes glitter with a terrible brightness, the rain falls, the mouth foams, the thunderbolt is unleashed and the spirits burst open breaches in the skin; but then the sky becomes clear again, and in the sick man *reason regains ascendancy*.”: Oswald Crollius’ *Traité des signatures, ou vraye et vive anatomie du grande et du petite monde* (Paris 1533), as glossed by Michel Foucault, *The Order of Things*, pp. 22-23. Pamela Smith also discusses this superimposition of the human body onto the natural landscape in the writings of Christian mystic and cobbler Jacob Boehme (1575-1624) in *The Body of the Artisan*, pp. 160-2.

otter or weasel devouring an eel, a lizard, a turtle, a parrot, and overlooking all from the top of an overgrown hillock, a young goat. The tapestry's inscription reads, "For every kind of beast and bird, of reptile and sea creature, can be tamed and has been tamed by humankind." In theological terms, the tapestry's meaning should by now be clear. Man, as paragon of all animals, contains them all within himself; likewise he has been put in charge, by God, of his bestial passions. Man is not visibly present but is addressed by the text and signified by the forest landscape and its inhabitants. The tapestry depicts nature as a sensual feast (a task ideally suited to this most haptic medium, with its apparently limitless capacity for varying texture) and simultaneously, paradoxically, offers a stern warning, best encapsulated in one of its border medallions: LETI EST CAUSA VOLUPTAS. Pleasure causes death.

Interestingly, the tapestry's Christian message of restraint and self-control is conveyed through a subtle visual vocabulary of cures and ills that links the humoral body with the natural landscape. Passion is characterized as physical sickness, for example satiety or a fever, implicitly affecting the body and soul of the Christian. In the case of this tapestry, the passion in question is lust. This is signaled by the central presence of the panther, which is depicted as violently, rabidly lustful; she pursues the lion even into his den, drawing his blood with her teeth and claws. According to Gesner, classical sources employ leopard, panther, and "pardus" interchangeably for a ferocious beast that hides its magnificent variegated coat in the brush and attracts its prey by exuding an irresistible fragrance. In antiquity, the pardus was unanimously regarded as an "antipathy" of nature, an enemy to all other creatures.⁵²⁸ The Physiologus employs only the term panther, and ascribes to the animal a mild temperament and Christlike

⁵²⁸ Curley p. xxv.

character.⁵²⁹ Interestingly, the Isola Bella tapestry departs from the Christian Physiologus and conforms instead to descriptions of the animal found in natural histories of the sixteenth century. In his *Historia animalium* (1551-8), Gesner affirms the promiscuous appetites of the pardus, a “wrathful and angry” beast that will wander “hundreds of miles” in pursuit of a sweet smell and is, not surprisingly, often characterized as female (fig. 154).⁵³⁰ “[W]e must remember that which Aristotle writeth in his Physiognomy,” he observes, “Among all Beasts the Lion doth most resemble the male, and the Pardal the female.”⁵³¹ Indeed, physiognomies published in Gesner’s own lifetime identified the pardus as the epitome of feminine sexuality, such as Giovanni Battista Della Porta’s *De humana physiognomonia, libri VI* (1586).⁵³² Popular opinion held that the animal’s spotted coat revealed its illegitimate parentage. “They are all one kind of beast, and differ in quantity only through adulterous generation,” Gesner observes, while Franzius notes that the “Female is very lecherous, she not only coupling with the Panther, but with the Lion also.”⁵³³ The lion-panther pair, therefore, was a locus for early modern anxieties about coupling between non-like types.⁵³⁴ As a creature, the panther was defined by an excess of unwholesome lustful passion that colored its hide and effused into the surrounding air. Gesner traces the name of the pardus (or “pardes”) to the Hebrew word for garden and implicitly to paradise itself, “because as colours in a Garden make it spotted, and render a fragrant smell, so the Panther is divers coloured like a Garden of sundry flowers.” Thus the panther and the flower bed are kin,

⁵²⁹ Curley pp. xxv-xxvi, and 42-45. Significantly, the panther/leopard takes on its benign Physiologan character in other tapestries in the Isola Bella series; in the tapestry depicting a lioness wading into a stream, the animal appears in the middle distance as one of an array of symbols of the resurrection.

⁵³⁰ Gesner/Topsell, pp. 575-586.

⁵³¹ Gesner/Topsell p. 579. Della Porta reiterated this sexual equivalence in his treatise on physiognomy.

⁵³² 1586 Latin edition, pp. 21-22.

⁵³³ Franzius p. 65. According to Gesner, a scarcity of water in Africa causes “lions, panthers and other beasts” to congregate on the banks of rivers, “where the Pardals and the Lions do engender with one another... and thereby it cometh to pass that some of them are spotted, and some of them without spots.” See p. 577.

⁵³⁴ “Bestiality,” the period’s term for human-animal intercourse, was made a capital crime in 1534 in England and Sweden. See Joyce Salisbury, *The Beast Within: Animals in the Middle Ages* (Routledge: New York and London, 1994) pp. 84-101.

“adjoining links” within the larger chain of nature, as their mottled surfaces and wafting perfume reveal. Yet the animal’s name also derives, he surmises, from *Pardalis*, the name of a famous harlot,

For as the Panthers by their sweet smells draw the Beasts unto them and then destroy them, so also do Harlots deck and adorn themselves with all alluring provocations, as it were with enchanted odours, to draw men unto them, of whom they make spoil and rapine.⁵³⁵

The panther’s predominant passion was physically manifested as a scent or vapor, attracting and contaminating others, while the animal’s spotted coat manifested its illicit origins.

With the panther at its center, the tapestry becomes a representation of lustful passion. The other animals play auxiliary roles: the salamander poised just above the fevered panther, for instance, is described in the *Physiologus* as quenching fire.⁵³⁶ Lust may also explain the presence of the goat in the landscape, which (looking innocent enough) peers from within the foliage in the upper left portion of the tapestry, one of very few domestic animals depicted in the *Isola Bella* series, yet a creature of “venereous disposition,” reports Gesner: “no beast more prone and given to lust than the goat.”⁵³⁷ Like the panther, the goat was known to emit a very strong odor, a vaporous manifestation of its lascivious character.

Yet the scene is also meant to illustrate the completeness of nature, which supplies both malady and remedy.⁵³⁸ For example, the weasel crouched in the stream devours a serpent,

⁵³⁵ Gesner/Topsell p. 578.

⁵³⁶ The *Physiologus* declares that the lizard, which in the tapestry hovers above the lion’s prominent genitals and the panther’s fangs, has the power to extinguish any fire it is tossed upon. In 1640, Bishop Edward Reynolds would also link the passions to fire in his *Treatise of the Passions and Faculties of the Soule of Man*: “as Fire (though it be of all other creatures, one of the most comfortable and usefull, while it abides in the place ordained for it;) yet, when it once exceeds those limits, and get to the house-top, it is most mercilesse and over-running: So Passion[s] (though of excellent service in Man, for the heating and enlivening of Vertue...)... are the best Servants, but the worst Masters, which our Nature can have,” pp. 45-6.

⁵³⁷ Gesner/Topsell p. 231.

⁵³⁸ “The physician was concerned with a single general condition, that of distemper,” writes P. M. Rattansi. “His task was essentially that of deciding how best to remove the humoral excess or to supply that which was deficient,” p. 52.

sparing the rest of the animals from its poison. The weasel was thought one of the few beasts who could consume the snake's deadly venom with immunity (this motif also appears in the famous *Hunt of the Unicorn* tapestries, c. 1500, The Cloisters). Throughout the Isola Bella series, the winding stream serves as a locus for imagery contrasting filth and purity, which coexisted both within the body and the natural landscape. The stream flows through most of the seven weavings, uniting the Isola Bella chamber into a single cohesive landscape. Throughout the series wild beasts congregate around and in it, just as the passions, which one early modern commentator called "the affections that happen in the blood," were imagined to collect in and move through the body.

In the smallest tapestry (fig. 112), the stream separates the lust-tormented panther on the left from two other panthers hungrily pursuing terrified monkeys among the trees on the opposite bank. "Egyptians paint a lion eating an ape to signify a sick man curing himself," explains Gesner.⁵³⁹ The tapestry seems to illustrate this theme of self-cure. If a lion meets an ape, Gesner explains, "he devoureth and eateth his flesh, for apes are "the principal remedy and medicine which he receiveth against all his diseases, both in youth and age." The phenomenon, well documented in early modern zoologies, beautifully encapsulates the theme of the Isola Bella series, and in fact it is illustrated several times within the set.⁵⁴⁰ Like the tumultuous passions within postlapsarian man, a menagerie of beasts roves unchecked through this forest, where battles periodically erupt and antipathies between various creatures are played out. Yet the landscape, like the interior of man, contains certain natural antidotes for the maintainance of

⁵³⁹ Gesner/Topsell p. 5. Distinctions between lions, leopards, and panthers were not consistently made either in the bestiary or in early modern zoology; the same characteristics and behaviors were attributed at different times to all of these beasts. Lions and panthers are used somewhat interchangeably within the Isola Bella tapestries: a medallion in the border of another tapestry in the set (fig. 132) repeats exactly the same composition of apes and predatory cats discussed here, but in the medallion the cats are lions.

⁵⁴⁰ See also Franzius pp. 46-7.

equilibrium among its fractious parts. The tapestry depicts the natural landscape as tumultuous but balanced, with a lust-crazed beast vividly depicted on the left but the fever's antidote depicted on the right.

The motif of lions or panthers hunting apes – an emblem for a sick man healing himself – appears repeatedly and with startling violence in the *Isola Bella* series. In another weaving from the set (fig. 111), panthers trap and disembowel their simian prey with exaggerated ferocity. With the exception of the archetypal male/female, lion/panther pair pictured in the smallest weaving and discussed above, a sexual pairing that was well known from early modern physiognomic literature, lions and panthers are used somewhat interchangeably within the *Isola Bella* tapestries as predators. In one of the series' border medallions (fig. 132), the same composition of apes and predatory cats is replicated in miniature grisaille, though here the cats, for whatever reason, lack the panthers' spots.

Indeed, among the best known examples of animals' innate medical knowledge was the craving of a sick leopard or lion for the blood of apes. The motif appears in numerous sixteenth-century Flemish tapestries, often in the border or in the periphery of the central scene. It can be found among the *Wavel* verdure (fig. 90).⁵⁴¹ A panther preying upon apes also appears in the *Getty Game Park Set A*, a now-dispersed series of five animal landscapes with emblematic borders known through the *Getty Photo Study Collection*; one weaving from this set features a leopard at the base of a tall tree, hunting the tiny apes that cling to the upper branches.⁵⁴² In another example, a set of three Flemish garden landscapes sold by the *Galerie Drouot* includes an

⁵⁴¹ The *Wavel* tapestry bears the mark of Brussels weaver Frans Ghieteels (active from 1561 to at least 1581). See Szablowksi pp. 252 and 468. Regarding the weaver's mark, see Delmarcel p. 365.

⁵⁴² "Game Park: Set A," *Getty Photo Study Collection*: image available at www.luna.getty.edu/images/tapestries/0240984. The same cartoon was clearly used, with slight alterations, for a tapestry included in the photographic archive at the *Musées Royaux d'Art et d'Histoire*, 1550.337, and attributed to Frans Geubels. The two goats are also reproduced in a tapestry bearing the mark of Frans Geubels; image available at www.luna.getty.edu/images/tapestries/0236885.jpg.

indeterminate but fierce feline pouncing upon a splayed ape within its border of zoological emblems.⁵⁴³

Furthermore, the same grouping of animal species found in the smallest Isola Bella tapestry – not only the panthers hunting monkeys but also the goat, parrot, and/or the lion – also appears, with some minor variations, in a variety of other Flemish tapestries produced in the latter half of the sixteenth century. While this may be simply a function of one or two *modelli* circulating among weavers, the tapestries differ widely in style and quality, opening the possibility that this complete, peculiar animal grouping was a recognizable tableau with a familiar meaning for viewers: a kind of composite emblem in itself. For example, a verdure with animals, stylistically quite dissimilar to the Isola Bella tapestries and attributed to the Pastrana workshop of émigré weaver Frances Tons, features a forest clearing with a goat, a weasel or otter wading through a stream with a fish in its jaws, apes clustered around the trunk of a tree, and a large lizard.⁵⁴⁴ A tapestry at the Château de Puyguilhem near Villars includes many elements from the same cartoon (fig. 155); it is one of a surviving pair, and its companion tapestry features the archetypal lion/leopard (male/female) conflict (fig. 156).⁵⁴⁵ A verdure tapestry associated with the Galleria San Giorgio in Rome depicts goats overlooking a hillock, a bearded lion with a

⁵⁴³ Photographic tapestry archive of the Musées Royaux d'Art et d'Histoire, Brussels, MRAH 1575.241.

⁵⁴⁴ Getty Photo Study Collection: image available at www.luna.getty.edu/images/tapestries/0236881. As Viale points out, the tapestry is a partial weaving of a sketch attributed to the workshop of Pieter Van Aelst, and preserved in the British Museum; see Viale pp. 111-2. This tapestry may have been originally purchased by Philip II of Spain for one of his courtiers, Duke Eric II de Brunswick-Lüneburg (1528-1584). The 1598 Spanish royal inventory lists a set of ten “bocages et chasses” bought for the duke, possibly on the occasion of his second marriage, and Guy Delmarcel notes that Philip also purchased a set of *Nine Worthies* for Duke Eric through Cardinal Granvelle; see Delmarcel, “Le roi Philippe II d’Espagne et la Tapisserie,” *Gazette des Beaux-Arts* ser. 6, n. 134 (1999) p. 167. The borders of the animal tapestry feature central medallions on three sides and very closely resemble (though they do not match exactly) the borders of a tapestry from a set of *Nine Worthies* woven in Brussels, pictured in Heinrich Göbel, *Tapestries of the Lowlands* (New York: Hacker Art Books, 1974), figs. 82-4.

⁵⁴⁵ The two erect snakes in the middle ground of this tapestry closely resemble those of another from the Isola Bella series (fig. 111).

captured ape, and a second ape crouching high in the nearby tree branches.⁵⁴⁶ A tapestry in the Stadhuis Middleburg depicts a leopard attacking a captured ape.⁵⁴⁷

Zoological imagery of diseases and cures appears not only in the smallest weaving but throughout the Isola Bella set. The tapestry depicting two erect serpents, for example, offers a fearsome image of animals serving as instruments of divine justice. The tapestry's inscription "The teeth of beasts, and scorpions, and serpents, and the sword taking vengeance upon the ungodly unto destruction." The same pair of serpents appears in identical form in a border medallion elsewhere in the set, beneath the motto, SIC LICET MEDERI, "Thus we are permitted to heal." The serpent, a creature whose powerful venom was thought to be both deadly poisonous and to have coveted medicinal properties, is imagined as a potent antidote, to rid the spiritual body of impiety.

Like the body, the natural landscape is depicted in the tapestries as both clean and unclean. The stream running throughout the series is a locus for anxiety about poison and purification: it is purified by a unicorn's horn (fig. 123), while a weasel/otter protects its purity by devouring a serpent (135). Serpents themselves are shown releasing their venom before entering the water and shedding their skin immediately upon leaving the water (figs. 137-138). Similarly, in the final tapestry of the set, which depicts the conquest of the passions, a lioness is "baptized" by wading chest-deep through the stream (fig. 136).

The beasts were said to instinctively discern the cures nature had provided for their pains, able to seek out the proper palliative flora and fauna from birth. That animals possessed this knowledge inherently, without practice or instruction, deeply impressed early modern writers and fueled claims, both earnest and facetious, that beasts were morally and/or physically superior

⁵⁴⁶ Photographic tapestry archive of the Musées Royaux d'Art et d'Histoire, Brussels, no. 1550.450.

⁵⁴⁷ Published in M. J. Onghena, *op. cit.*, p. 19.

to man.⁵⁴⁸ These claims originated with Plutarch's *Gryllus*, a dialogue between Ulysses and a man whom Circe has transformed into a pig. The text formed the basis for numerous humanists' rhetorical explorations of the comparative value of animal and human life.⁵⁴⁹ The claims are repeated by Virgil, by Giovanni Battista Gelli in his dialogue *Circe*, and numerous other texts circulating in the sixteenth century, perhaps most colorfully in a long passage of Montaigne's in *Apologie de Raymond Sebond* (c. 1576). The passage is part of Montaigne's attempt to subvert one of humankind's central claims to superiority over beasts: his grasp of *scientia*, which was tied closely to his will.

Why do we say, in the case of Man, that distinguishing plants which are useful for life or for medicines from those which are not (recognizing, say, the virtues of rhubarb or polypody) is a sign that he has scientific knowledge based on skill and reason? Yet the goats of Candia can be seen picking out dittany from a million other plants when they are wounded by spears; if a tortoise swallows a viper it at once goes in search of origanum as a purge; the dragon wipes its eyes clear and bright with fennel; storks give themselves salt-water enemas; elephants can remove darts and javelins thrown in battle from their own bodies, from those of their fellows, and even from those of their masters... they do so with more skill than we ever could while causing so little pain.⁵⁵⁰

The examples of animal expertise in "physick" enumerated by Montaigne and by Plutarch before him appear frequently in Flemish tapestry of the sixteenth century. The Vienna *Romulus and Remus* series, for instance, includes an emblem of a tortoise eating wild herbs to fortify itself against serpents (which were believed to harm less by bite than by breath); the inscription reads

⁵⁴⁸ Boas, *The Happy Beast*, pp. 6-8 and 25-36.

⁵⁴⁹ Boas, *The Happy Beast*, p. 25.

⁵⁵⁰ Montaigne p. 517.

NE CONTAGIA LEDANT.⁵⁵¹ The Isola Bella set also includes an emblem of a dittany-munching deer pierced by an arrow with the motto MEUM IMMEDICABILE, “my (wound is) incurable,” which in this case provides a visual echo of the lion pierced by a unicorn’s horn in the tapestry’s center, which itself recalls the lance wound in the side of Christ. Another of the emblems in the same tapestry border features a pair of lizards eating the leaves of an unidentified herb with the motto, HINC NOBIS SALUS, “We get our health from here.”

⁵⁵¹ A detail of the emblem is published in Tervarent, pp. 36-7 and fig. 31. Another tapestry series by Frans Geubels, the five-piece Game Park A set from the French and Company archive at the J. Paul Getty Museum, includes this emblem as well; see <http://luna.getty.edu/images/tapestries/0240984.jpg>. The emblem is in the lower left.

CONCLUSION

The Isola Bella landscapes are implicitly equated with the human body through an iconography of cures and ills that is also found in early modern natural histories and in treatises on the passions. The result is a woven forest wracked with discord in the same way that the postlapsarian Christian body was imagined to be. The tapestries' biblical inscriptions warn the viewer against falling into bestiality, above scenes vividly depicting the violence and disorder wrought by unrestrained passion. Thus the Isola Bella landscapes consistently emphasize a Christian ideal of hard-won self-control rather than undisturbed apathy. Since the passions were conceived of as humoral excess that resulted in physical illness, and an equivalence was often drawn between the epitomic human body and the natural landscape, it is not surprising that the tapestries' iconography conflates virtue and physick.

Previous interpretations of the Isola Bella tapestries have divided the beasts into good and evil camps. For example, Mercedes Ferrero Viale sees in the tapestry depicting two vengeful serpents an image of divine justice, but she casts the predatory panthers as symbols of the Church, and the apes they devour as the sinners who are ultimately damned.⁵⁵² I have argued that it may be more fruitful to approach the Isola Bella landscapes as representations of the passions that reflect a profound ambivalence toward these "necessary irritants," to use Michael Schoenfeldt's phrase, within early modern Christianity. There are no strictly evil passions, only agitations, perturbations of the body and soul which are "divinely sanctioned by the order of creation," and sharpen the virtues as long as they are not allowed free rein.⁵⁵³ Paster has noted in early modern discourses an "ethical neutrality" reserved for the desire of predators such as wolves and lions to hunt and kill other animals; the cruelty built into natural cycles of life and

⁵⁵² Viale pp. 89-91.

⁵⁵³ Schoenfeldt, "'Commotion Strange,'" p. 52.

death seems to have affirmed early modern observers' view of the passions as ambiguous.⁵⁵⁴

Indeed, several of the Isola Bella tapestries, as well as animal tapestries in other series such as the Wawel verdure, seem designed to highlight this poignant moral ambiguity. For example, a lioness crouched domestically in her den, suckling her cub, is depicted surrounded by the scattered bones of previously slaughtered prey. Her mate drags home a fresh kill, whose coiled body is posed to perfectly mirror that of the small nursing cub (fig. 110). Within the Wawel series, a leopard or panther woven from the same design guards her cubs as her mate battles a bear (fig. 93); another weaving from the same set casts the panther pair as predators before a family group of dragons (fig. 81). All of the beasts are fierce, all have young and all must eat. Presenting the beasts as families deliberately complicates any good/evil template: searching for a "protagonist" in such scenes simply does not make sense.

The tapestry inscriptions at Isola Bella insist on human control and dominion over animals, even as Gesnerian zoology proposed closer affinities between man and beast that were both psychological and physical. Like the frontispieces of illustrated Dutch fable books (figs. 145-146), in which Aesopian animals impersonate human virtues and vices on stage, animal tapestries like the Isola Bella set depict the internal moral dilemmas of a Christian viewer. Unlike the Aesopian menagerie, however, the tapestries' woven animals inhabit a fully developed natural landscape that sixteenth century mystics, zoologists, and physicians described as akin to the microcosmic human body.

The Isola Bella tapestries do not represent an event or a narrative, but rather a sort of perpetually tumultuous environment. These monumental landscapes arguably reveal something about how early moderns imagined their interior selves, both spiritual and physiological. Though the tapestries utterly lack heroic human figures, the human body lurks throughout the set: first, in

⁵⁵⁴ Paster, "Melancholy Cats," p. 127.

the anthropomorphized faces and bodies of the “nobler” four-footed animals depicted; also, in the tapestries’ inscriptions, which invoke and then remind the human viewer of his divinely-ordained privileged status over the beasts; and finally as the paragon of all nature described in canonical Christian writings, as man the epitome, encompassing every creature within himself. The tapestries depict nature as fraught with conflict as a result of, and as a reflection of, the inner moral conflicts plaguing postlapsarian man. An early modern Christian would see in these massive woven combats elaborate mirror images of the fallen human being: volatile, violent, wracked by passions.

Catholic humanist Juan Luis Vives (1492-1540), writing on the passions in 1538, mapped the integrated hierarchy of God, nature, and the human body in this way: “This is the order of Nature, that Wisdom be the rule of the whole, that all creatures obey man; that in man, the body abides by the orders of the soul, and that the soul itself comply with the will of God.”⁵⁵⁵ The Isola Bella tapestries, closely associated with powerful Catholic patrons throughout the early modern period, vividly represent the same hierarchy of creatures and of faculties, and the same command to subordinate the animal passions. The tapestries picture postlapsarian man’s chaotic internal state as part of the grander natural order. Thus they depict the passions as integral to divine creation and to natural history.

⁵⁵⁵ Juan Luis Vives, *Opera omnia*, vol. I 1216a; IV, 401, quoted in Carlos Noreña, *Juan Luis Vives* (The Hague, 1970), and in Harrison, “Reading the Passions,” p. 52. Vives’ work was internationally renowned in his lifetime; he resided mostly in Flanders after 1512. See also Noreña, *Juan Luis Vives and the Emotions* (Carbondale: Southern Illinois Press, 1989).

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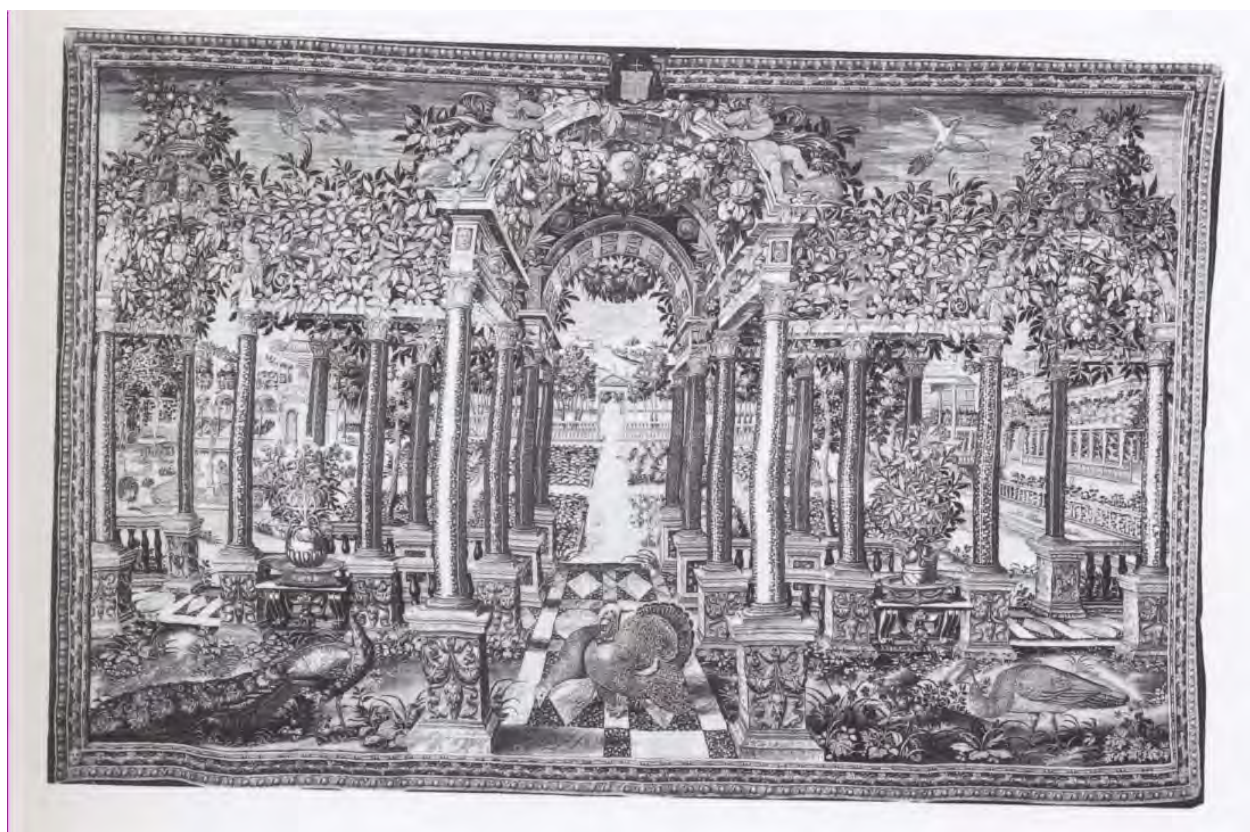


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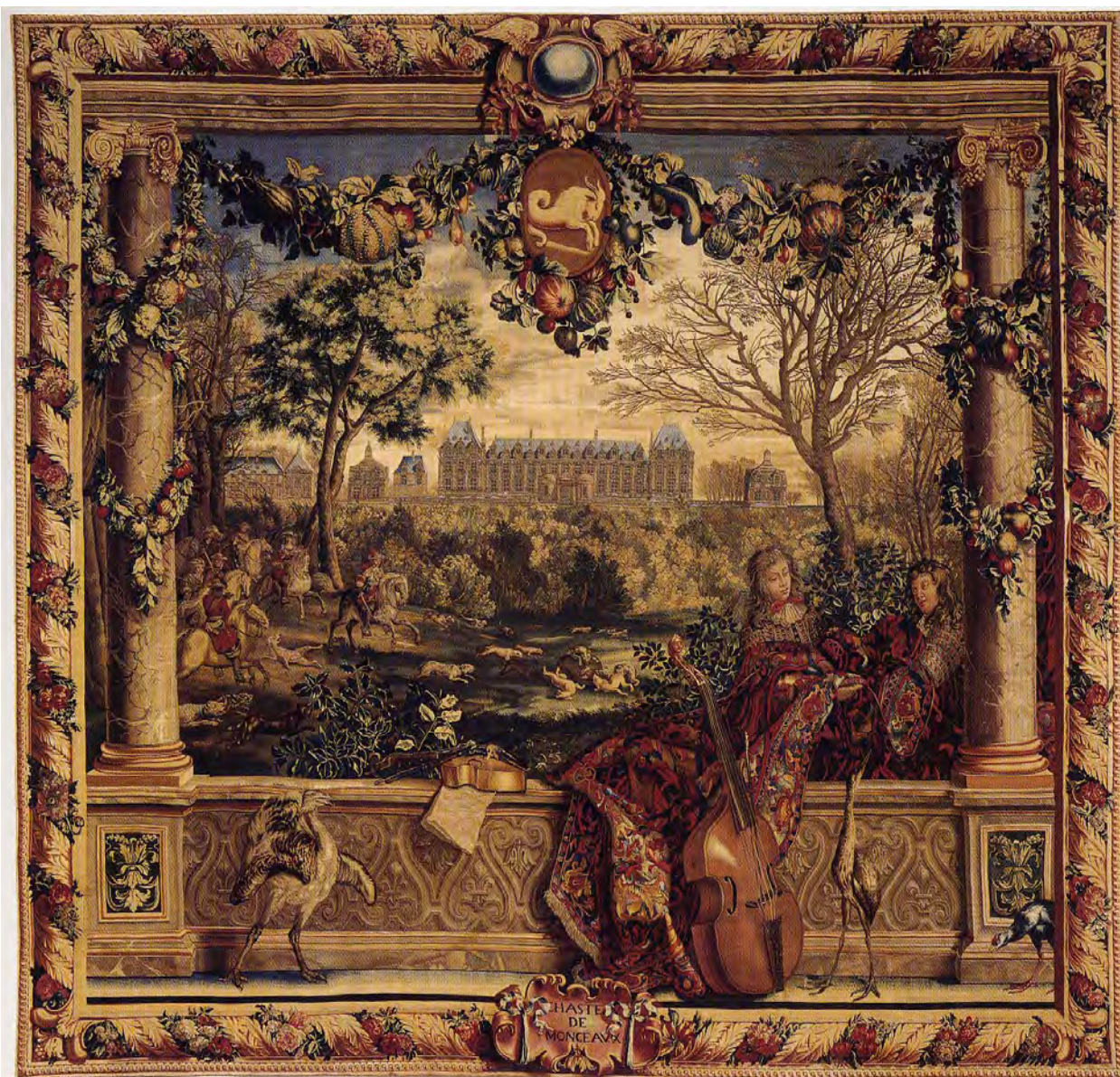


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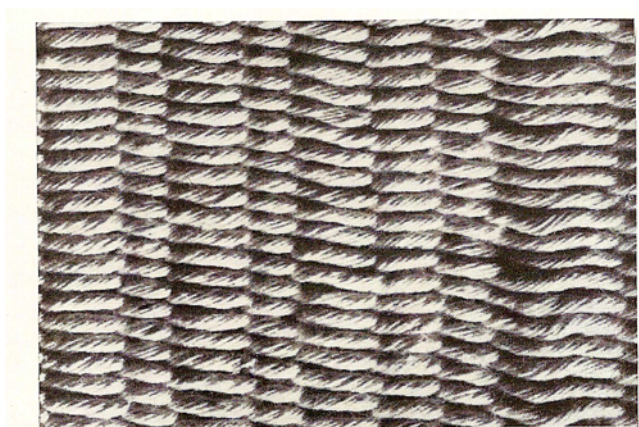


Figure 6



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Figure 10



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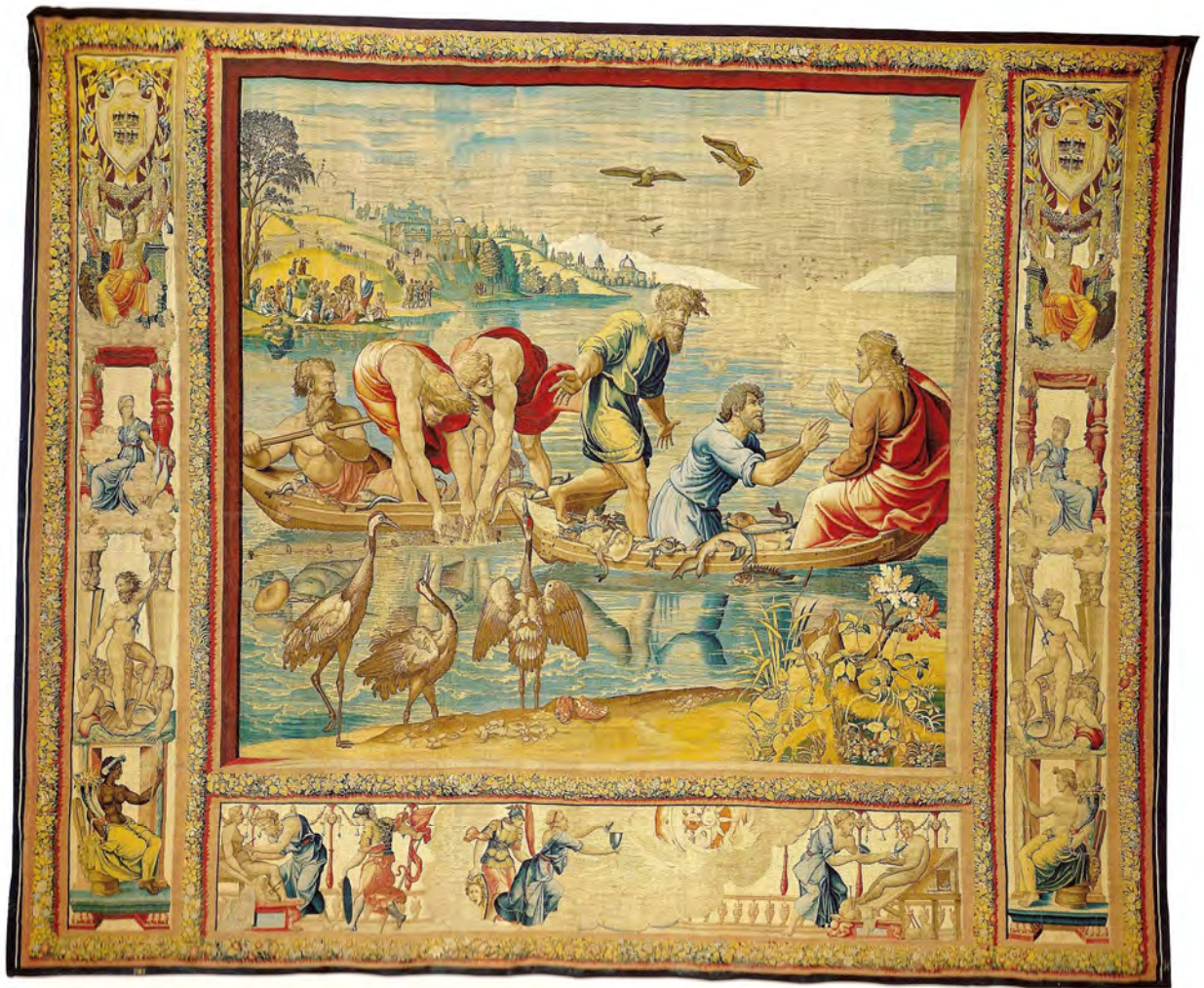


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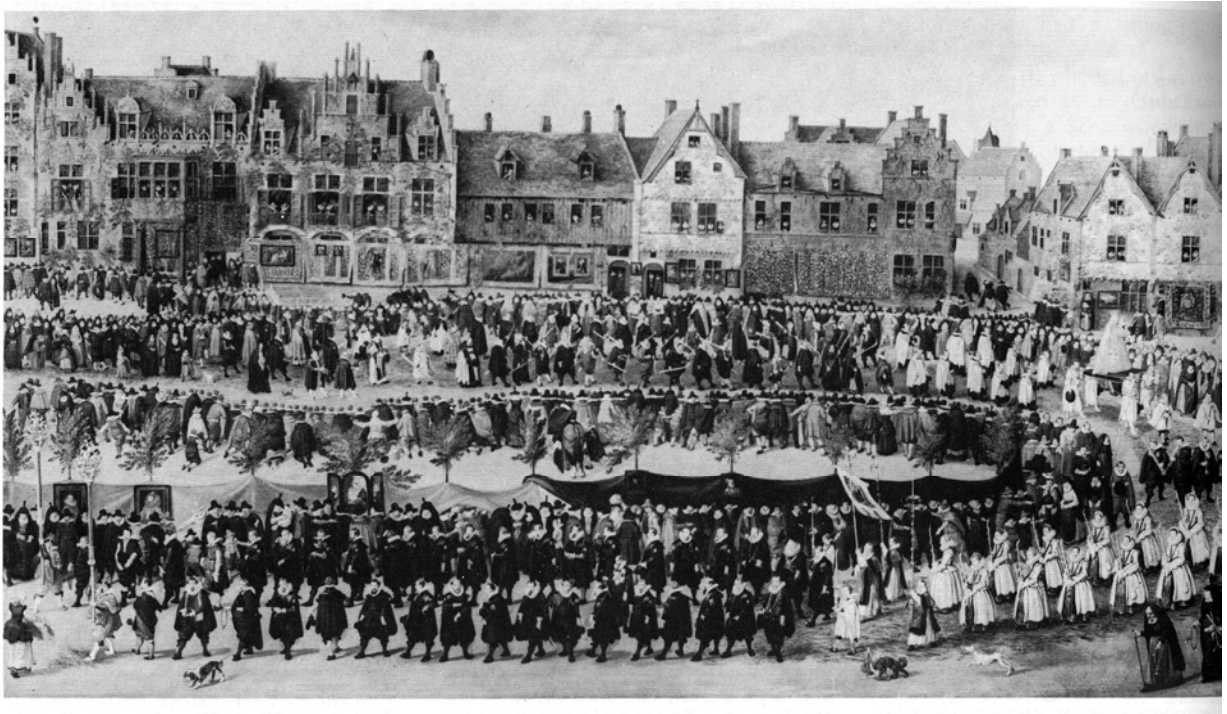


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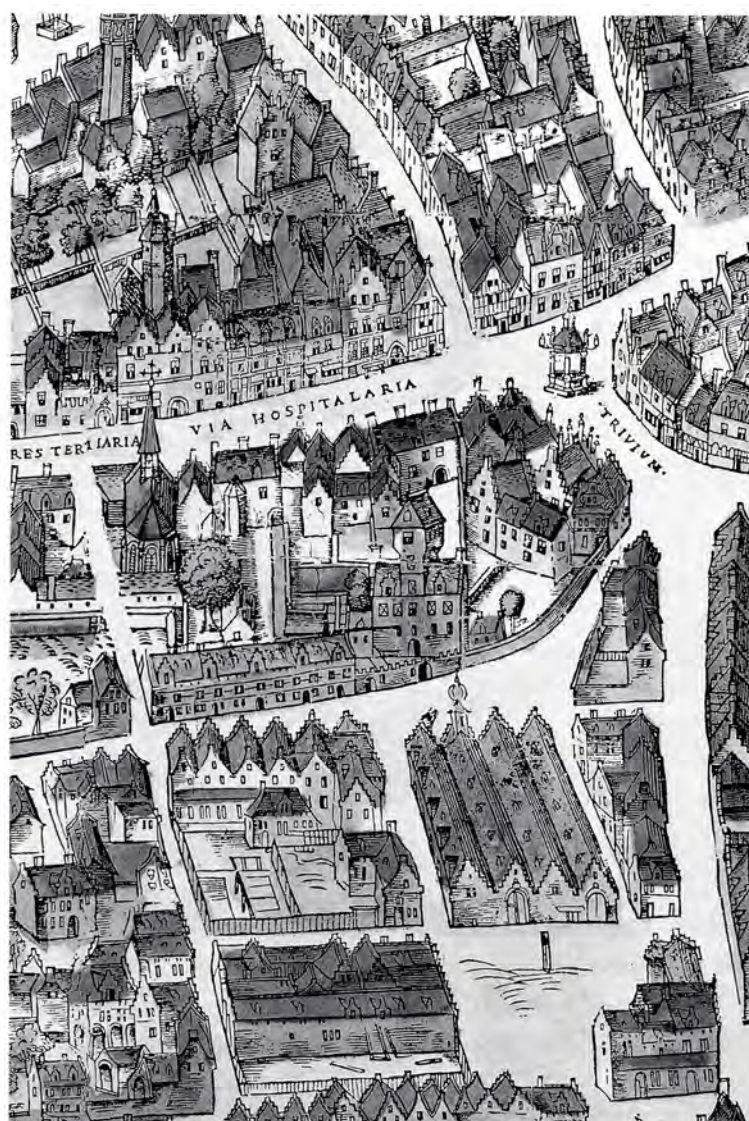


Figure 15



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Figure 20



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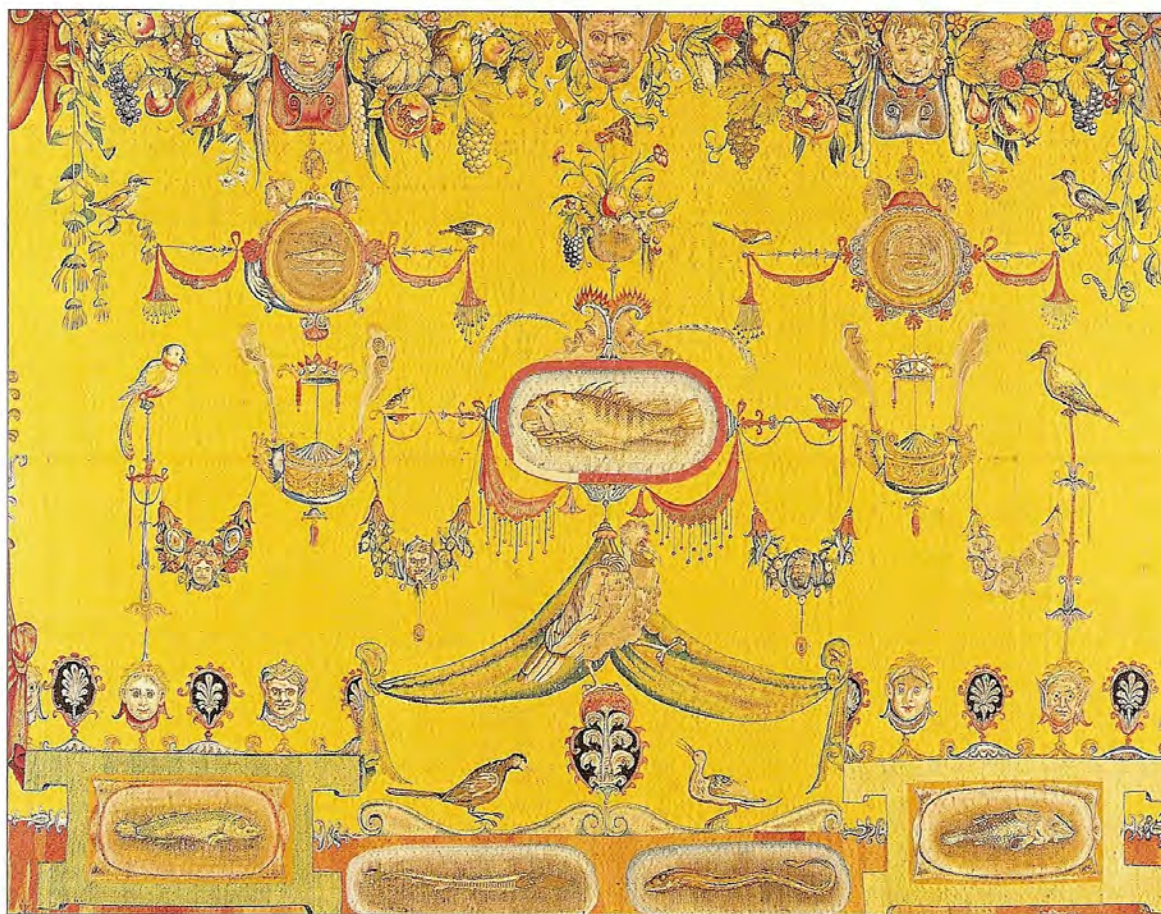


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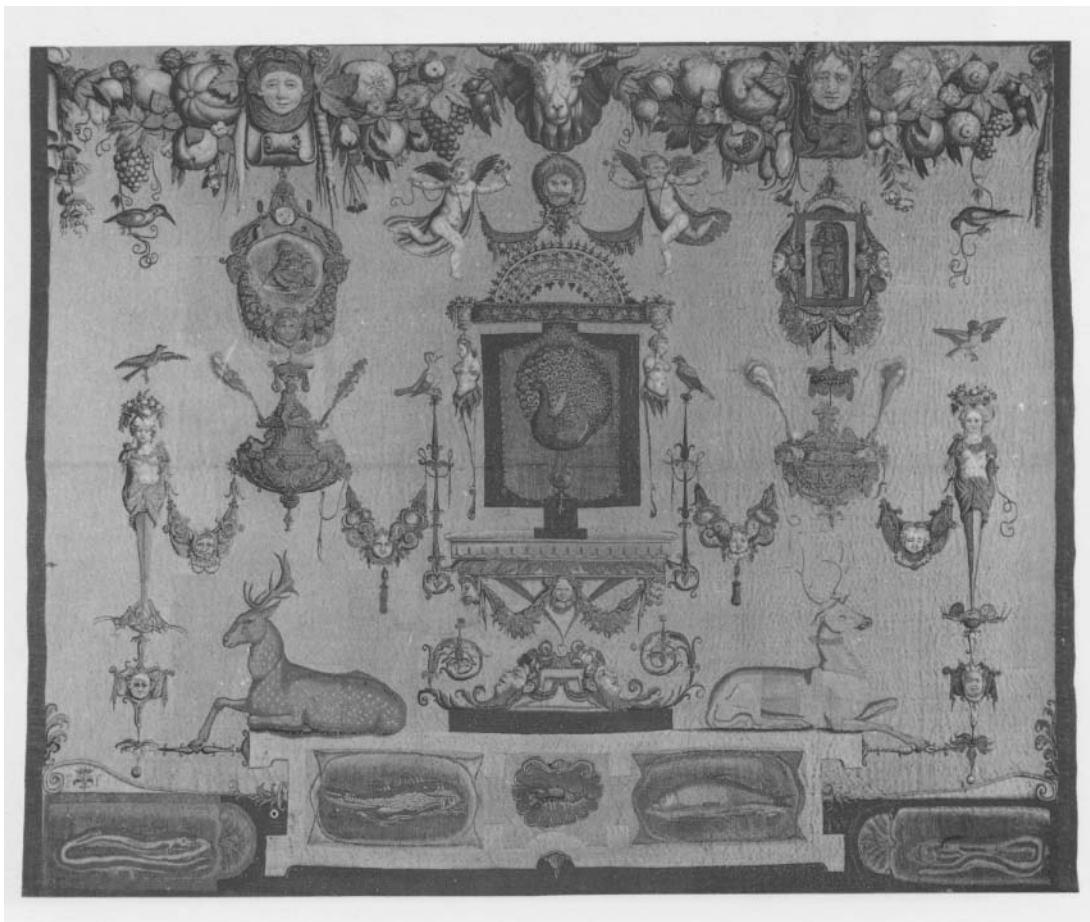


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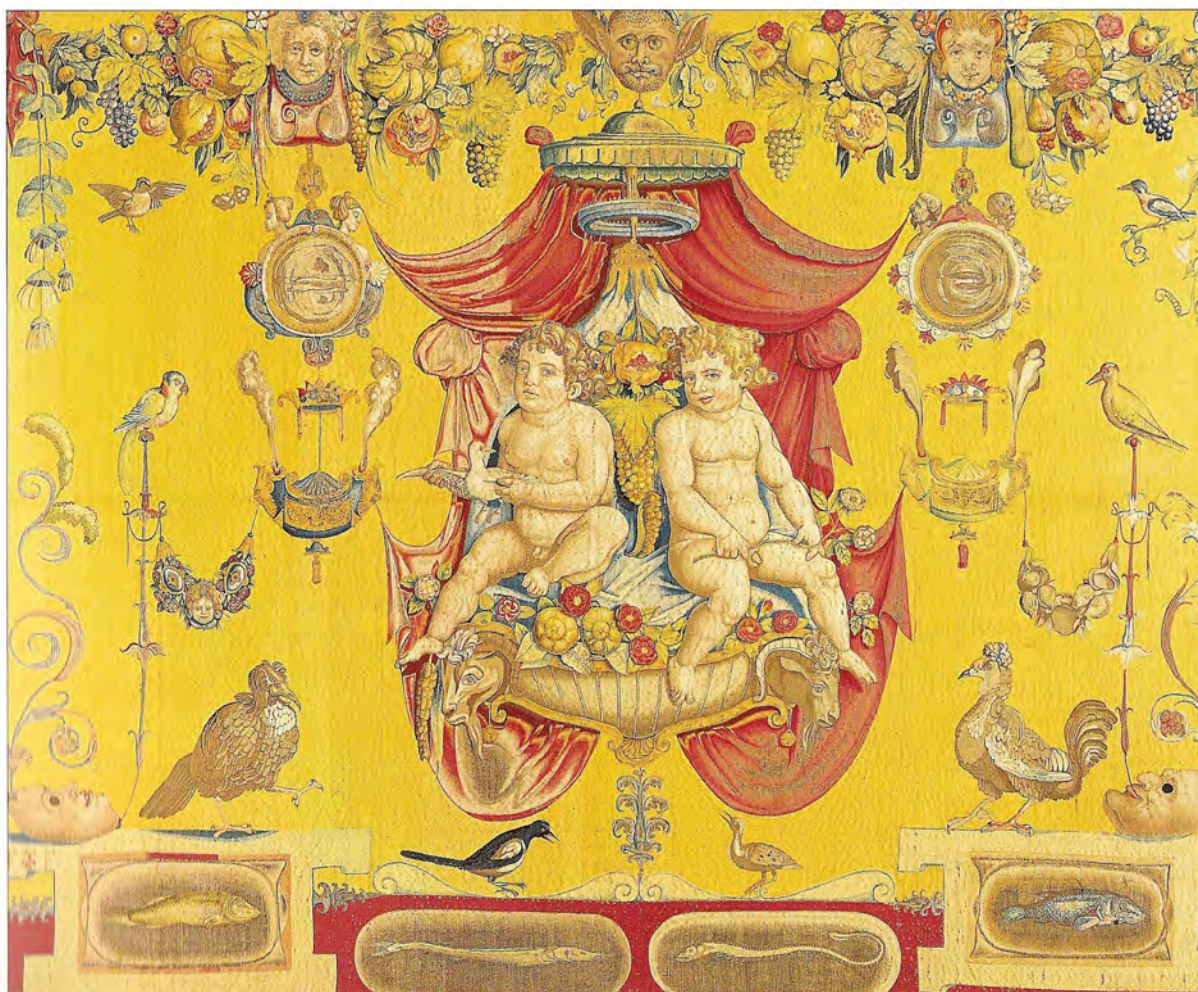


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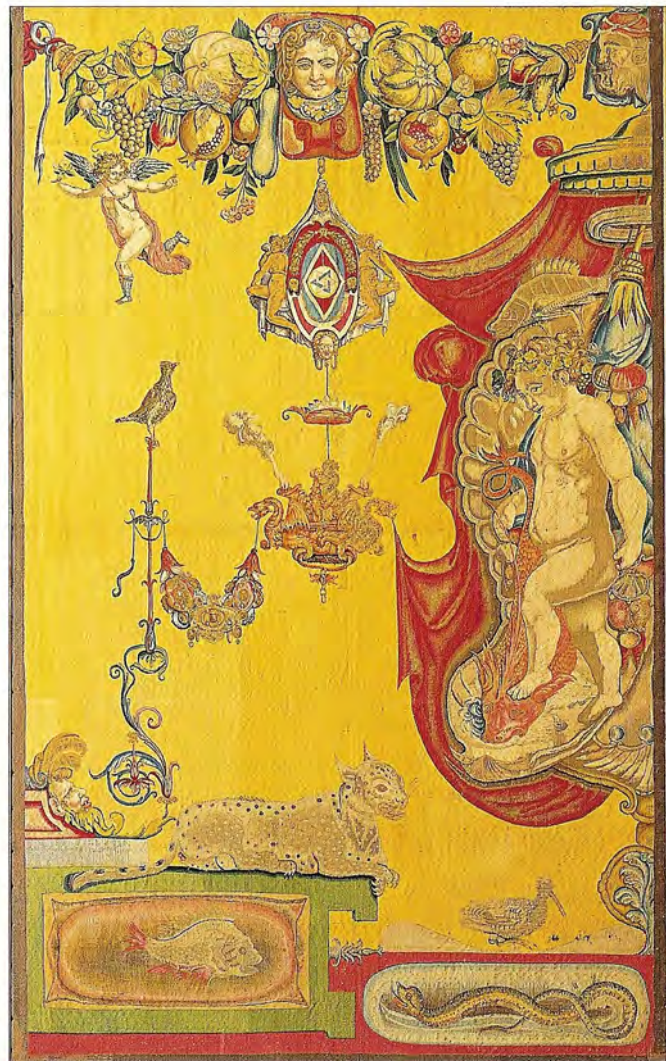


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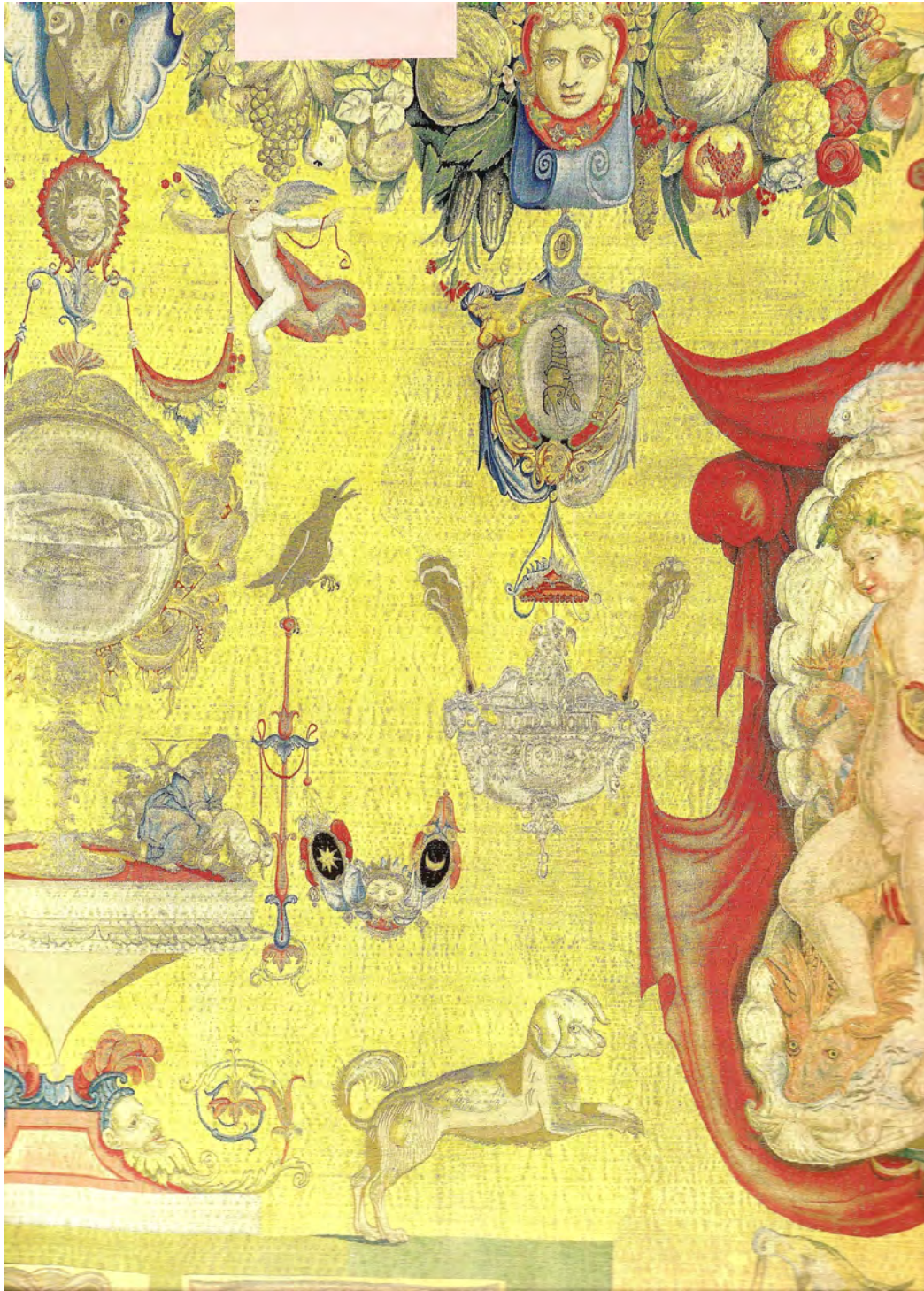


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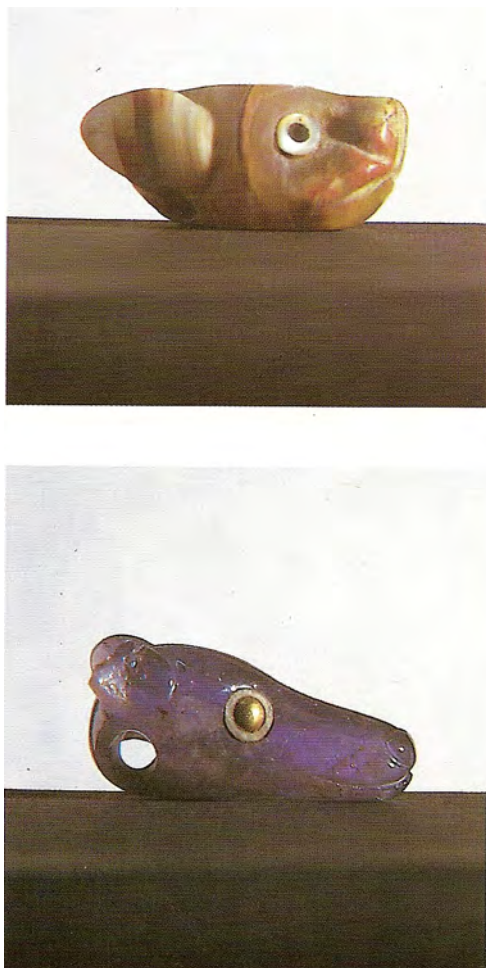


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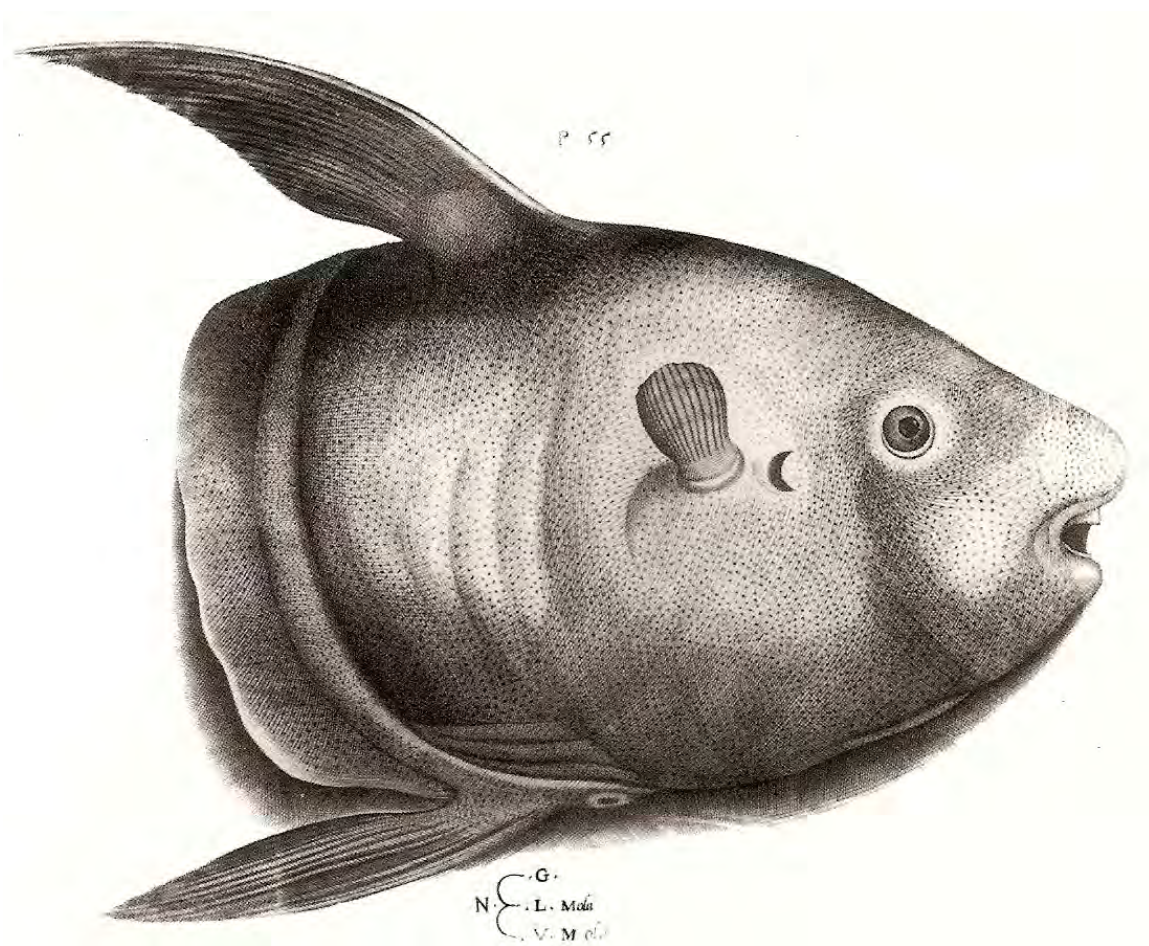


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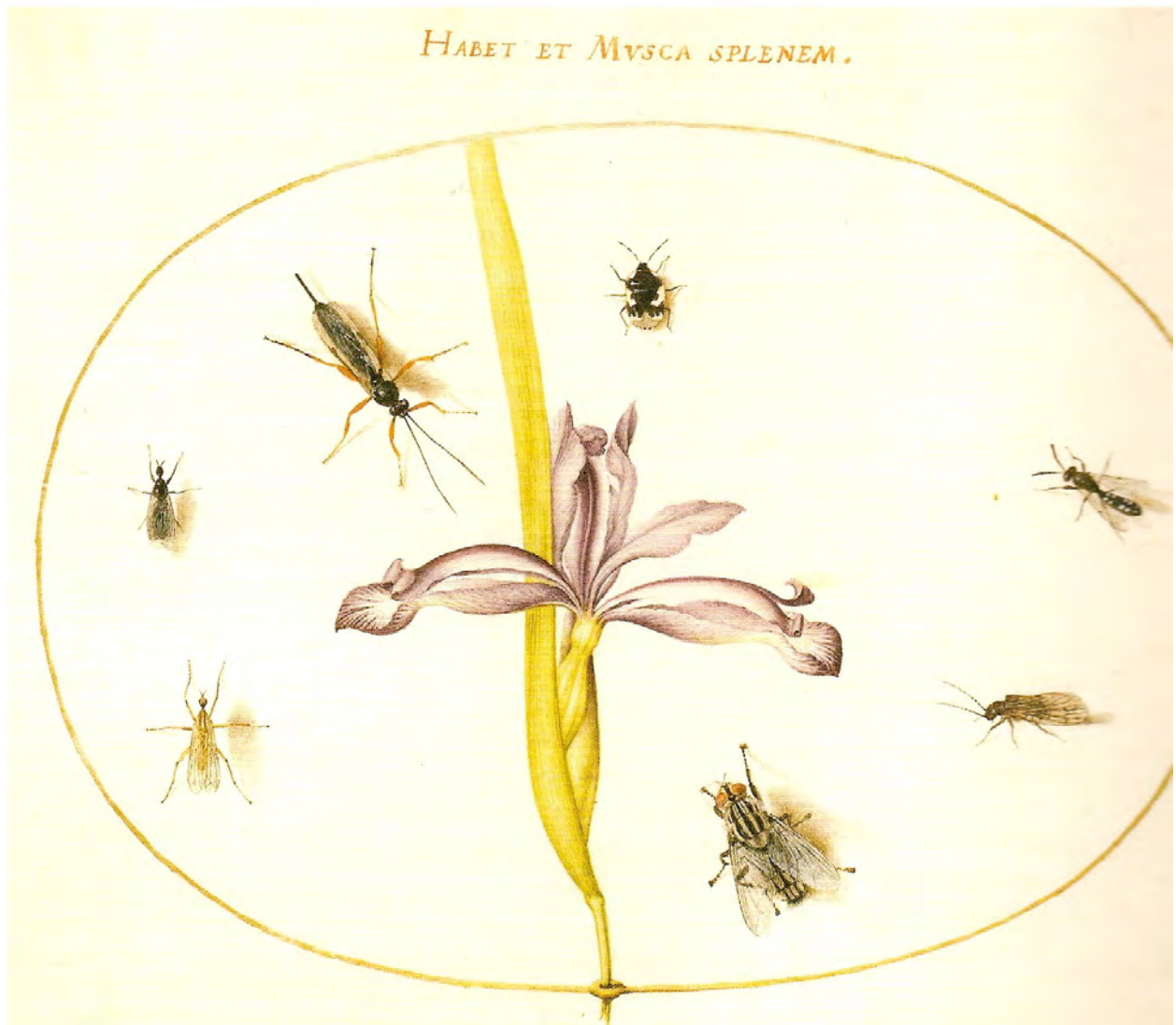


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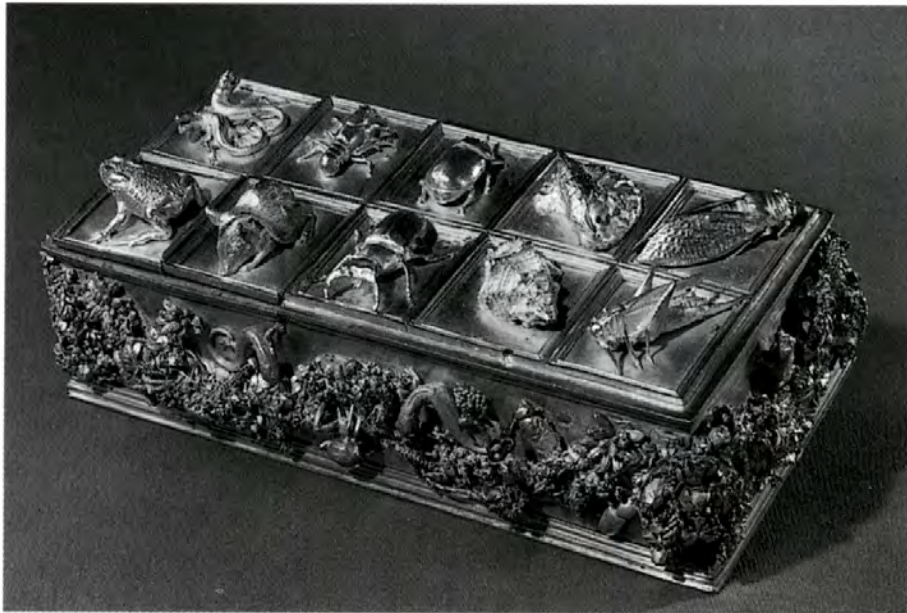


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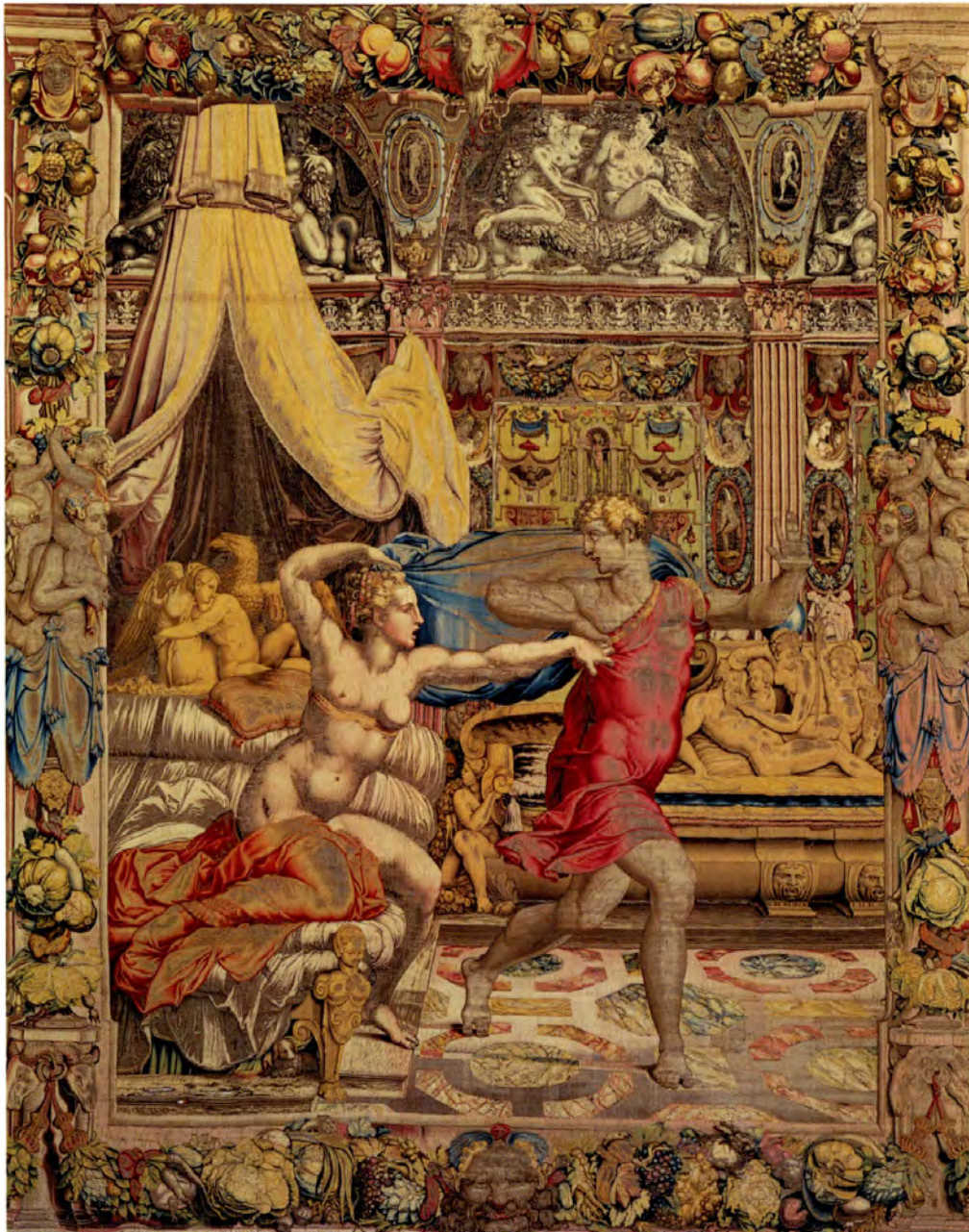


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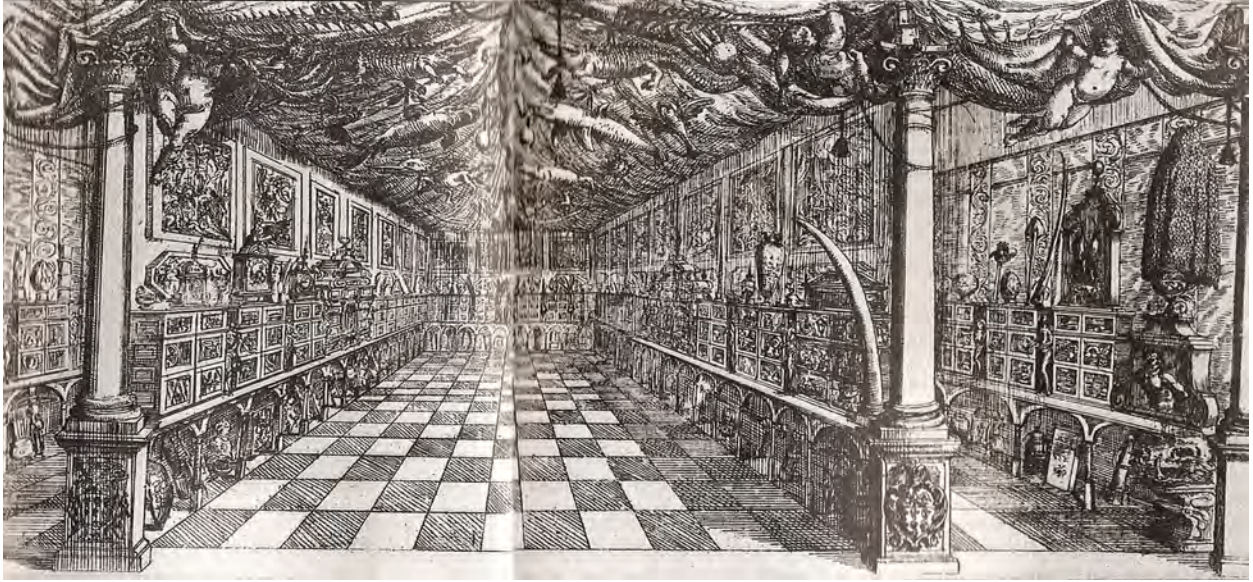


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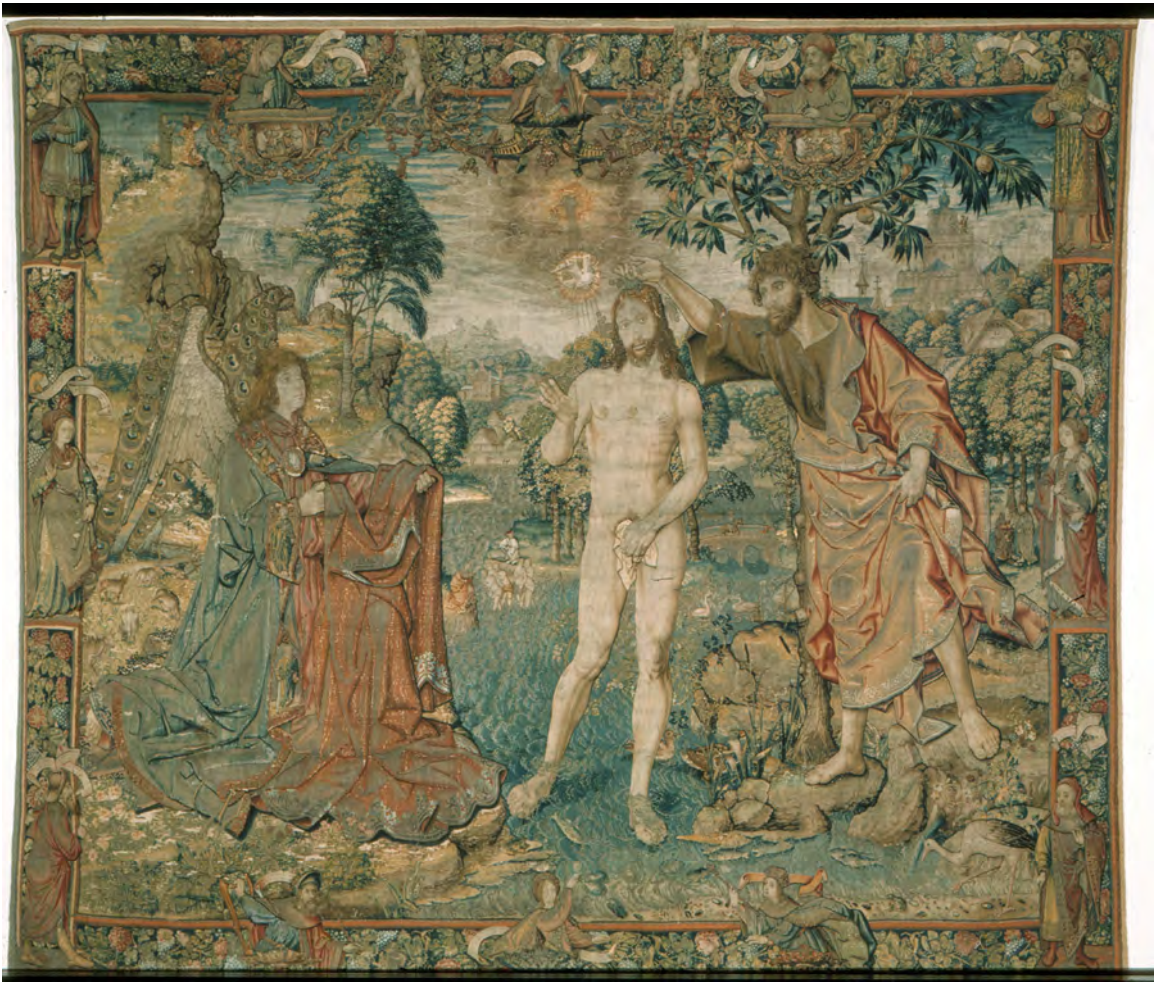


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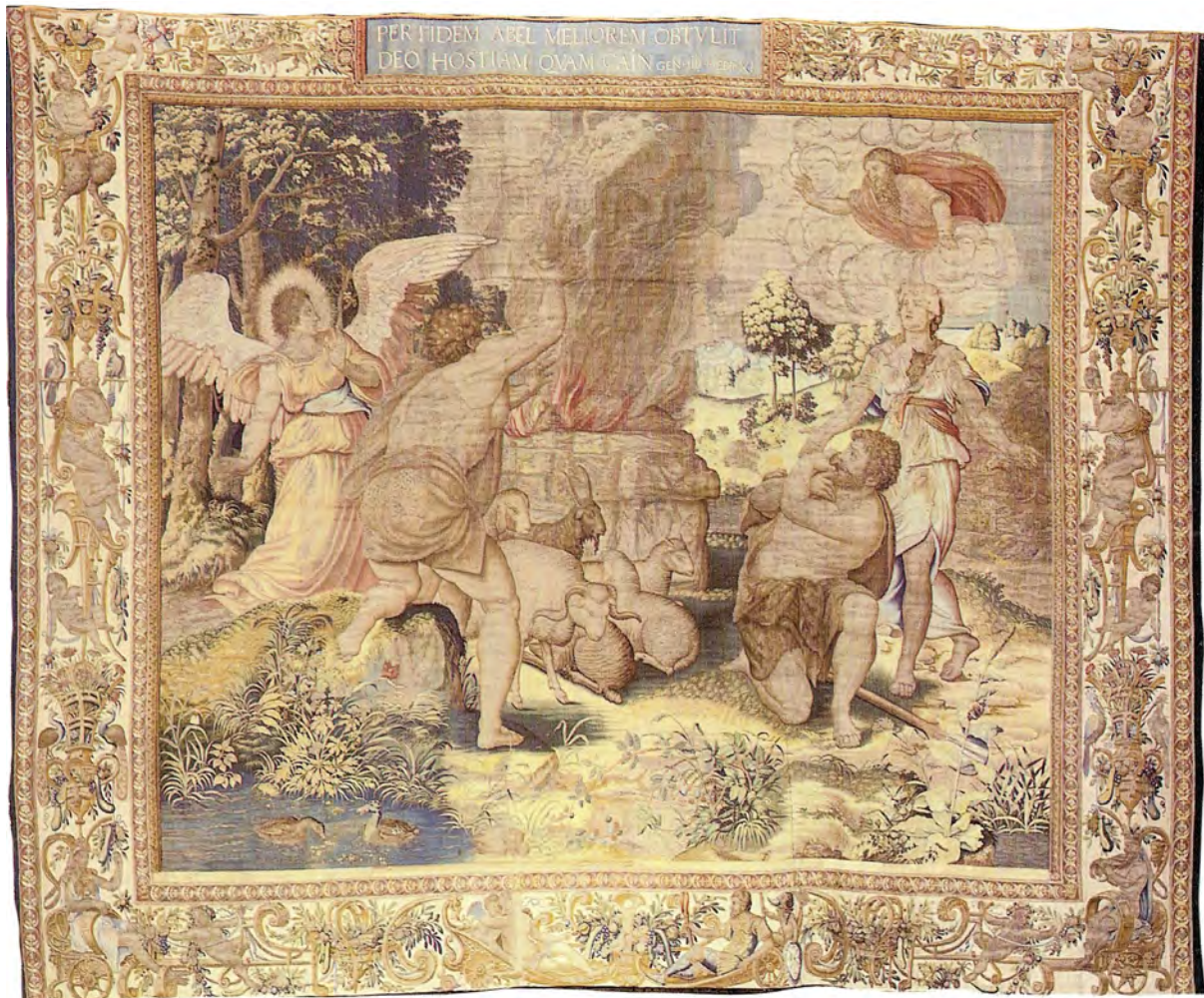


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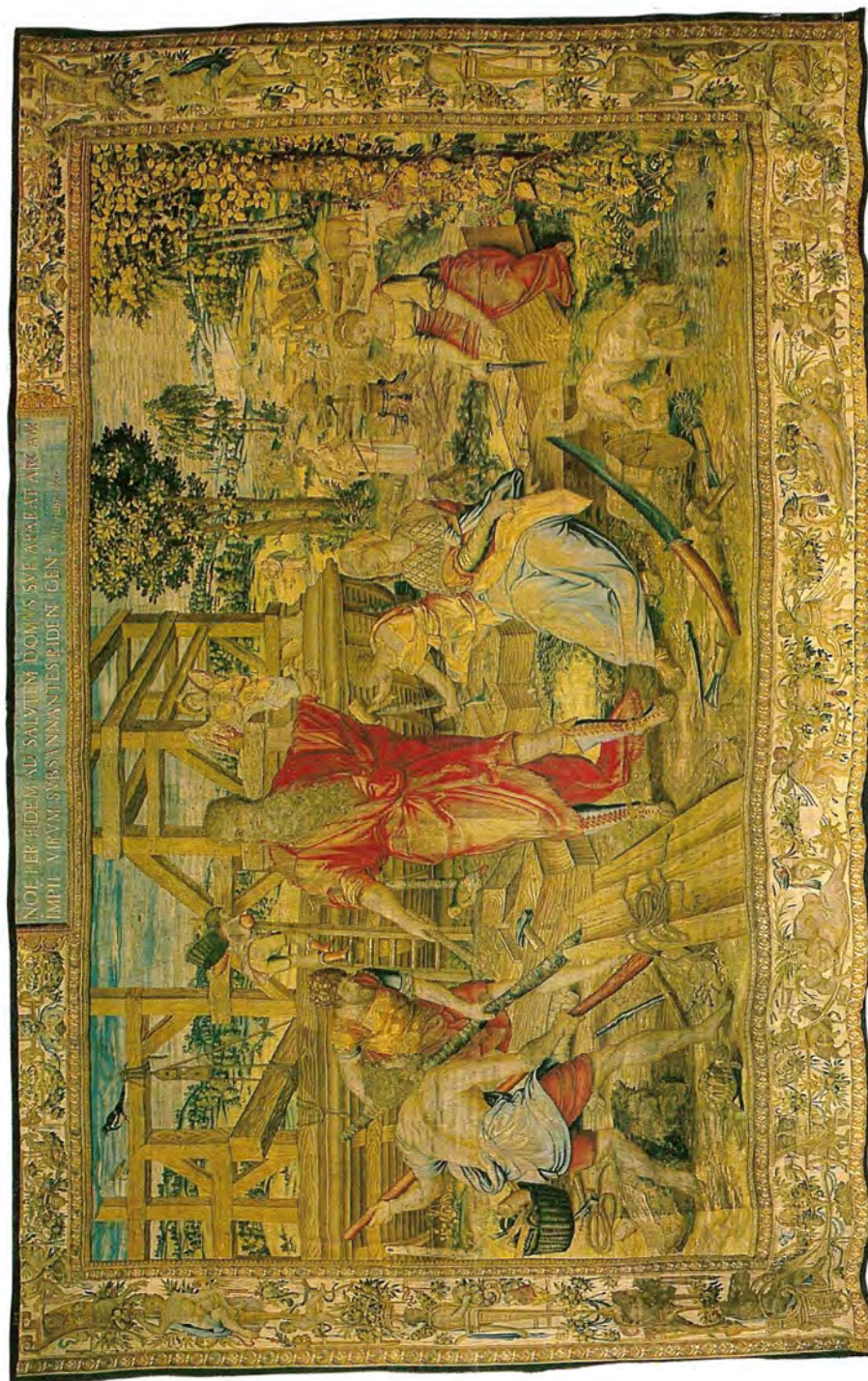


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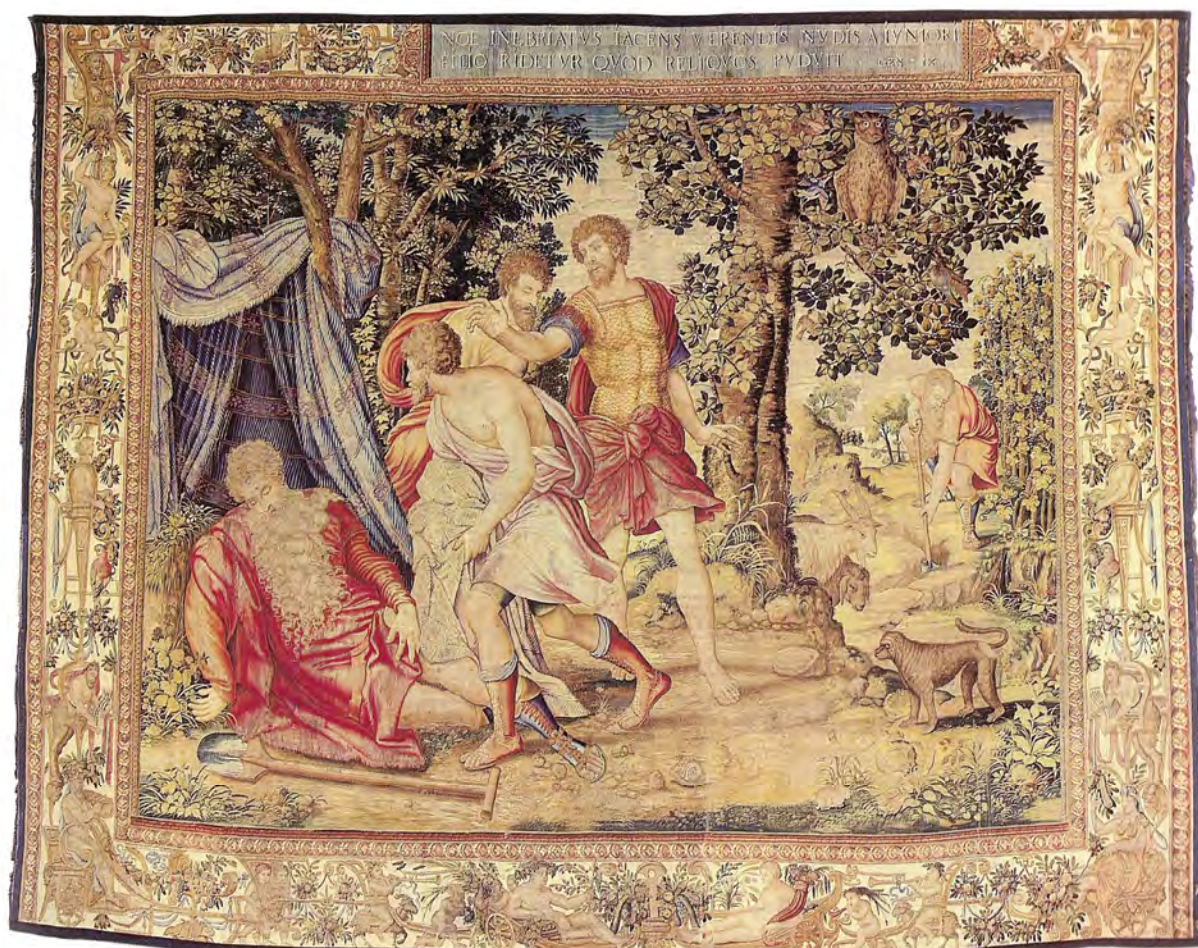


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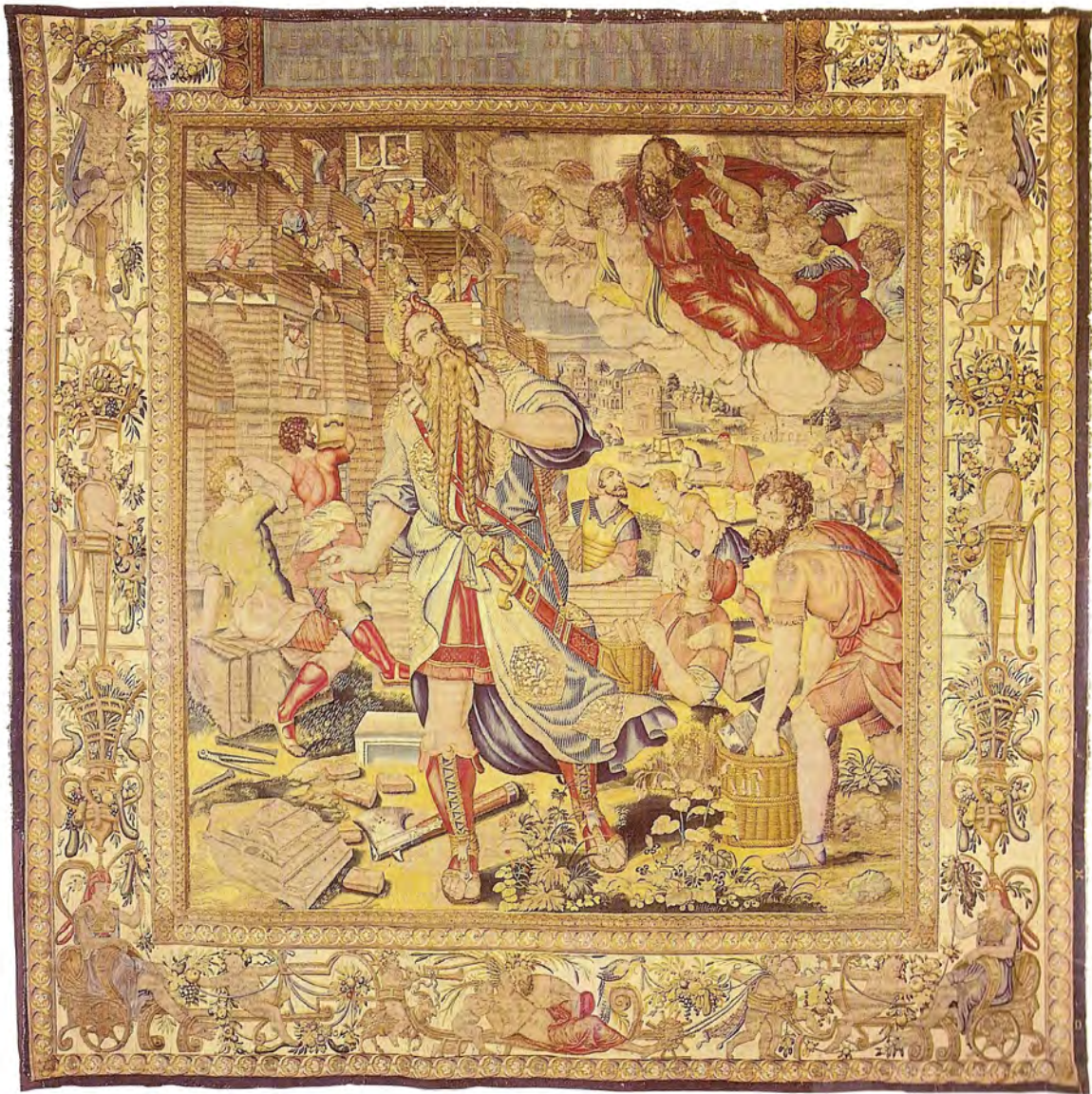


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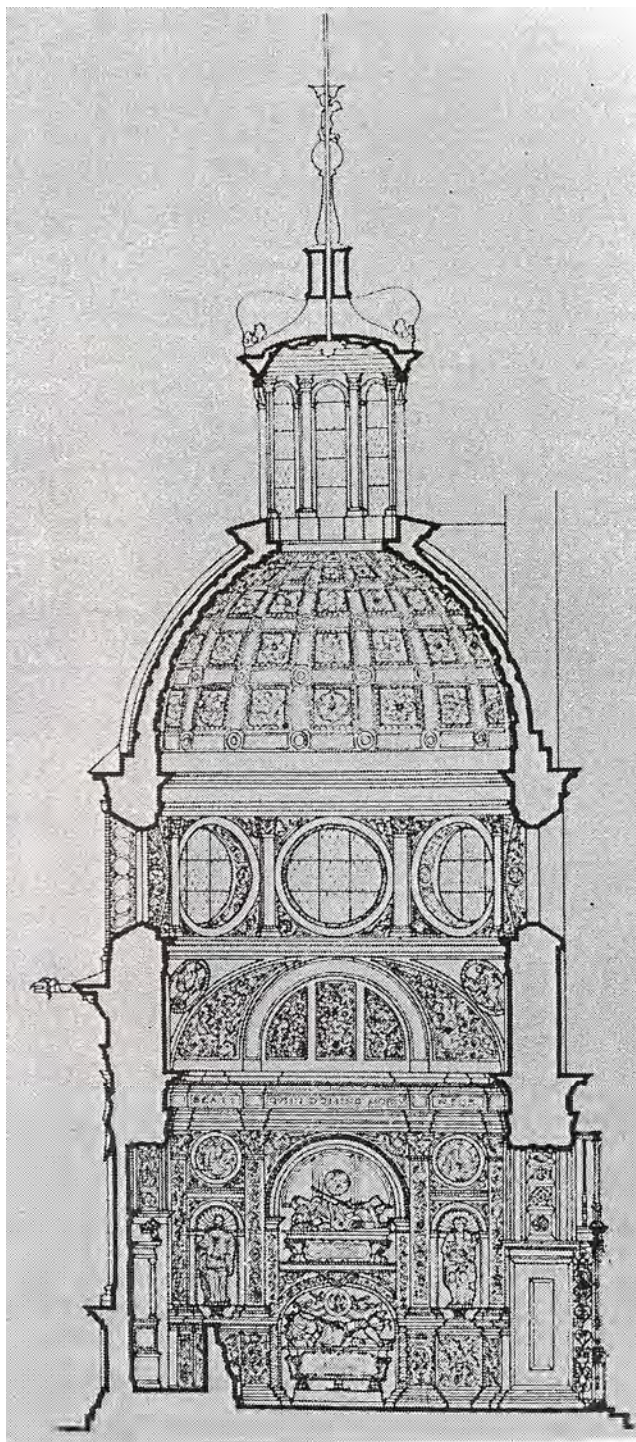


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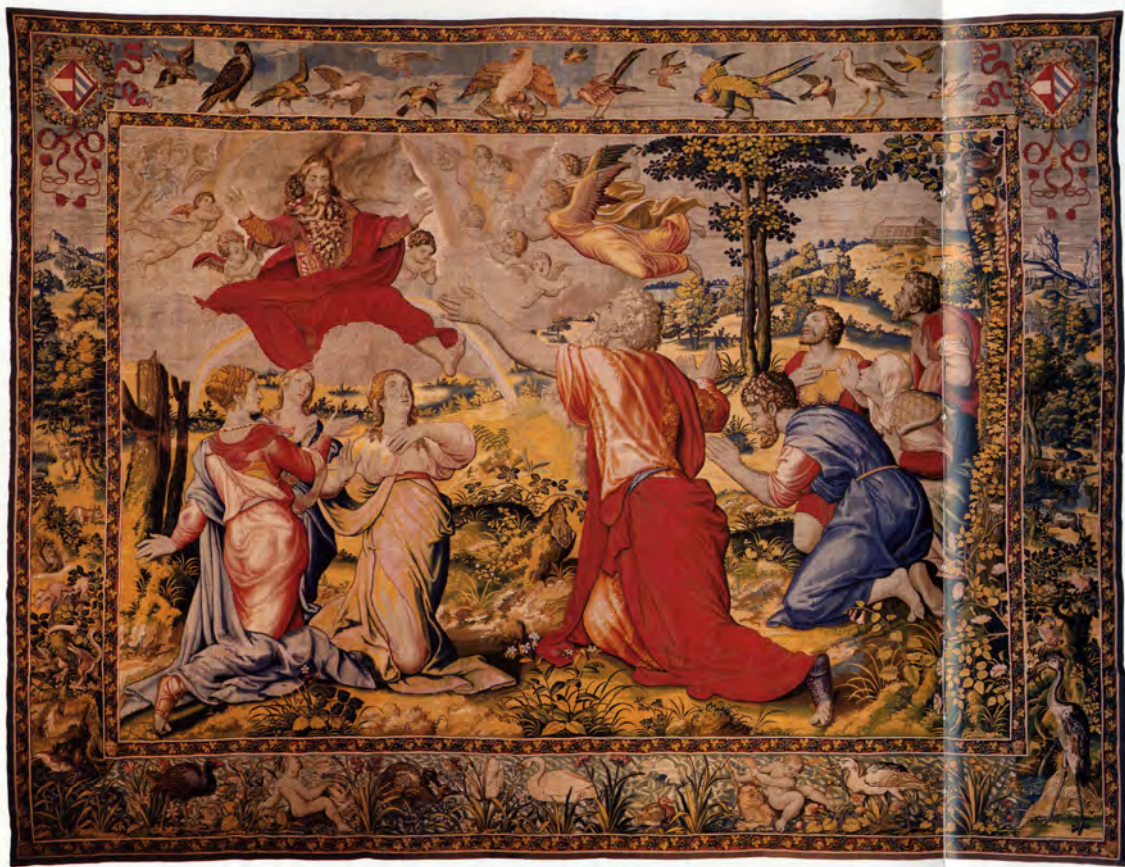


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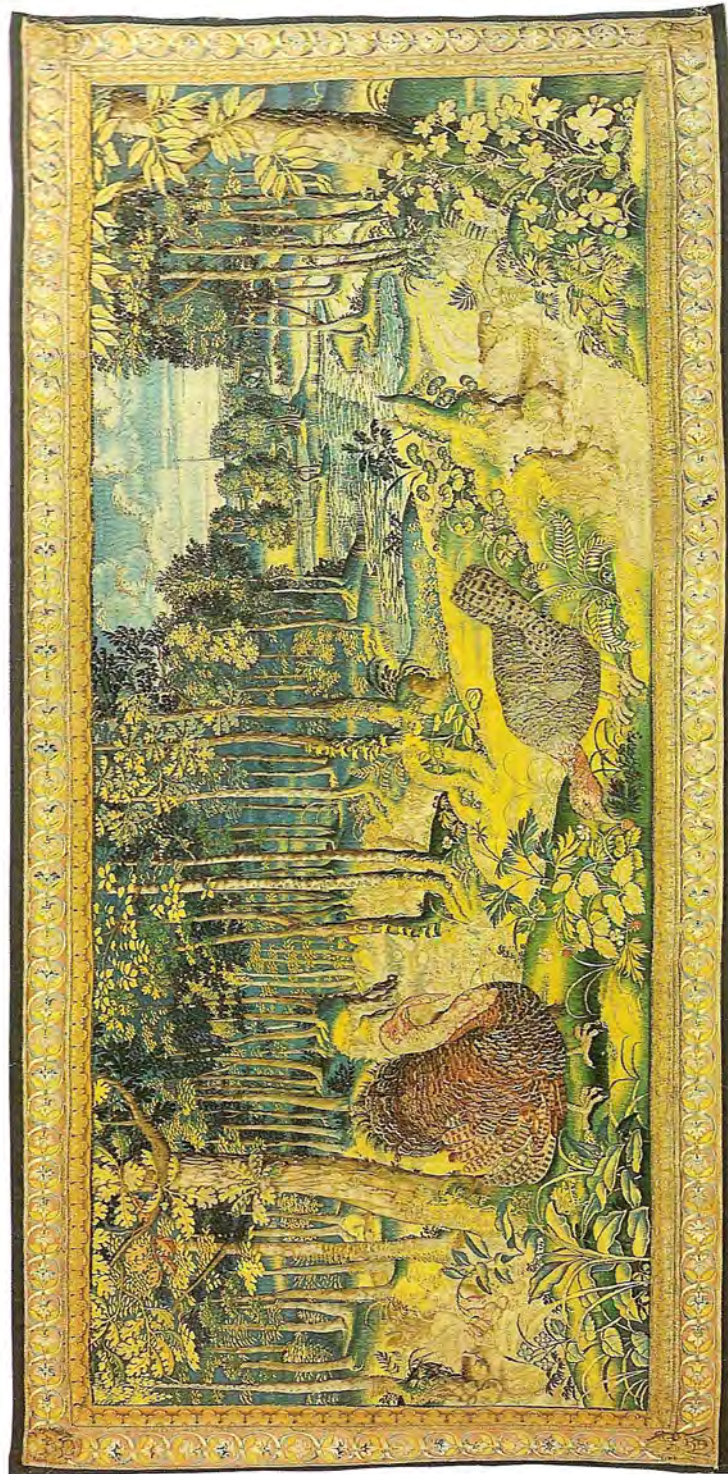


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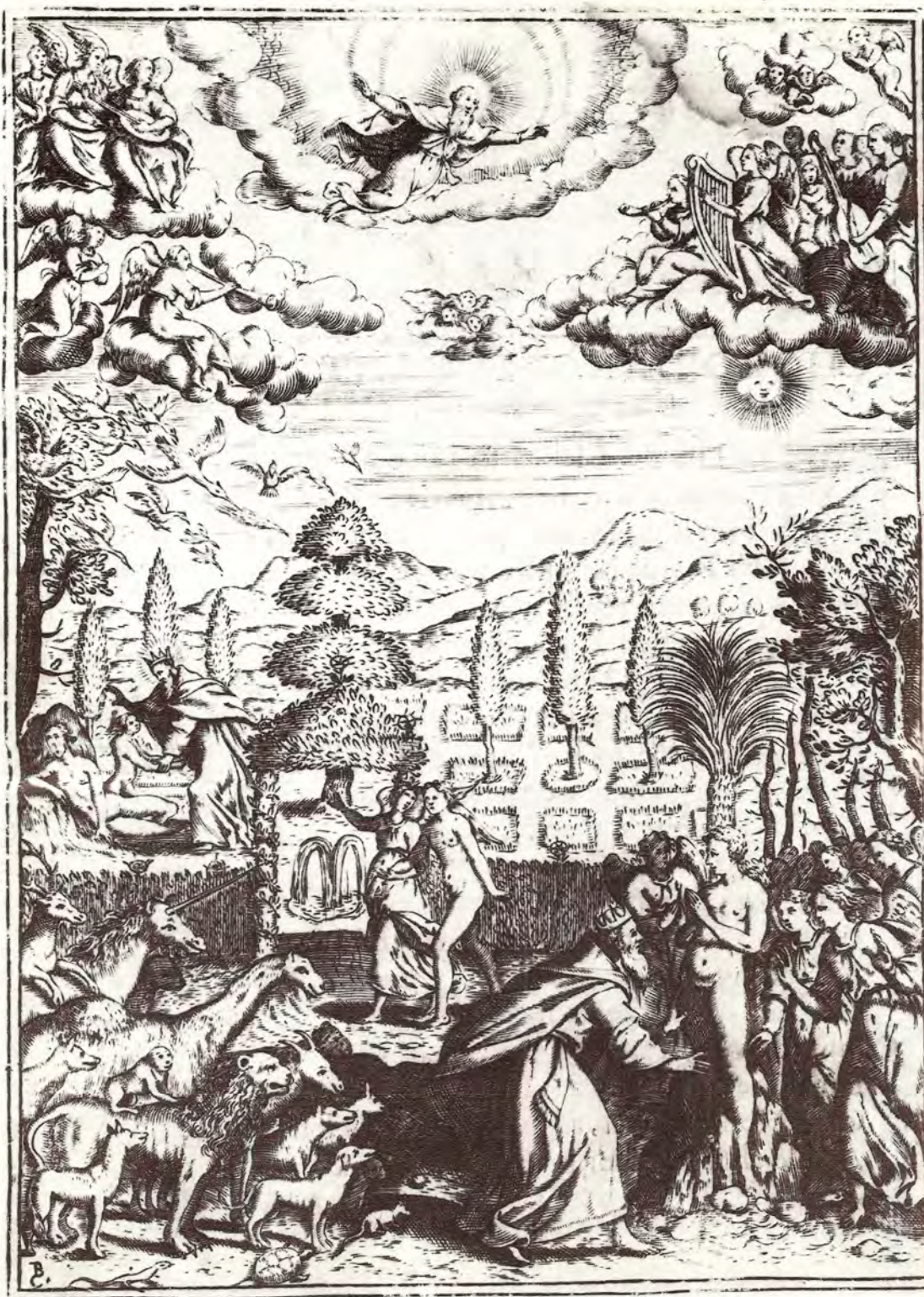


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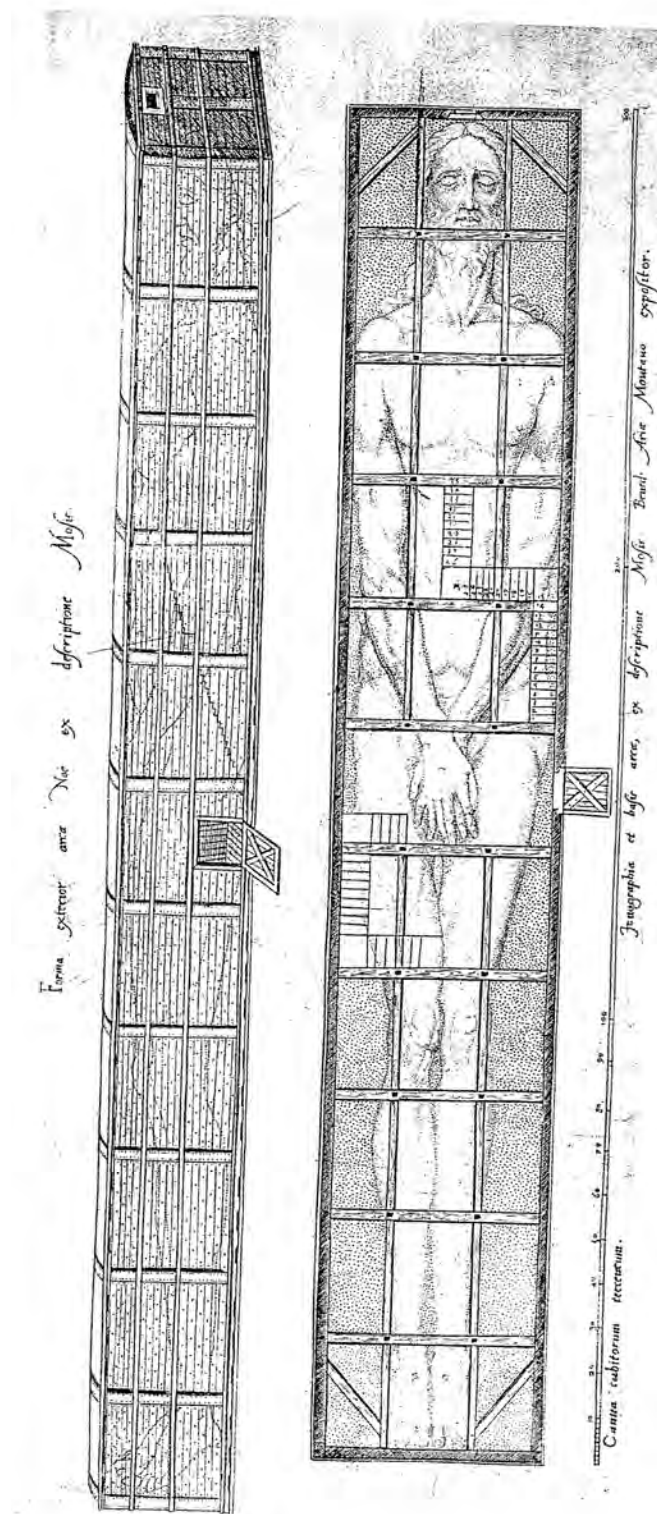


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Figure 122



Figure 123

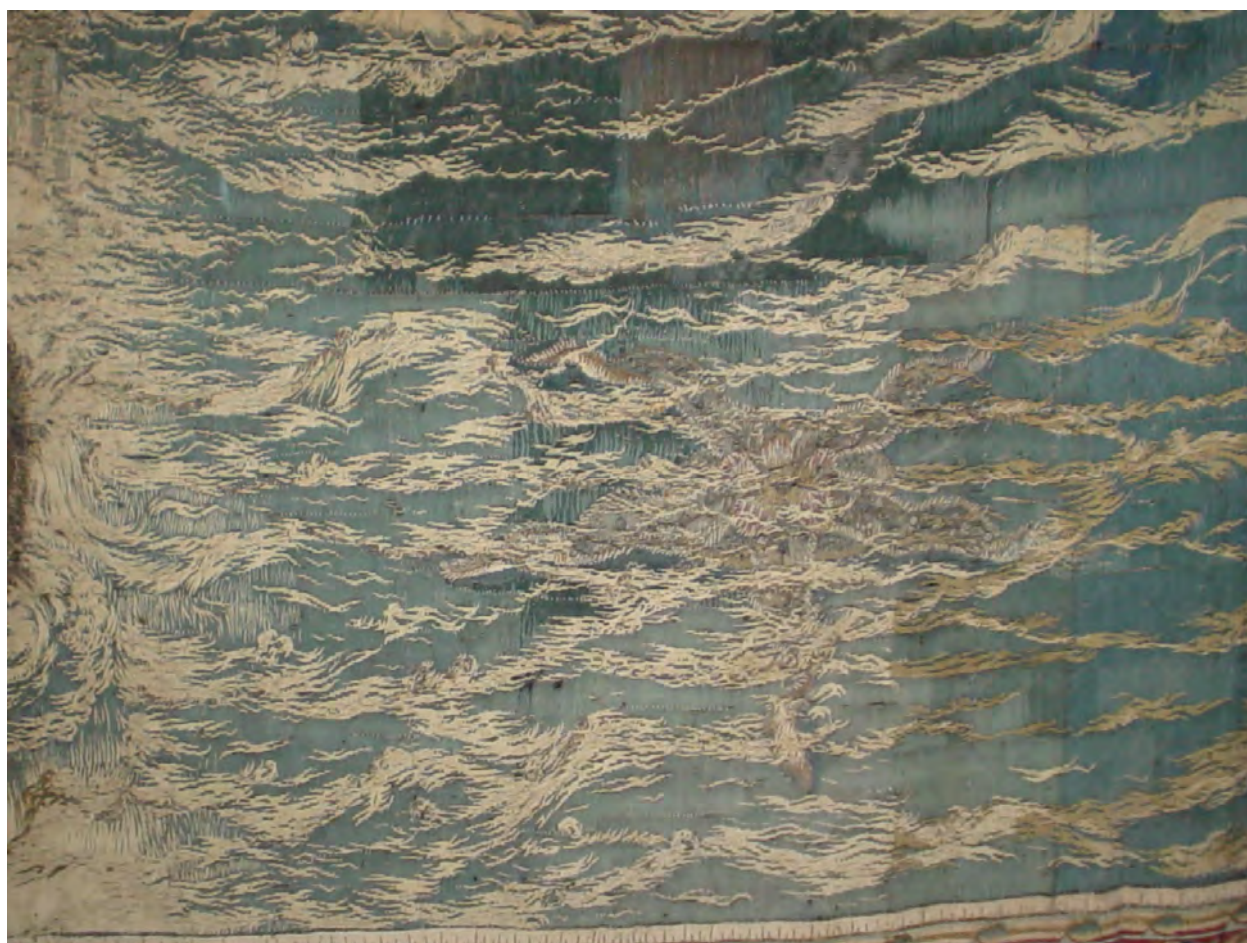


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Figure 145



Figure 146



Figure 147

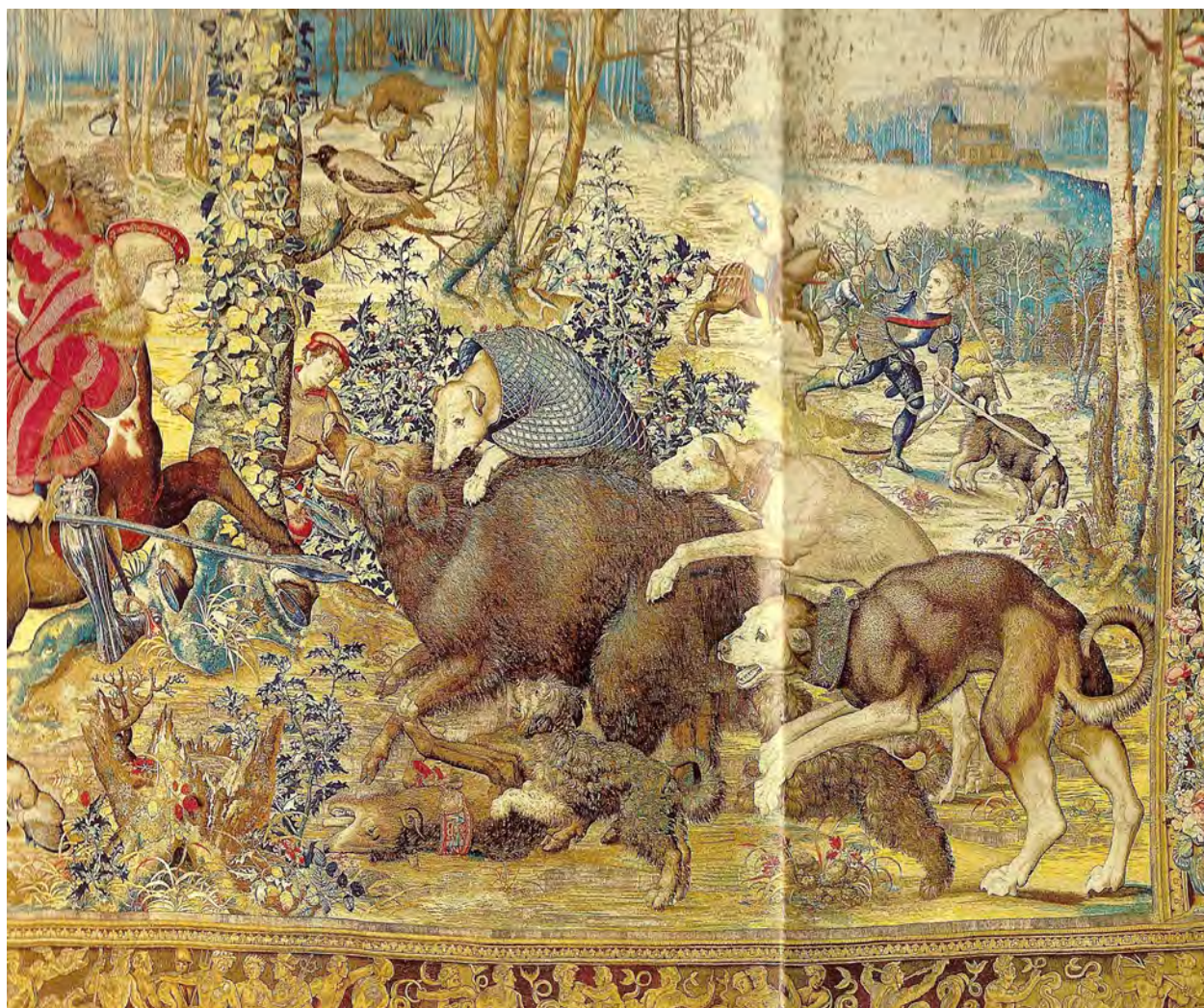


Figure 148

LXXVII. 85
 CÆCVS AMOR
 SOBOLIS.



*Est cum & amare noceat. Suffocat simia amando
 Simiolum. Exemplum hoc o fugitote patres.*

Figure 149



Figure 150

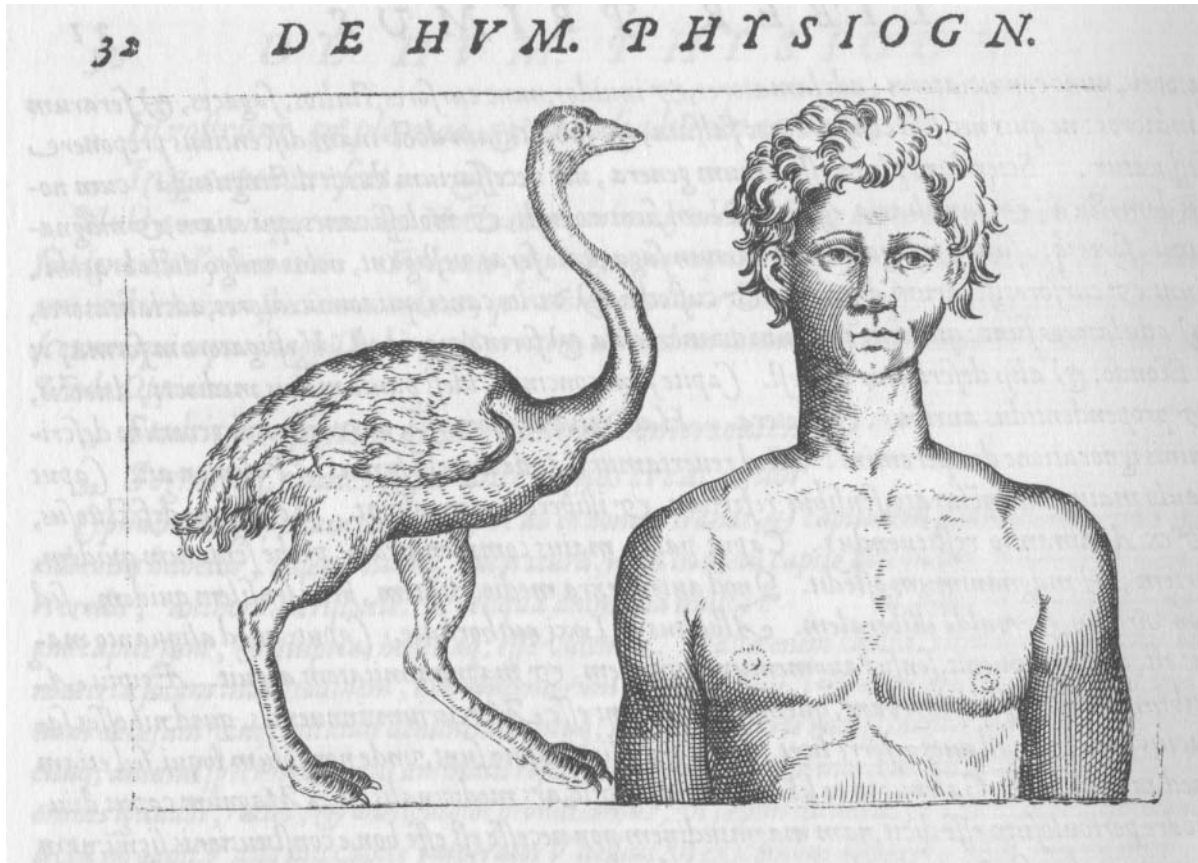


Figure 151



Figure 152



Figure 153



Figure 155



Figure 156