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## Visceral space: dissection and Michelangelo's architecture

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# **Visceral Space: Dissection and Michelangelo's Architecture**

A thesis submitted in partial fulfillment of the requirements of the  
Honors Program of the Department of Architecture  
in the Fay Jones School of Architecture, University of Arkansas.

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## **Introduction:**

### **Visceral Space: Dissection and Michelangelo's Architecture**

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A tumultuous period of self-redefinition, the Renaissance (14<sup>th</sup>-17<sup>th</sup> centuries) nurtured extensive discovery in the realms of art and science alike. The human body was one of the new frontiers under epistemological siege, and both doctors and artisans sought to uncover the secrets it concealed. While Renaissance doctors delved into the body for medical reasons, Renaissance artists penetrated the body's surface to enhance their ability to accurately portray the human form in texture and proportion. This yearning for corporeal knowledge seemed to permeate almost all creative disciplines of the era, including architecture—even Renaissance architects anatomized the body in order to utilize its underlying principles and qualities as a model for their own works. And while human dissection was more acceptable in the Renaissance than in the Middle Ages, the practice was still far from modern science: it was yoked to a surprising world of religious heroics and cultural anxieties. Controversies imbued dissection-related imagery with unexpected symbolic potency, leading artists and architects to deploy dissection in unanticipated ways as inspiration and metaphor within their work.

This project focuses on the architectural work of Renaissance master Michelangelo Buonarroti (1475-1574), who, perhaps, is better known for his painting and sculpture than for his architecture. Nevertheless, his buildings are revered by architectural historians, such as James Ackerman, for their mimicry of bodily motion and emotion, and their acknowledgment that the visitor will actually experience the space from many vantage points. Under the influence of Renaissance humanism, it was not uncommon for architects to validate their designs by reference to the human body, for example, basing the dimensions of a basilica on ideal bodily proportions. But

Michelangelo's approach in his earliest architectural designs, such as the Medici Chapel (1521-1524) and the Laurentian Library (1523-1525) in Florence, Italy, had already diverged in that respect from his peers. Ackerman observed that Michelangelo's architectural style recalled human musculature; however, Ackerman did not take his bodily analogy far enough. This study of the widespread "culture" of dissection in the Renaissance will reveal that he, like many art historians, underestimated the hold the multivalent domain of anatomization had on the imagination of leading artists. It also aims to uncover how, why, and the degree to which the increasingly acceptable practice of dissection influenced Michelangelo's body of built work. In a thorough analysis of his architectural designs and of artists' participation in the culture of dissection, this project will explore the different ways in which anatomization found expression in Michelangelo's architecture and helped to shape the powerful character of High Renaissance architecture in Italy.

### **Michelangelo's Revolutionary Style**

Michelangelo's early architecture plays a critical role in the history of architecture, since it was a major contributor to what art historians term the High Renaissance style in art. This universally admired style formed quickly in the first two decades of the 16<sup>th</sup> century, following the previous century-long period of experimentation which comprised the early Renaissance. The logically rationalized architecture of the early Renaissance (15<sup>th</sup> century) defined space with planar surfaces and distinct geometrical forms, while the emotive High Renaissance architecture defined spaces with layered, substantive masses that, through their thickness, created depth and shadow, and helped to create a tangible atmosphere that encompasses the viewer psychologically. Michelangelo's architecture falls into this category of voluminous space, but he takes it a step further – carving and modeling his wall forms in a way that makes them appear fleshy in addition to massive.

Why these revolutionary changes occurred in the years of 1500 to 1527 is uncertain; as productive as this period was, it lacked any written architectural theory to explain the designers' aims. In the case of Michelangelo's early architectural designs, there is no contemporary discourse that could shed light on their origin. Historians do have a few words that Michelangelo himself pronounced on the subject of architecture: "surely, the architectural members derive from human members. Whoever has not been or is not a good master of the figure and most of all, of anatomy, cannot understand anything of it."<sup>1</sup> In addition, after Michelangelo's early designs were completed, Renaissance architect Sebastiano Serlio suggested a similar notion in his 1537 treatise when he extolled the importance of seeing beneath the surface of the body.<sup>2</sup> Both architects, amongst others, thought that the creation of engaging built form required an intimate understanding of anatomy, since it acquainted the designer with the human body's rich spatial interplay between flesh and void.

In spite of the evidence for architectural interest in the autopsy, several historians have neglected anatomical dissection as a possible generator of High Renaissance architectural form in general, and of Michelangelo's buildings in particular. For example, while historian Jonathan Sawday has extensively documented the influence of dissection on Northern Renaissance poetry and philosophy and hints at its influence on architecture, he does not offer any definitive observations of how corporeal study actually affected architecture. Moreover, historian Charles Burroughs has considered Michelangelo's Medici Chapel as a metaphor of physicality (specifically, as Marsyas's flaying at the hand of Apollo), but he does not attribute his conclusions to the contemporary experience of anatomical study. This is surprising since Michelangelo's known exposure to human dissections (documented in his drawings) makes him a prime candidate for evaluating dissection's influence on Renaissance architecture.

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<sup>1</sup> James S. Ackerman *The Architecture of Michelangelo* (Chicago: University of Chicago Press, 1986), 37.

<sup>2</sup> Sebastiano Serlio. *Books I-V of 'Tutte l'opera d'architettura et prospetiva' by Sebastiano Serlio*, vol. 1 of *Sebastiano Serlio on Architecture*, trans. Vaughan Hart and Peter Hicks (New Haven, NJ: Yale University Press, 1996), vol.1, 48.

Moreover, contrary to popular belief, neither civil nor ecclesiastical law actually prohibited dissection of human corpses in Renaissance Italy. Still, the practice was seen as a liminal one. For instance, the pain associated with autopsy, even if only imagined, came to be seen as paralleling the excruciating martyrdom of saints, leading dissection to be associated positively, if counter-intuitively, with Christian ideas of penance and redemption.<sup>3</sup> This unexpected connection between dissection and eternal life in paradise seems especially important to the design of a family burial chapel like the Medici Chapel where priests said daily mass for the salvation of the departed. But despite the chance for salvation through dissection, many people did not want to donate their body for medical purposes after death, because they believed they should preserve their corpse's integrity for Judgment Day or for viewing at a funeral.<sup>4</sup> This choice resulted in widespread shortages of subjects for anatomical analysis, but, as Sawday demonstrated, criminals did not have the luxury of choice. After execution, most criminals' bodies would be given to anatomists, even sometimes in violation of familial wishes.<sup>5</sup> The dissection of a criminal's body acted as a posthumous punishment, and if conducted while the subject was still half alive, the pain served as further castigation. In any case, this punishment atoned for the sins of anatomical subjects, giving them a better chance at securing a place in heaven.<sup>6</sup> Thus, in light of these associations, dissection quickly came to represent regeneration and redemption. So, with dissection as punishment carrying religious and scientific implications, it is not surprising that Michelangelo would use his Medici Chapel commission to explore anatomization as a new source for architectural form in the High Renaissance.

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<sup>3</sup> Katharine Park, "The Criminal and the Saintly Body: Autopsy and Dissection in Renaissance Italy," *Renaissance Quarterly* 47, no.1 (1994): 23, <http://www.jstor.org/stable/2863109> (accessed March 23, 2010).

<sup>4</sup> Park, 4.

<sup>5</sup> Jonathan Sawday, *The Body Emblazoned: Dissection and the Human Body in Renaissance Culture* (London: Routledge, 1995), 61-62.

<sup>6</sup> Park, 23.

## Literature Review

### *The Cultural Implications of Dissection*

Bernard Schultz's book, an earlier work (pre-1990s) looks at dissection and its influence on art, but approaches the topic in a less culturally conscious manner; it comes at a time when the religious implications of dissection had not been discussed yet. Schultz's book gives a brief history of the development of anatomical knowledge throughout known human history, settling thereafter on the Renaissance as his historical region of focus. He describes the influence anatomical study had on the theories of Alberti and Ghiberti, and the effect that overt anatomical study had on the artistic works of Leonardo da Vinci and Michelangelo Buonarroti. Schultz's book is especially important to the investigation of dissection's influence on Michelangelo's early architectural works. He gives a complete account of Michelangelo's participation in anatomical study and his friendship with Realdo Colombo, including chronologies and locations for all known periods of anatomical study. While Schultz analyzes the influence of anatomical study on Michelangelo's sculpture and painting, he does not bring this into the realm of architecture. Moreover, Schultz's analysis is limited to the formal qualities of these artworks; for example, he reiterates throughout his work that the exaggerated musculature in Michelangelo's artwork had to result from intensive anatomical study. Therefore, he does not broach the ideological influences that dissection may have had on Michelangelo's architectural works.

Other works that looked at the cultural meanings of dissection (including religious and secular ideals) came after 1990, and these works include Jonathan Sawday, Katharine Park, and Cynthia Klestinec. Jonathan Sawday surveys the 'culture of dissection' in the early-modern period, and describes its ideological influence on poetry, philosophy, medicine, art, and architecture. His work, a presentation of dissection as an important cultural factor, directs historians' eyes to

relationships they may have neglected. However, Sawday's survey does not directly apply to this research topic. While the book mentions architecture as influenced by the 'culture of dissection,' it does not go into detail about how dissection affected architecture formally or ideologically. His survey of Renaissance works also focuses on Northern Europe rather than Italy; in the end, all of his analyses may not be applicable because of the slightly different cultural attitudes between North and South Europe.

Katharine Park's written works describe 15<sup>th</sup> and 16<sup>th</sup> century practices of dissection, and specifically mentions the significance these had for contemporary society. She describes the conflicts surrounding the practice of dissection; for example, during the Renaissance, Italian anatomists confronted a shortage of subjects because of the Italian desire that corpses remain in an acceptable state for viewing at a funeral. Park also demonstrates that dissection was seen as a form of penance, regeneration, or redemption, resulting from the observed parallels between the dissection of saints and criminals during the early modern period. Throughout her works, she hopes to dispel the misguided preconceptions that the church was fervently opposed to anatomical dissection. Overall, Park's research offers a very complete description of medieval and early modern anatomical practices and their cultural relationships.

Cynthia Klestinec discusses the anatomy theatre, a Renaissance setting in which the body was scrutinized to enhance medical understandings. She also gives a brief history of anatomy, in which she begins to hint at latent cultural symbolisms surrounding the practice of anatomy. She states, "...the aesthetic dimensions of anatomy have been characterized both as part of the tradition of memento mori and its themes of death and human mortality, and as part of the tradition of Carnival and its theme of regeneration."<sup>7</sup> However, she does not go into depth about this subject;

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<sup>7</sup> Cynthia Klestinec, *Theaters of Anatomy: Students, Teachers, and Traditions of Dissection in Renaissance Venice* (Baltimore, MD: John Hopkins University Press, 2011), 6.



rather, the focus of her research concerns the relationship between the anatomy professor and his students. Moreover, anatomy theatres first originated in the university setting in the mid to late 16<sup>th</sup> century. This places the focus of Klestinec's research after the design and construction of both the Medici Chapel and the Laurentian Library, making her conclusions less useful to a discussion of cultural factors pertinent to the time of Michelangelo's early architectural designs.

### *Michelangelo's Art and Architectural Theory*

James Ackerman gives a surprising account of Michelangelo's architectural theory; he emphasizes the differences between Michelangelo and other architects of his time, and focuses on anatomy as central to Michelangelo's work and architectural philosophy. He also describes the Medici Chapel in a surprisingly corporeal manner, comparing the wall to an epidermis. But, Ackerman's interpretation leaves room for further elaboration since he does not discuss the origins of the characteristics of Michelangelo's architecture.

Cammy Brothers' book surveys the significance of drawings in Michelangelo's architectural philosophy, positing that they were the origin of his architectural designs. She makes several observations about the characteristics of Michelangelo's architecture that are apparent in his drawings as well. She mentions that his work demonstrates qualities of 'fragmentation and dismemberment' and also describes the ways in which visitors respond to Michelangelo's architecture empathetically. In other readings, fragmentation and empathy have been connected to the 'culture of dissection'; however, Brothers does not seem to attribute the occurrence of these qualities within Michelangelo's work to his practice of dissection. Nevertheless, her work provides a broad selection of drawings that may be analyzed to understand Michelangelo's motivations during the design of his architectural works.

Fredrika Jacobs emphasizes the significance of Michelangelo's exposure to two flayed Marsyas statues in the Medici Palace garden in his childhood. She also outlines in detail the significance of the anatomical study and the myth of Marsyas to the Renaissance artists and society. She argues that because of Michelangelo's childhood exposure to Marsyas and his own practice of anatomical studies, the Medici garden later became the Accademia del Disegno, a design school where men studied Michelangelo's work and, following in his footsteps, conducted dissections to gain anatomical knowledge. Jacobs' essay insightfully reveals Michelangelo's fascination with the myth of Marsyas and his exposure to dissection, and she also carefully outlines the metaphysical symbolisms surrounding Marsyas that are transferred to the practice of dissection. However, she does not discuss the influence that Michelangelo's exposure to dissection and Marsyas had on his sculptural or architectural work; rather, she discusses its influence on the work of later artists that studied that of Michelangelo.

#### *Past Interpretations of the Medici Chapel*

Literature review concerning past interpretations of the Medici Chapel is located within Chapter 3.

## Chapter One:

### The Significance of Dissection to Renaissance Culture and Artistic Endeavors

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As Jonathan Sawday suggests in his book *The Body Emblazoned*, ‘Renaissance culture’ could be renamed the ‘culture of dissection’, a term which establishes that the Renaissance consisted of “a network of practices, social structures, and rituals surrounding [the] production of fragmented bodies.”<sup>8</sup> Despite its sometimes grotesque and appalling nature, human dissection acted as an important tool of investigation and discovery amongst Renaissance doctors and artists alike. Renaissance doctors studied corpses to understand the nature of disease, and Renaissance artists saw anatomical study as a way to broaden their myological knowledge and enhance the veracity of their human figures. As historian of science Katherine Park has demonstrated, the explosion of the practice of anatomical dissection in sixteenth-century Italy resulted mainly from three factors: the humanist interest in the newly rediscovered anatomical treatise of Greek writer Galen of Pergamon (129-199 C.E.), the focus amongst artists on naturalistic realism, and the advent of the printing press, which allowed anatomical studies to be easily disseminated amongst anatomists, artists, or even common people.<sup>9</sup> I argue that, during this proliferation of anatomical study, Renaissance anatomists and artists did not merely take practical knowledge from the corpse—for example, how to cure ailments and realistically reproduce muscular systems—but also, due to the spiritual and intellectual implications of dissection that arose from the ongoing engagement of the medieval church with dissection, they saw the process of dissection as a symbolic and intriguing narrative and understood the corpse’s sensual interior as an analog for engaging artistic and architectural characteristics.

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<sup>8</sup> Sawday, 2-3.

<sup>9</sup> Park, 14-15; Bernard Schultz, *Art and Anatomy in Renaissance Italy* (Ann Arbor, M.I: Umi Research Press, 1985), 23.

## Historical Misconceptions Concerning Medieval Anatomical Study

While this flowering of interest in anatomical study during the Renaissance seems to be well-known, the religious and cultural significance of anatomical dissection is, at best, vaguely understood. Recognition of the medieval history of anatomical study is essential to understanding the profound significance that anatomical dissection had within the culture of the Renaissance, because it reveals the important spiritual dimensions of dissection which were common in Renaissance culture throughout Europe. Due to a widespread assumption that Christianity was hostile to anatomical study during the Middle Ages, historians have been struggling since the early twentieth century to rediscover the nature of the relationship between anatomical investigation and European culture throughout the fourteenth, fifteenth, and sixteenth centuries.<sup>10</sup> The apparent unwillingness, or perhaps fear, on the part of historians, to believe that autopsy, embalming, and dissection may have been acceptable even to medieval Europe, seems to stem from a misunderstanding of medieval and early modern religious tabus. While it is true that the acceptance of overt human dissection has waned and waxed throughout human history due to differing value systems amongst world cultures, historians beholden to the Enlightenment meta-narrative of history have rejected and misconstrued the truth that European Christianity of the Middle Ages and Renaissance had actually been open, sometimes even welcoming, to the idea of human dissection.<sup>11</sup> These historians' assumptions led to the propagation of a mistaken image of the Renaissance doctors, artists, and masterminds who

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<sup>10</sup> Katherine Park has been at the forefront of efforts to demonstrate that anatomical dissection was conducted for religious reasons during the Middle Ages and Renaissance, and that the church had been more open to dissection than described within several established historical perspectives. See her *Secrets of Women: Gender, Generation, and the Origins of Human Dissection* (New York: Zone Books, 2006), 21, and Park, "Criminal and Saintly," 3.

<sup>11</sup> For information about the varying degrees of acceptance of anatomical dissection throughout ancient history, see Schultz, 2. For a list of several errant historical interpretations of dissection, see Park, *Secrets of Women*, 21nn20-22. Her list includes Andrew Dickson White, *A History of the Warfare of Science with Theology in Christendom* (New York: Appleton, 1897), vol. 2, pp. 49-55, which paints a heroic picture of the Renaissance by purporting that Renaissance masters revealed the understandings of natural science tragically hidden by medieval Christianity. She also lists Michel Foucault as understanding the Middle Ages as starkly contrasting the 'postmedieval period of rational inquiry'; his work *The Birth of the Clinic: An Archaeology of Medical Perception*, trans. A.M. Sheridan Smith (1973; New York: Vintage, 1975), ch.8, has been significant to modern histories of human dissection.

practiced dissection; in many cases, modern scholars thought that a man who studied the human body via dissection risked his livelihood, causing him to peel apart bodies in seclusion in order to evade the church's attempts to shut his operation down.<sup>12</sup> But, as Park and other historians of science have demonstrated, in reality, many of these pioneers into the inner realm of human body were actively supported by the church. In fact, in the case of Michelangelo, the church gave him bodies and a room for dissection within the Florentine church Santo Spirito.<sup>13</sup> The contradictory and mistaken view of the church appears to stem from the Enlightenment misrepresentation of medieval and Renaissance Catholicism as so blindly dogmatic and inherently superstitious that anything that conflicted with its canon would have been deemed entirely unacceptable.

Several scholars incorrectly assumed that the church insisted on the absolute inviolability of the corpse. Indeed, the church had been concerned about the ability for a soul to be reunited with its body in preparation for the Last Judgment, but even these anxieties did not color all Christian practices, especially not in Italy.<sup>14</sup> Beginning in the twelfth century, clerics and monastics in Italy conducted autopsies on the bodies of saints to determine if their organs had any qualities that revealed their sanctity; an example would have been a cross on the heart or well-polished gallstones.<sup>15</sup> On the opposite end of the spectrum, autopsies to identify the physical manifestation of sin were conducted on criminal bodies, searching for characteristics such as hair on the heart.<sup>16</sup> Furthermore, autopsies sometimes served a purely medical purpose – in the fourteenth century, families often wondered the reason why a relative might have succumbed to a mysterious illness, so as Park states, postmortem autopsy to determine the cause of death “established itself in Italian medicine as not only tolerated but frequently *requested* [italics added] on the part of individuals and

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<sup>12</sup> Park, *Secrets of Women*, 21.

<sup>13</sup> Ascanio Condivi, *The Life of Michelangelo*, trans. Alice Sedgwick Wohl, ed. Hellmut Wohl (Baton Rouge: Louisiana State University Press, 1976), 17.

<sup>14</sup> Park, “Criminal and Saintly,” 11. Northern Europeans were more concerned with the inviolability of the corpse than Italians.

<sup>15</sup> Park, “Criminal and Saintly,” 2.

<sup>16</sup> Park, “Criminal and Saintly,” 26.

their families.”<sup>17</sup> These autopsies, saintly and otherwise, familiarized Italian society with the practice of opening the body, thereby causing cultural attitudes surrounding the inviolability of the corpse to relax, but not to the point where the exploration of cadaver’s interior was unanimously accepted.

Moreover, contrary to the widely held views, medieval religious law did not prohibit the opening of human corpses; rather, it outlawed practices which might result in the total dismemberment of the body. For example, Pope Boniface VIII’s famous bull *De Sepulturis* (1299/1300) states that: “Persons cutting up the bodies of the dead, barbarously boiling them, in order that the bones, being separated from the flesh, may be carried for burial in their own countries, are by the very act excommunicated.”<sup>18</sup> Hence, it neither outlaws autopsy and dissection, nor restrains the study of anatomy. The practice of boiling the flesh off of a corpse’s skeleton originated in the Crusades to ease the transport of bones back home for burial.<sup>19</sup> In this case, perhaps what truly revolted the pope was the actual cooking of the flesh, which might be reminiscent of cannibalism. Other body-related practices such as embalming, posthumous autopsy, and anatomical dissection are fundamentally different in nature and thereby would have been exempt from the bull’s decree. Indeed, Park’s research contradicts the common perception that the church had been opposed to dissection by demonstrating evisceration’s importance to the church’s study of saintly bodies and by giving a more credible account of the bull’s actual influence upon medieval and Renaissance religious, judicial, and medical opinions regarding autopsy and dissection.<sup>20</sup>

Knowledge of the ancients’ fears of corpse pollution may have caused historians to view medieval and early modern studies of the corpse as more controversial than they actually were.

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<sup>17</sup> Park, “Criminal and Saintly,” 4.

<sup>18</sup> For the full English text of the bull, see James J. Walsh, *The Popes and Science: The History of the Papal Relations to Science During the Middle Ages and Down to Our Own Time* (New York: Fordham University Press, 1908), 33.

<sup>19</sup> Walsh, *The Popes and Science*, 33-34.

<sup>20</sup> Park, *Secrets of Women*, 25; Park, “Criminal and Saintly,” 11.

While corpse pollution greatly concerned the people of ancient Greece and Rome, usually resulting in the restriction of dissection to animal bodies, Christianity did not propagate fears based on the perceived impurity of a corpse. As Katharine Park reveals, “Christian culture defined itself in opposition to Mediterranean paganism in this regard.”<sup>21</sup> In light of this observation, the Enlightenment discourse, which has fed the mistaken histories of dissection, seems hypocritical: Enlightenment views, while rejecting medieval Christianity for its superstition, placed Classical ideals as central to its philosophy, even when it is demonstrated, as in this example, that classical culture is more superstitious.

The true relationship between dissection and the church is therefore not characterized by mutual hostility. In fact, research suggests the opposite – that the church’s close relationship with dissection imbued the practice with symbolic power, thereby causing dissection to manifest metaphorically and ideologically within several Renaissance cultural spheres – and my research extends these findings to the realm of art and architecture.<sup>22</sup>

## **Pre-Renaissance Dissection**

### *Classical Anatomical Studies*

The study of the human body via dissection began at the library of Alexandria during the third century B.C.E. Its birth had been preceded by the era of classical Greece, which generally preferred the dissection of animals rather than humans for reasons which include reverence for the dead and a

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<sup>21</sup> Park, *Secrets of Women*, 23.

<sup>22</sup> Sawday, ix. Jonathan Sawday presents his book as a catalogue of how dissection affected all cultural realms, including poetry, philosophy, art, and architecture. Despite mentioning architecture as one of the relevant cultural areas, he does not extensively discuss dissection’s influence upon architecture.

fear of corpse pollution.<sup>23</sup> It is true that both Plato and Aristotle had studied anatomy, but they did so only through the use of animals.<sup>24</sup> So, the library of Alexandria stands as a stark symbol of liberalism within the practice of classical science because it held the first known human dissections. Despite its antiquity, this ancient library was more tolerant than any environment known throughout the Middle Ages and Renaissance. The library even had specific rooms<sup>25</sup> to accommodate the anatomical studies of several anatomists, including Herophilus of Chalcedon (335-280 B.C.E.) and his assistant Erasistratus of Chios (304-250 B.C.E.).<sup>26</sup> But, not only did Herophilus and Erasistratus dissect corpses, they *vivisected* them. Vivisection had been an extremely controversial practice in the Classical Era as well as the Middle Ages and Renaissance, because it involved the dissection of a man while alive. Presumably, this would allow the anatomist to see the movement of organs that would normally be still in a posthumous dissection. Second-century Greek philosopher and medical writer Celsus vividly described the practices of Herophilus and Erasistratus, emphasizing the sensual and textural qualities of the body revealed by vivisection:

“...[Herophilus and Erasistratus] laid open men whilst alive – criminals received out of prison from the kings – and whilst they were still breathing, observed parts which beforehand nature had concealed, their position, colour, shape, size, arrangement, hardness, softness, smoothness, relation, processes, and depressions of each, and whether any part is inserted into or is received into another.”<sup>27</sup>

It is likely that any anatomist, whether conducting a study on the living or dead, would discover a similar plethora of corporeal information to that described by Celsus. The insides of a corpse fascinated Hellenistic society, and Alexandria’s anatomists sought out whatever sensory information they could from the body’s newly revealed character. Perhaps artists and anatomists have always had a close relationship; Schultz notes that the anatomical study in Hellenistic Greece led to

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<sup>23</sup> Schultz, 5-6; Park, *Secrets of Women*, 23.

<sup>24</sup> Schultz, 2, 5-7.

<sup>25</sup> Carl Sagan, Ann Druyan, and Steve Soter, “The Shores of the Cosmic Ocean,” episode 1, *Cosmos: A Personal Voyage*, collector’s ed. DVD, directed by Adrian Malone (Studio City, CA : Cosmos Studios, 2000).

<sup>26</sup> Schultz, 7-8.

<sup>27</sup> Bernard Schultz quotes Celsus in *Art and Anatomy*, 7.



increased sculptural realism, a phenomenon also noticed within Renaissance art.<sup>28</sup> Just as those who had studied the corpse in the Hellenistic Era, Renaissance artists and anatomists would absorb the body's wealth of spatial and haptic information. But, in contrast, their studies would take the corpse's sensory information to another level; it would not only inform the realism of their sculpture, but also shape philosophical, social, and religious ideologies of the Renaissance.

### *Galen of Pergamon*

The anatomical progressiveness of the Library of Alexandria ended when the Roman Republic became the dominant Mediterranean power during the second century B.C.E. Rome's stringent opinions concerning human corpses caused the practice of anatomical dissection to cease.<sup>29</sup> Also, the Library of Alexandria burned in 48 B.C.E., causing much of the anatomical knowledge it held to be lost; most of what exists today had been recorded within the writings of other anatomists and philosophers. Since so much knowledge had been destroyed or obscured, the nature of the corpse's interior was little known until rediscovered in the Renaissance. Following the library's ruin, the anatomical writings of Galen of Pergamon (c. 130-200 C.E.) became central to medical practice; according to Schultz, "[Galen's] own voluminous body of contributions would form medical thought in both the West and Arabic East for over thirteen hundred years."<sup>30</sup> Surrounded by a culture hostile to human dissection, Galen did not dissect human corpses, but he dissected animals, including apes, and likely extrapolated his observations to his study of the human body.<sup>31</sup> Moreover, he worked as a surgeon for the school of gladiators at Pergamon (158-161 C.E.), allowing

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<sup>28</sup> Schultz, 8.

<sup>29</sup> Schultz, 9.

<sup>30</sup> Schultz, 10.

<sup>31</sup> Schultz, 10.

him to make more accurate observations concerning the inner workings of the human body.<sup>32</sup> Whether or not Galen was actually observing a human body, he could still make observations that would apply to the human bodies he viewed while conducting surgery. He saw the human body as similar to other animal bodies, since it contained similar organs, systems, which all interrelated with one another in a similar manner, no matter the species of animal.

Galen's philosophy defined a paradigm of thinking, characterized by separation and division, which would color anatomical study within the sixteenth century. Galen's anatomical study defined the parts of the body according to two classification schemes: dissimilar vs. similar and noble vs. inferior. The "similar" parts, also seen as "inferior," included the tissues that are present throughout the entire body, such as skin, bone, fat, and ligament. "Dissimilar" parts, seen as "noble," were only present within one part of the body, and included internal organs, such as the heart, brain, and liver.<sup>33</sup> Galen's framework of classifications began to fragment a human's idea of his or her own body. Sawday discusses the implications of this divisive mindset, pointing out its political implications: "such a vocabulary of nobility and inferiority offered endless metaphorical possibilities within a political sphere. The body seemed to be the ultimate guarantee of an organization of society which was profoundly hierarchial..."<sup>34</sup> While Sawday applies Galen's framework to political culture, my research reveals that this Galenic mindset—so focused on separation—also visibly influenced architectural theory. Architects began seeing buildings as having certain systems that resembled parts of the body; columns were compared to bones, and walls to skin covering bone. This systemic understanding of architecture appears within Michelangelo's Medici Chapel, which is visibly segmented within its section and contains walls that appear to be a set of layered systems that spatially impact one another.

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<sup>32</sup> Schultz, 10.

<sup>33</sup> Sawday discusses Galen's divisive ideas about the body in his *The Body Emblazoned*, 129-130.

<sup>34</sup> Sawday, 130.

After Galen's death, the Roman Catholic Church endorsed Galen's work and incorporated it into their philosophies, using it to justify man's dominance in contrast to other animal species.<sup>35</sup> Also, professors and anatomists would use his book to teach anatomy, reading from it in lieu of actually conducting a dissection.<sup>36</sup> This resulted in the widespread acceptance of Galenic work as a dogmatic text on anatomy, until sixteenth-century humanists, such as Andreas Vesalius (1514-1564), would challenge the eminence and validity of Galen's treatise. Vesalius's *De humani corporis fabrica*, published in 1543, turned the study of anatomy on its head – Vesalius's work, highly modeled and detailed, starkly contrasted the diagrammatic and visually flat anatomical studies of the fourteenth century. To emphasize how revolutionary his work was, historians later used Vesalius to mark a turning point in anatomical history; they labeled all anatomical history following 1543 as the "Post-Vesalian Era."

### *Anatomical Study in the Middle Ages*

Anatomical study may have not occurred in Western Europe during the early part of the Middle Ages (500 C.E. – 1200 C.E.), but Islamic culture saw value in anatomical study and sought to protect the endangered Western anatomical texts by translating texts such as Galen's into Arabic. The 10<sup>th</sup> century also saw the development of the *Canon* (1025), the sixteen-volume medical treatise authored by Persian philosopher and scientist Avicenna (c. 980-1037). As Schultz states, "the *Canon* stood for centuries as a handbook of medical practice for both the Islamic and European peoples."<sup>37</sup> In its eminence, it would act similarly to the works of Galen in that it would be used as a central anatomical text amongst universities until the 16<sup>th</sup> century.

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<sup>35</sup> Schultz, 12-13.

<sup>36</sup> Schultz, 12.

<sup>37</sup> Schultz, 15.

While it is true that third and fourth century Christianity viewed anatomical study as appalling, these attitudes gradually diminished in intensity, giving way to a more receptive atmosphere to the study of the corpse.<sup>38</sup> So, bearing in mind that Medieval Europe and its Catholic Church had been much less hostile to anatomical study than previously thought, Katharine Park places the re-birth of corpse-study within the thirteenth century.<sup>39</sup> At first, in the late thirteenth century, anatomists and medics infrequently conducted autopsies, or postmortem examinations to determine causes of death or reveal sanctity.<sup>40</sup> In this way, autopsy seems to serve as an important starting point for the acceptance of dissection into Italian society. It avoided any visible mutilation of the corpse, especially the face, allowing the body to be displayed in a proper funeral—a rite of utmost importance to early modern Italian society.<sup>41</sup> Furthermore, anatomical thought, which had been previously preserved in Arabic, had just begun to be translated and propagated throughout Europe during the twelfth century.<sup>42</sup> Galen's *De usu partium* was amongst these translated works. The new knowledge revealed by these important anatomical works helped to fuel the reappearance of anatomical dissection during the late Middle Ages, thereby leading to the later explosion of anatomical study during the Renaissance.

Italian society, largely tolerant of autopsy, would eventually become more comfortable with the idea of dissection, leading to widespread practice throughout Italy later in the sixteenth century. The process of acceptance in Italy may have been inevitable, since, as Park argues, autopsy requires dissection.<sup>43</sup> Autopsy focused on one body and sought to identify the degree to which it differed from an anatomical norm. Dissection, on the other hand, made assumptions about the ideal human physiology, by surveying a plethora of bodies and cataloguing the similarities between them. Since

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<sup>38</sup> Park, *Secrets of Women*, 24.

<sup>39</sup> Park, *Secrets of Women*, 13.

<sup>40</sup> Park, *Secrets of Women*, 13.

<sup>41</sup> Park, *Secrets of Women*, 15-16; Park, "Criminal and Saintly," 6.

<sup>42</sup> Schultz, 15.

<sup>43</sup> Park, "Criminal and Saintly," 6-7.

autopsy requires dissection to define the anatomical status quo, Park emphasizes that it is only logical that dissections began re-appearing during the early 1300s, in the vicinity of the first recorded autopsy (1286).<sup>44</sup>

Moreover, due to several other contributing factors, Italy became the center of anatomical study during the thirteenth through fifteenth centuries.<sup>45</sup> Italians, when compared to Northern Europeans, placed less importance upon the inviolability of the corpse for Judgment Day.<sup>46</sup> This led to a more liberal atmosphere concerning the various practices of anatomical study, and especially dissection, as it divided the corpse most thoroughly. In addition, several regions in both North and South Italy were known to have history involving the practice of medicine and anatomy. Park describes these areas and their significance to the burgeoning Italian practice of medical anatomical study:

“The early interest in opening human bodies sprang partially from conditions specific to Italian medicine: the long tradition of animal dissection associated with the southern Italian city of Salerno (an important center of medical teaching as early as the eleventh century), the sophistication of thirteenth-century surgical practice in the Po valley, and the intensified attention devoted to the anatomically informed works of Galen on the part of medical masters at the University of Bologna in the years around 1300.”<sup>47</sup>

As demonstrated above, the practice of Italian anatomical study had roots in all geographical regions. This would encourage Italian citizens to be more comfortable with the idea of dissection because it was widespread throughout the country. There were more opportunities for Italians to study anatomy, and this would eventually lead Italy to become the birthplace and leader of the ‘anatomical Renaissance.’ In late medieval Italy, the university town of Bologna served as the undisputed center of dissection research. As Park has argued for the development of dissection in

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<sup>44</sup> Park, “Criminal and Saintly,” 4, 6-7.

<sup>45</sup> Park, *Secrets of Women*, 20.

<sup>46</sup> Park, “Criminal and Saintly,” 11.

<sup>47</sup> Park, *Secrets of Women*, 20.

all Italian locales, Bologna's anatomical practice began with posthumous autopsies, expanding to dissection when Bologna founded a surgical school in the thirteenth century.<sup>48</sup> According to Schultz, anatomist William of Saliceto conducted Bologna's first human dissection during the late thirteenth century.<sup>49</sup> The University of Bologna hosted one dissection each year as part of the surgical curriculum, and it also made use of translated Arabic treatises (Avicenna, Galen) when teaching anatomy classes.<sup>50</sup>

Later, in the fourteenth and fifteenth centuries, universities with medical programs including anatomical dissections would begin appearing throughout Italy. Two other prominent cities, in addition to Bologna, would later become prominent centers of anatomical study: Padua and Florence. In the late fifteenth and early sixteenth centuries, Padua would boast its own permanent anatomical theatre, and Florence would become home to anatomical demonstrations attended by artistic luminaries such as Leonardo da Vinci and Michelangelo. It is no coincidence that these artists were interested in raw anatomical study: early modern artists studied anatomy to enhance their own works' veracity, and they also assisted anatomists with their illustrations for a printed anatomical treatise. The fourteenth century saw the early signs of these symbiotic relationships between artist and anatomist.<sup>51</sup> During the quattrocento, anatomy professors hired artists to create their lesson visuals, and anatomists also incorporated symbolic imagery from well-known artists' work into their illustrations to imbue them with allegorical significance.<sup>52</sup> The emergence of explicit relationships between artists and anatomists during this time period would act as a pivotal precursor to the appearance of several important cultural transformations surrounding dissection in the Renaissance.

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<sup>48</sup> Schultz, 16.

<sup>49</sup> Schultz, 16.

<sup>50</sup> Schultz, 16.

<sup>51</sup> Schultz, 18.

<sup>52</sup> Schultz, 18-20.

## The Nature of the ‘Anatomical Renaissance’<sup>53</sup>

Beginning in the sixteenth century, Europe, especially Italy, saw a flourishing of anatomical practices that had not been seen since the Hellenistic Era. Once again, society had become comfortable enough with the idea of opening the body that artists could to conduct dissections to give their work anatomical veracity and scientists undertook anatomical studies to discover the root causes of disease. The discoveries made by these two professions would ultimately inform other creative realms, such as aesthetic theory and religious propaganda. Universities began to calcify the practice of anatomical dissection by making it a part of their curricula, and tailored dissections to different target audiences. These dissections may be divided into two categories. The first group encompasses those undertaken within private settings for a small lamount of viewers (Fig. 1), and the other included public dissections conducted in front of an audience in an auditorium-like setting (Fig. 2). Historian Cynthia Klestinec examines the difference between the two modes of anatomical apprehension within her book *Theatres of Anatomy*, which catalogues the rich history of the development of the stationary (permanent) anatomical theatre during the mid-to-late sixteenth century. According to Klestinec, each mode of dissection became popular because it satisfied specific needs: private dissections allowed those attending to view the corpse up close, enabling them to comprehend details that would not have been obvious from auditorium seating, and public dissections performed the function of making a dissection available to a wider audience.<sup>54</sup>

Renaissance artists usually conducted dissections in a fundamentally different way from medical doctors or university professors. Renaissance artists (and architects) undertook private dissections because the auditorium setting of public dissection was less conducive to the close

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<sup>53</sup> Sawday coined the term ‘Anatomical Renaissance’ on *The Body Emblazoned*, 4.

<sup>54</sup> Klestinec, *Theaters: Students, Teachers*, 21.

observation of a corpse. Artists dissected so they could see the formal qualities of the corpse, the musculature, textural qualities, colors, and the ways in which bodily systems connected to one another, so a dissection would have not made much sense to their practice if they could not view the corpse. The way in which artists obtained their bodies for dissection also differed greatly from the norm established by Renaissance medicine. Doctors usually obtained their bodies from postmortem examinations, but artists did not have this option.<sup>55</sup> And in reality, few people actually ended up at the gallows, so this was not a reliable source of bodies for a private anatomist's practice either.<sup>56</sup> Instead, artists frequented hospitals which were repositories for a larger number of bodies. Moreover, the cadavers they offered fell within the traditional sources of subjects for dissection: the destitute foreigner, or the man or woman without family to object to dissection.<sup>57</sup> Renaissance masters who are known to have practiced anatomical study in private, such as Leonardo da Vinci and Michelangelo, obtained their bodies from public or church hospitals.<sup>58</sup> Obtaining bodies from legitimate sources would reduce the chance that an artist's workshop would be resisted by society at large.

Artists could have met resistance when trying to obtain bodies, because, for reasons of trust and integrity, public dissections during the sixteenth century had been more acceptable than private ones. Klestinec describes how fear surrounding dissection had been distributed during the Renaissance: "[the fears were] tied to concerns about local rather than foreign corpses and to private anatomical exercises rather than public ones."<sup>59</sup> Usually, the sourcing of the body for a public dissection was transparent, making people feel more comfortable with the dissection, but it was not always clear where anatomists obtained their bodies. For all that the public knew, a private

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<sup>55</sup> Park, "Criminal and Sainly," 16.

<sup>56</sup> Park, "Criminal and Sainly," 16.

<sup>57</sup> Park, "Criminal and Sainly," 16.

<sup>58</sup> Park, "Criminal and Sainly," 16; Schultz, 78.

<sup>59</sup> Klestinec, *Theaters: Students, Teachers*, xvii.



anatomist could have obtained their body legally, through known sources, such as the gallows or hospitals, or the body could have been obtained illegally, through murder or graverobbing.

Because of the fears surrounding dissection – including residual worries of bodily integrity or the concern that desperate anatomists would murder to obtain bodies – those who chose to scrutinize the body were dauntless pioneers in the realm of anatomical understanding, and their efforts to understand the human viscera revealed a fearsome, yet inspiring world. Most scholars are aware that Renaissance artists penetrated the body’s surface in hopes that they would enhance their ability to accurately portray the human form in texture and proportion. But, likewise, even Renaissance architects anatomized the body in order to utilize its underlying principles and qualities as a model for their own works.

In a statement with great relevance to architecture, Sawday observed, “the study of anatomy was the study of the organization of space.”<sup>60</sup> During their corporeal studies, both artists and architects confronted a complex network of volumes enclosing fascinating spaces (Fig. 3), which, as Francis Bacon would observe, revealed a wealth of “passages and pores ... cavities, nests, and receptacles.”<sup>61</sup> Architects’ exposure to this bizarre, cavernous world may well have revolutionized the Renaissance notion of space, perhaps even inspiring the transformation of the 15<sup>th</sup>-century planar and rationalized artistic works into the voluminous, layered buildings and paintings of the High Renaissance style. The juxtaposition of Brunelleschi’s Old Sacristy (1421-1440) (Fig. 4) and Michelangelo’s New Sacristy (1521-1524) (Fig. 5) exemplifies this shift. Although little noticed, architects argued the necessity to see below the surface of objects and concepts, including the human body. Such assertions appeared in 16<sup>th</sup> century architectural theory; architect Sebastiano Serlio (1475-1554), Michelangelo’s contemporary, asserted in his 1537 treatise on architecture:

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<sup>60</sup> Sawday, 86.

<sup>61</sup> Sawday, 94. This quoted material was originally found in Francis Bacon’s *The Advancement of Learning* (1605).

“...those artists who have seen the skeletons of humans and animals are more skilful and have a better understanding of the art than those who deal with the subject superficially, only making use of the outward appearance. [...] It is indeed true that once a man is well acquainted with and has memorised [sic] the said ‘hidden’ parts, when later he is at work he will make use of these fundamentals and will make many of his things with a practice which, however, will have originated from theory.”<sup>62</sup>

Serlio’s statement is made in a context relating to the art of studying perspective, where he recommends that those who want to gain mastery over perspective must delve inward to find the skeleton of its logic. But, Serlio’s last sentence seems ambiguous; he seems to mean that this anatomical-based practice of seeing deeply into something could be applied to any practice, even architecture. Leon Battista Alberti (1404-1472) makes even more extensive references to the human body than Serlio, repeatedly comparing architectural components to bodily parts such as bone, skin and muscles.<sup>63</sup> In her article “Notes from the Field: Anthropomorphism,” architectural historian Alina Payne explicates the developmental process of body-based architectural paradigms; first, Alberti improved upon the ideas of Vitruvius’s “prescription for architectural beauty [that] was based on the proportions of the human body.”<sup>64</sup> Then, architects like Michelangelo, who have identifiably corporeal styles, “added their own more or less organicist or abstract twists to the Albertian definition.”<sup>65</sup> Both Serlio’s and Alberti’s body-based vocabulary reveals the popularity of the body as an architectural model; a pervasiveness which originates in Renaissance anatomical study. Payne even speaks of an “intersection between the sciences of body and building,” stating that “the growing scientification of the human body – its analysis and display as a section through a building, layer by layer, mobile joint by mobile joint – had brought about an abstract conception of

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<sup>62</sup> Sebastiano Serlio, *Books I-V of ‘Tutte l’opera d’architettura et prospetiva’ by Sebastiano Serlio*, vol. 1 of *Sebastiano Serlio on Architecture*, trans. Vaughan Hart and Peter Hicks (New Haven, NJ: Yale University Press, 1996), 48.

<sup>63</sup> As an example of Alberti’s extensive architectural analogies to the human body, see Leon Battista Alberti, *On the Art of Building in Ten Books*, trans. Joseph Rykwert, Neil Leach, and Robert Tavernor (Cambridge, MA: MIT Press, 1988): 79-81. See also Alina Payne, *The Architectural Treatise in the Italian Renaissance: Architectural Invention, Ornament, and Literary Culture* (Cambridge: Cambridge University Press, 1999), 82-83 and Charles Burroughs, *The Italian Renaissance Palace Façade: Structures of Authority, Surfaces of Sense* (Cambridge, United Kingdom: Cambridge University Press, 2002), 99.

<sup>64</sup> Alina Payne, “Notes from the Field: Anthropomorphism; Alina Payne,” *Art Bulletin* 156, no. 1 (March 2012): 29.

<sup>65</sup> Payne, “Notes from the Field: Anthropomorphism,” 30. Payne also mentions Bramante and Palladio as having ‘organicist’ styles.

its parts and their role in the functioning of the whole.”<sup>66</sup> Renaissance architects were becoming more and more aware of the value of the body as an analogy for their architecture, and likely began to believe that the creation of built form required as intimate an understanding of anatomy as it did for painting or sculpting human figures, since it acquainted the designer with the body’s rich spatial interplay between flesh and void.<sup>67</sup> Michelangelo appears to be one of the foremost exemplars of this phenomenon; not only does he state that “the members of architecture derive from the members of man. Who has not been or is not a good master of the human body, and most of all of anatomy, cannot understand anything of it,” but also seems to have taken a personal interest in the symbolic undertones associated with the practice of anatomical dissection – as revealed in his poetry and paintings,<sup>68</sup> Michelangelo was obsessed with the idea of exchanging a flayed skin for heavenly release from corporeal suffering.

Michelangelo had not been the only artist familiar and involved with the less utilitarian meanings and uses of dissection-based imagery. Several Renaissance artists played a pivotal part within the development of the iconographic propaganda of dissection, since artists’ works were the way that many of the symbolic meanings associated with the practice came to reach the public at large. Artists would represent dissection within their artwork in two different ways: basing their iconography on their own conception of dissection’s meaning or deriving it from their understanding of its societal significance. This substance and understanding was then communicated to the public through the artists’ own signed works or via artist-illustrated anatomical treatises, which were both distributed to university pupils and disseminated to the public via the printing press.<sup>69</sup> Hence, artists did not merely utilize knowledge gained from anatomical study in the production of their works; they represented dissection in ways which could either create new

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<sup>66</sup> Payne, *The Architectural Treatise*, 211.

<sup>67</sup> Sawday, 85-86.

<sup>68</sup> See chapter 2 discussion

<sup>69</sup> Park, “Criminal and Saintly,” 14-15.

meanings or perpetuate current cultural connotations of the practice. Architecture also played an integral part in this cultural exchange between scientific and artistic practice; since it too possesses the ability to communicate the symbolic meaning and formal imagery related to anatomical study. Therefore, all creative works of the Renaissance could act as the catalyst and catalog of the development of various symbolic meanings of dissection.

### *Dissection and Schematic, Conglomeratic Thought*

Dissection revealed the interior spaces of human bodies, and instantly, as Sawday put it, Renaissance “poets, philosophers, scientists, architects, and artists had begun the task of *making new sense* [italics added] of the interior world of the human frame.”<sup>70</sup> As early modern society internalized the lessons of anatomical study, several preoccupations surfaced within creative works. These were not limited to naturalistic renderings of the human body, and they serve to reveal the Renaissance’s new fascination with segmentation, space and volume, and the depiction of the lifeless as lifelike. Dissection, by inspiring Renaissance culture’s preoccupation with separation, fragmentation, and restructuring, ultimately influenced the ideology and form of Renaissance architecture – instances of this showed up in Alberti and Serlio’s treatises, among others.

As mentioned earlier during the description of Galen’s ideology and its divisive nature, Sawday believes that the growing practice of dissection during the Renaissance was a catalyst for the preoccupation of sixteenth and seventeenth century society with ideas including segmentation, categorization, and reconfiguration.<sup>71</sup> During a dissection, the body was methodically cut open and pulled apart to reveal the logic of the human body. Bodily systems became objects of study; each corporeal part was classified by its differences in relation to others. This process became a

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<sup>70</sup> Sawday, ix.

<sup>71</sup> Sawday, 2-3. Also see the general argument of its affects on Renaissance intellectual culture contained in his introduction.

paradigm, pervading all Renaissance work in subtle ways. An example of this appears within the Renaissance *blazon*, a poem in which parts of the female body are isolated for use in metaphorical comparisons. Historians attribute the appeal of the poetic *blazon* to the divisive, dominating nature of Renaissance anatomical culture, as David Norbrook observed: “the vogue in the sixteenth century for the blazon, the detailed enumeration of the parts of the woman’s body, can be seen as reflecting the new scientific mentality with its mastering gaze, its passion for mapping the world in order to gain power over it.”<sup>72</sup> Architecture would also evidence this fragmentary culture within its form – during the Renaissance, the walls of important architectural works seem to be more focused on the presentation of the wall as a layered system of structure and skin, rather than a flat plane that was typical of much Romanesque architecture in Italy (especially Tuscany) and early Renaissance architecture as well.<sup>73</sup>

With ideas of separation came the urge for artists and intellectuals to rebuild and repair, sometimes to improve what came before. An idea, former practice, or object could be dissected or taken apart, and then reconfigured. Several artworks evidence this phenomenon in different ways: for example, Hugues Sambin in his *De la Diversité des Termes* (1572) combines and recombines, in a collage-like manner, several different permutations of the classical orders (Fig. 6).<sup>74</sup> As Park points out, Renaissance graphic art had been unusually focused upon representations of the torturous, divisive practices of flaying and dismemberment.<sup>75</sup> Sawday, focusing on dissection’s affects on Renaissance literature, attributed the Renaissance fascination with caustic literary satire to the eminence of violent, penetrating anatomical practices.<sup>76</sup> Later, in the analysis of the Medici Chapel, I argue that Michelangelo’s Mannerism is similarly schistic; his own individual brand of Mannerism is

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<sup>72</sup> David Norbrook, as quoted within Sawday, 192.

<sup>73</sup> As an example of Romanesque architecture, see San Miniato al Monte (c. 1013, Florence, Italy) and for early Renaissance, see Alberti’s façade for S. Maria Novella (1456-1470, Florence, Italy).

<sup>74</sup> George Hersey, *The Lost Meaning of Classical Architecture: Speculations on Ornament from Vitruvius to Venturi* (Cambridge, MA: MIT Press, 1988), 135-137. Hersey states that Sambin’s work represents the presence of monstrosity in architecture; I argue that monstrosity is a product of Sawday’s divisive ‘culture of dissection.’

<sup>75</sup> Park, “Criminal and Saintly,” 21.

<sup>76</sup> Sawday, 2.

a divisive emblazoning of the corpus of Classical architecture – a process in which Michelangelo internalized the lessons of antiquity and used his knowledge to recompose Classicism into a new conception of architectural form.

### *Dissection as a Judicial Act and a Public Service*

When a criminal's body was chosen for a public dissection, the humiliation inherent in this form of dissection served the community by acting as a deterrent for crime.<sup>77</sup> And, since these public dissections were able to communicate with society at large, they therefore acted as the vehicle of development of the numerous symbolisms associated with dissection during the Renaissance. This public, judicial setting allowed dissection to play two important semiotic functions: to represent the society's intellectual prowess and to act as a symbol of redemption for sinners – both are concepts that would affect the desired content of artists' commissions for funerary works.

For Renaissance intellectuals, dissection must have appeared to be a novel mode of seeking medical information, so it logically follows that public Renaissance anatomical studies became a symbol of the communal pursuit of knowledge. A community's anatomy theater, whether it was in Padua, Bologna, Rome, or elsewhere – acted, according to Sawday, “as a register of a community's intellectual prowess.”<sup>78</sup> The value which society assigned to dissection also bolstered dissection's function as an appropriate punishment. When a criminal was dissected in a public setting, not only was he redeeming himself by deterring others from committing crimes, he was contributing to the aims of science and expanding the Renaissance body of anatomical knowledge; in this manner, according to Sawday, “the criminal could ... perform a public service.”<sup>79</sup> Bearing this in mind,

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<sup>77</sup> Klestinec, *Theaters: Students, Teachers*, 76.

<sup>78</sup> Sawday, 189.

<sup>79</sup> Sawday, 55.

dissection had come to act in the same manner as the ancients' sacrifices – an opened corpse had become an offering to God to ensure God's good graces, since it would ensure an obedient, lawful society and a group of dedicated intellectuals and artists who sought to reveal, represent, and revere His mysteries.

Dissection became a part of the judicial process – and the cycle of punishment and redemption that went along with it – when anatomists began using the gallows to satisfy the growing demand for corpses. Facing a shortage of bodies, artists and doctors alike had to resort to the bodies of criminals and marginal members of society, more specifically, foreigners and the impoverished, in order to conduct private or public anatomical dissections.<sup>80</sup> Furthermore, the potential for dishonor inherent in public dissection logically drove society to prefer that dissection be restricted to foreigners, criminals, and animals.<sup>81</sup> If society did not know the subject of a dissection, or were less emotionally attached to him or her, they would have likely been more able to accept his or her end under the scalpel of an anatomist. Anatomists also honed in on these groups because they offered the least resistance: they would either not have family near enough to them to object to dissection or have enough money to be concerned with a proper burial. Although dissection had been much more acceptable to medieval and Renaissance society than widely thought, cultural anxieties—not necessarily religious ones—exerted limitations on dissections conducted for the pursuit of knowledge. Even in liberal Italy, some families refused postmortem autopsy on behalf of their family members. Their rejection of dissection did not result from their focus on bodily integrity in heaven; rather, they desired a proper burial where those attending were still able to view the body.<sup>82</sup> Park mentions that public dissections were viewed as a “dramatic violation of personal and family honor,” and this likely deterred many from volunteering themselves or family members for

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<sup>80</sup> Park, “Criminal and Saintly,” 12.

<sup>81</sup> Park, *Secrets of Women*, 19.

<sup>82</sup> Park, “Criminal and Saintly,” 4.

dissection in the name of furthering knowledge.<sup>83</sup> Furthermore, according to Park, private dissection, embalming, and autopsy were acceptable because none of them involved “an unnamed and naked corpse . . . not only exposed in front of a group of unrelated viewers but also largely dismantled.” A public dissection under the gaze of interested strangers, including artists, could dishonor the subject because it would reveal his or her naked body to view, and it might also mutilate the face, which was an important part of the body to display at a proper funeral.<sup>84</sup> This inherent societal humiliation caused by the act of exposing the viscera of a corpse gave dissection power as a mode of punishment.

Historians analyzing the significance of dissection during the Renaissance must not forget that this pursuit of knowledge came at a grave price. Sawday presents the issue as a double edged sword – anatomists “were dedicated to achieving knowledge of the human body in order to alleviate pain and suffering, and yet that knowledge was only gained at the cost of enormous pain to the victims who, eventually, arrived in the anatomy theatres.”<sup>85</sup> In this light, some anatomists could have been seen as insensitive – they desperately hunted bodies, no matter the cost to themselves or others. Several anatomists would even risk their freedom and reputation by illegally pursuing bodies by night.<sup>86</sup> The scarcity of bodies frequently led anatomists to take extreme measures, such as graverobbing and possibly murder.<sup>87</sup> This dangerous, ravenous appetite for bodies (and by association, for knowledge) also caused some anatomists to callously disregard their subjects’ wishes for burial. According to Sawday, in order to obtain bodies, “...anatomists intervened even when the family and friends of the victim may have felt reasonably assured that the corpse would receive burial. Their intervention was unpredictable, and neither money nor social class could guarantee

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<sup>83</sup> Park, “Criminal and Saintly,” 12.

<sup>84</sup> Park, *Secrets of Women*, 15.

<sup>85</sup> Sawday, 187.

<sup>86</sup> Sawday, 196.

<sup>87</sup> Park, “Criminal and Saintly,” 12.



that an execution victim would escape their attentions...”<sup>88</sup> Some Italians feared dissection not only for its ability to jeopardize the integrity of the body, but for its mesmerizing quality, which seemingly drove men to obtain bodies no matter the circumstance; in some cases, anatomists mistakenly obtained bodies of people who had not actually died yet.<sup>89</sup> A suspect milieu might have caused some artists to avoid the appearance of too much anatomical knowledge in renderings of the human form in paintings and sculpture, as some did express distaste for such detail.<sup>90</sup> Other artists likely transmuted the pain and fear associated with dissection into a design device – in the Medici Chapel, apprehension, struggle, and suffering embodied by the space’s sculpture serves the space’s latent allegory of dissection: by emotionally discomforting those who enter the space with imagery evocative of dissected viscera, the Medici Chapel likely caused visitors to fearfully evaluate their own virtuousness, since dissection, in reality, was a disturbing punishment sometimes required of the iniquitous.

### *Dissection, Bodily Transience, and Christian Redemption*

Perhaps even less acknowledged than the frequency of anatomical dissection itself in the Renaissance is the fact that it had an omnipresent spiritual significance. Because artists were frequently commissioned to produce religious and funerary works, historians need to consider this particular relationship in detail. This notion originated in part from the practices of flaying, punitive vivisection, or posthumous dissection on the bodies of criminals, where their bodily disintegration

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<sup>88</sup> Sawday, 61-62.

<sup>89</sup> Sawday, 61.

<sup>90</sup> Fredrika Jacobs. "(Dis)assembling: Marsyas, Michelangelo, and the Accademia del Disegno," *Art Bulletin* 84, no. 3 (September 2002): 440-441. <http://www.jstor.org/stable/3177307> (accessed March 23, 2010). Jacobs mentions Italian theorist Lodovico Dolce, who describes Michelangelo’s anatomical exaggeration as ‘ugly.’

came to be an early modern form of redemption. As Park explains, after a public execution “the criminal’s subsequent dissection... resembled a sacrament – the penultimate act in a potential drama of redemption.”<sup>91</sup> The wicked, if dissected, could seemingly redeem themselves as their souls resided in purgatory, and the fact that their bodies provided valuable medical and artistic insight to society helped the person atone for his or her sins.

But the religious significance of a dissection would not end there, since the dissection process appeared, to Renaissance society, very similar to martyrdom. Those whose bodies were used for dissections seemed to be giving the ultimate sacrifice in a manner similar to the pain and suffering that Christ endured on the crucifix. In 16<sup>th</sup> century Europe, the dissection of a criminal and the crucifixion of Christ came to be juxtaposed in the early modern mind; as Sawday emphasizes in *The Body Emblazoned*, like a criminal, “Christ [had] also been condemned as a malefactor and put to a public and shameful death.”<sup>92</sup> Sawday also relates the Last Supper to a dissection, or rather, a self-dissection, where Christ divided his body for the Eucharist: “... so powerful was the set of symbolic meanings invested in the figure of the self-dissecting Christ, that it came to inhabit the visual depiction of anatomization at every level.”<sup>93</sup> As an example, anatomist Berengario da Carpi utilized this connection between Christ and dissection, projecting his own musculoskeletal findings onto Christ’s body suspended on a crucifix (Fig. 7). Park describes the nature of the relationship between dissection and redemption, its societal purpose, and its reminiscence of Christ: “in addition to being an act of vengeance and a warning to others, [posthumous dissection] was also the culmination of a process that aimed to reconcile the criminal with those that condemned him through a final act of atonement explicitly identified with Christ and the saints.”<sup>94</sup> In the Middle Ages St. Bartholomew’s martyrdom would have been viewed as a death by flaying, but in the

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<sup>91</sup> Park, “Criminal and Saintly,” 23.

<sup>92</sup> Sawday, 106.

<sup>93</sup> Sawday, 118.

<sup>94</sup> Park, “Criminal and Saintly,” 23.

Renaissance culture of anatomization, it could be seen as death by dissection (Fig. 8). One has a glimpse of this idea in écorché figures, as well (Fig. 9, Fig. 10). In essence, a criminal had often been compared to a martyr because of the pain that he appeared to suffer under the anatomist's knife in order to give the utmost bodily sacrifice to the study of science.<sup>95</sup> Artists and architects might encapsulate this idea in their work by including forms or images evocative of a soul penitently hoping for release by way of self-dissection. In his *Last Judgment* paintings for the cupola of Florence Cathedral (Santa Maria del Fiore) Federico Zuccaro (1541-1609) depicts a suppliant man, looking upwards to Heaven, ripping himself open with his hands, his organs sloughing out of his body cavity (Fig. 11). This man is in the region of the dome which represented Hell, so his upward glance symbolizes his hope that his bodily sacrifice will win him favor with God. Michelangelo seems to make use of a similar vertical allegory within the Medici Chapel as well, where the lower regions of the chapel represent earthly torment, the upper reaches heavenly ecstasy, and dissection acts as the border between the two.

So, like Zuccharo, Michelangelo also saw embedded significance in the idea of a man destroying himself in order to earn or achieve an ethereal state of being. Throughout the entirety of his creative work, Michelangelo seems to focus on the idea that the earthly body is a restraint that must be overcome to achieve perfection. These ideas are exemplified through his poetry:

“Merciful to others and merciless only to itself, a lowly creature’s born, who with pain and sorrow clothes another’s hand and strips off its own skin, and only through death might be called truly born.”<sup>96</sup>

Michelangelo’s fixation on flaying as a release from mortal imperfection seems not only rooted in his adolescent familiarity with the Marsyas statues within the Medici garden, but also rooted in his own insecurities about the afterlife and his acknowledgement of the disintegrated human body as a way

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<sup>95</sup> Park, “Criminal and Saintly,” 23.

<sup>96</sup> Fredrika Jacobs, “(Dis)assembling: Marsyas...,” 426. This quoted material was originally found in Michelangelo, “D’altrui pietoso e sol de sé spietato,” in *The Poetry of Michelangelo: An Annotated Translation*, by James M. Saslow (New Haven: Yale University Press, 1991), 219, no. 94.

for the sinful to find salvation. Michelangelo was likely aware of the web of pervasive connections drawn between excoriation and punishment, redemption, and regeneration, and these seem to repeatedly inform his architectural designs, especially the Medici Chapel, with its program underpinned by the idea of hope for release into the afterlife.

Not only Zuccharo and Michelangelo saw significance in the image of a flayed human; many Renaissance artists and anatomists saw great cultural significance given to the dissection-related process of flaying away skin to reveal muscle, and eventually representations of the shedding of the skin became a central icon that represented dissection's regenerative and holy purposes. Throughout the Renaissance, the body was seen as the 'garment of the soul', implying a separation between the physical and spiritual essences of human life.<sup>97</sup> Upon death, a human would shed his or her palpable mortal shell, leaving behind a spirit which had no discernible physical form and was assumed to be everlasting. Anatomical studies represented this idea by depicting both the earthly body and the soul simultaneously. Artists would do so by depicting the skin's removal and the body's mutilation as not injurious to the subject. In their images, wounds that would be fatal to a living being are of no consequence to the anatomical subject; instead, the subject pays no attention – much like the reptile that moults yet still remains alive. For example, the *écorchés*, or flayed anatomical studies within Berengario da Carpi's anatomical treatise (1521), show men willingly flaying themselves, one with his skin falling from his waist like cloth (Fig. 12). In his other *écorchés*, martyrs willingly participate in their own excoriation, holding their own instrument of martyrdom or pulling away their own skin (Fig. 9, Fig. 10). Thus, when these images are seen in the context of the religious meanings of dissection, the skin becomes the willingly disposed earthly body, while the living subject represents the soul awaiting redemption – which cannot feel pain and is therefore indifferent to the body's destruction. For artists, such depictions of dissection became *memento mori*

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<sup>97</sup> Sawday, 73.

– they depicted the frailty of the human body, thereby prompting the viewer to become introspective and contemplate the essence of his or her existence. And, if the viewer had numerous sins, dissection-based imagery likely incited fear in the heart of the viewer, prompting him or her to think about the measures he or she might have to take to secure a place in heaven, where in some cases, dissection must have been their last logical resort.

For such delinquent people, they could have seen their bodily integrity – their skin and organs – as commodities to be exchanged with God in order to obtain heavenly favor. An illustration of the anatomy theatre (1610) in Leiden, Netherlands, shows a man displaying a lifeless human skin as if it was a fine piece of cloth to be traded for other excellent goods (Fig. 13). Michelangelo painted a similar image in the Sistine Chapel, of course, in his depiction of Saint Bartholomew, where the saint hopes to be redeemed in exchange for his bodily sacrifice -- he holds a knife in one hand and his empty skin in the other. In both these depictions, the skin becomes a commodity that can be traded – in the case of the theatre illustration, for goods; in the case of Michelangelo's work, for admittance into heaven. In the case of the latter, the live anatomical subject with flayed skin symbolically represented what some criminals were relying upon for eventual redemption: dissection's part in the holy-regenerative process, where, in exchange for the subject's dissected body, his or her soul ascends into heaven. As evidenced in their artwork and anatomical studies, artists had been aware of such symbolic undertones connected to dissection. Michelangelo would use imagery of dissection for several different purposes in service of his design; to name a few, he would use forms and narratives connected to dissection to make his space act as a *memento mori*, inciting viewers' fearful reflections, and he would also use it to better fulfill the programmatic requirement of the space – to represent Christ's Resurrection.

During the Renaissance, there had been a widespread interest in the revival of classical knowledge, no matter what its topic – myth, philosophy, mathematics, and anatomy alike. Antique culture as a whole was a new, uncharted world that Renaissance intellectuals sought to study and emulate. While myths could have had significance merely based on their Classical origin, uses of the Classical tale of Marsyas seems to stem from more than an interest in studying the antique past. Marsyas had relevance to specific Renaissance concerns – it embodied the want for just punishment, the separation between the soul and the body, and the yearning for release into a serene afterlife. In this way, the myth of Marsyas carried similar metaphors as a public dissection. Since the meanings of both were so similar, one might argue that the two different realms had a symbiotic relationship, where the popularity of anatomical study fed fixations upon the myth of Marsyas, and vice versa. However, since the practice of anatomical dissection was a tangible phenomenon to be witnessed in Renaissance daily life, whereas Marsyas was merely a myth from antiquity, the relationship between Marsyas and anatomical study had likely been more unidirectional, where the less relevant cultural artifact, the myth of Marsyas (erudite knowledge from classical antiquity) acted as the symbol or representation for the more relevant cultural practice of anatomical dissection (practiced and witnessed within many realms of Renaissance society).

The tale of Marsyas, part of Ovidian myth, described a satyr who hubristically challenged Apollo to a musical contest, failed to sufficiently impress the god, and as punishment for his insolence, found himself bound to a tree and flayed.<sup>98</sup> During the contest, Marsyas did not impress Apollo because he used an inferior instrument, the *aulos*, to compete with Apollo's lyre.<sup>99</sup> To the Greeks, the *aulos* represented tormented emotion, while the lyre represented otherworldly

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<sup>98</sup> Charles Burroughs, "Monuments of Marsyas: Flayed Wall and Echoing Space in the New Sacristy, Florence," *Artibus Et Historiae* 22 (2001): 33, 42. Burroughs's account of Marsyas originates in Ovid's *Metamorphoses* VI.

<sup>99</sup> Edith Wyss, *The Myth of Apollo and Marsyas in the Art of the Italian Renaissance: An Inquiry into the Meaning of Images* (Newark, NJ: University of Delaware Press, 1996), 26-29.

harmony.<sup>100</sup> Because of these meanings, the story sets up a fundamental opposition between human imperfection and heavenly perfection. It also created a great religious metaphor, where Apollo, representing heavenly justice, punishes that which represents the hubristic soul, blinded and tempted by emotion, and through a Christian lens, sin. This polar opposition set up by the story of Marsyas relates directly to dissection in that it similarly recalls flaying's role in the transformative process between anguish on earth and ecstasy in heaven. In the story of Marsyas, Apollo's knife acts as the boundary between both polarities; in the case of dissection, the anatomist's knife divides the two.

Historians demonstrate their similar understanding of the myth when they establish that Renaissance artists felt affinity with Marsyas, seemingly a martyr for art, who, much like artists in the Renaissance, unwaveringly sought to compete with heavenly perfection.<sup>101</sup> This dedication led Marsyas to a tormented death. Artists, especially Michelangelo, identified with these ideas because they recalled the painful dedication that each artist goes through to perform transformation upon the media of their choice; in the case of Michelangelo, like Apollo, or an anatomist, he penetrates into the body of his marble block to reveal and revive the sculpture within (Fig. 14).<sup>102</sup> In this way, the satyr's agonizing death also alludes to Christ's sacrifice and Resurrection.<sup>103</sup> Ovidian myth describing Marsyas emphasizes this metamorphosis from the physical to the ethereal: "the fertile earth was soaked [with tears], and soaking caught those tears and drank them deep into her veins,' at last dispersing them as a river. Marsyas the satyr is thus transformed into Marsyas 'the clearest river in all Phrygia.'"<sup>104</sup> In the context of Marsyas, bodily flaying clearly represents ideas of metamorphosis and regeneration, and it is no coincidence that anatomical dissection – a practice which flayed and mutilated the body in a manner similar to that of Apollo's punishment – has a similar meaning to the

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<sup>100</sup> Wyss, 26-29.

<sup>101</sup> Jacobs, 433; Sawday, 185.

<sup>102</sup> Jacobs, 433.

<sup>103</sup> Jacobs, 433.

<sup>104</sup> Jacobs, 429.

Renaissance people. Through the eyes of Renaissance culture, the body was an object which concealed a vaguely understood world – a world that contained the soul, enabled life, and succumbed to sickness and age unknowingly. Therefore, any allegory that centered on the idea of penetration into the depths of the body beyond the superficial outer shell would have significant meaning to Renaissance culture.

Marsyas and dissection metaphorically represented martyrdom, transformation, and righteous punishment, but dissection satiated the Renaissance need to see the reality of the body beneath. Hence, some representations of Marsyas in the Renaissance would merely act as more glamorous covers for the narratives of dissection, which included its representation of the ravenous need of artists and intellectuals to comprehend the secrets of the human corpse. Titian's work *The Flaying of Marsyas* (Fig. 15) seems to speak of this. In his painting, the flaying of Marsyas has an audience, much like the audience that would attend a public dissection. A satyr holds a bucket, much like the basket or goblet placed near a dissected corpse on the floor (Fig. 1), while another woman plays a violin – some dissections were accompanied by music.<sup>105</sup> Two knife-wielding figures are present – the one at the bottom appears to represent Apollo, while the other at the top might eagerly represent the prying eyes of the anatomist. Two dogs stand in the bottom right corner of the painting – as seen in the title plate of Vesalius's *Fabrica* (1575) (Fig. 16), dogs and other animals were often included in anatomical illustrations because public dissections usually included a series of human and animal studies. The number of figures included by Titian is quite unusual to the typical depictions of Marsyas (Fig. 17), where only Apollo and Marsyas are present within the scene. Thus, Titian seems to be using the guise of Marsyas to legitimately depict the drama of an anatomical dissection; a blatant depiction of dissection, possibly because of lingering taboo, might not have seemed an appropriate subject matter for a painting, but Marsyas, in its classical origin, would.

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<sup>105</sup> Klestinec, *Theaters: Students, Teachers*, 14.



Artists who worked for anatomists used Marsyas as an icon for dissection as well. As an example, Marsyas appears in an illuminated letter V in Vesalius' *Fabrica* (Fig. 18).<sup>106</sup> Michelangelo, too, who practiced anatomy and worked for an anatomist,<sup>107</sup> has been claimed to represent the myth Marsyas within his work, but one might argue that this is incorrect. While, Burroughs argues that Michelangelo evokes Marsyas in the Medici Chapel because of its mythical significance to the Medici family and his exposure to two Medici statues of Marsyas in his childhood,<sup>108</sup> none of Michelangelo's work conspicuously depicts Marsyas, and Michelangelo is much more likely to have used symbolism related to dissection in his work because Michelangelo performed a plethora of dissections over the course of several years.<sup>109</sup> Therefore, one might argue the opposite of Burroughs: that Michelangelo did not seek to suggest Marsyas but dissection instead.

Dissection and Marsyas also carried similar religious overtones: martyrdom, sacrifice, and bodily transformation. But, the myth of Marsyas wouldn't have been accessible to the Renaissance culture at large – it was a classical myth confined to the literate and learned. Therefore, more well-known cultural practices of dissection gave the myth of Marsyas, as represented or alluded to in church settings, an ability to be able to more readily communicate symbolic meaning to a wider public. A viewer who sees a depiction of Marsyas' punishment might see the drama of dissection rather than the erudite meaning of the classical myth. The myth of Marsyas would also not have been able to represent the Renaissance desire to understand the interiors of things if it did not relate back to the practice of dissection. Without the latent cultural meaning surrounding anatomical practice that caused flaying and disembodiment to be associated with redemption, salvation, and punishment, the Marsyas myth could not have acted as easily as a vehicle of communication with all subjects who viewed and experienced Renaissance art at the time of its conception.

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<sup>106</sup> Sawday, 186.

<sup>107</sup> Refer to Chapter 2 for more information.

<sup>108</sup> Burroughs, 33-36.

<sup>109</sup> Refer to Chapter 2 for more information.

In light of all the ways in which Renaissance society learned and utilized the practice of anatomical dissection, the corpse acted as a frontier for Renaissance architects and artists -- a place which could be explored and roamed and comprehended. The ideas and metaphors that society and creative professions would take from the corpse, such as deconstructive and reconfigurative practices, judicial metaphors, and religious allegories, would make their way into the Medici Chapel, facilitated by Michelangelo's avid practice of dissection. In the Medici Chapel, Michelangelo takes the allegorical and symbolic meanings derived from anatomical study to inform his architectural approach -- he uses bodily forms to evoke and represent the dissected body, prompting the visitor to contemplate the act of dissection and its secular and spiritual consequences.

## Chapter Two:

### Dissection and Michelangelo's Artistic Practice

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To this day, many historians' analyses have approached Michelangelo's work through the lens of humanism and Neo-Platonism as major drivers of his intellectual philosophies. Humanism and Neo-Platonism are innately connected; as philosophies, they both extolled studies of Classical Greece and Rome and valued their influences within artistic pursuit. More specifically, humanism supported the empirical pursuit of knowledge and the magnanimous support of the arts and sciences. Furthermore, Neo-Platonism was a component of humanist thought – it sought to combine Classical myth and symbolism with Christian subject matter. In fact, Michelangelo, in his youth, spent quite a lot of time within the Palazzo Medici, so his mind was inevitably steeped in the humanist intellectual environment that inevitably pervaded the house of the Medici family, such prominent art patrons.<sup>110</sup>

So, therefore, it is accurate to place Michelangelo's work within these movements, as many hallmarks of these ideologies have visibly molded his artistic commissions. Moreover, it is undeniable that dissection – the empirical study of anatomy—was inevitably supported by humanist doctrine and is considered a component of the humanist movement as a whole. However, viewing dissection as only a mere component of humanism diminishes its significance. To this day, the influence of anatomical study within Michelangelo's architecture has been described in a very superficial way; for example, Bernard Schultz in his *Art and Anatomy in Renaissance Italy* only credits the muscular veracity of Michelangelo's sculptures to his anatomical studies; he does not speculate on any other qualities of Michelangelo's works that may have had their origin on a dissecting table.

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<sup>110</sup> Condivi, 12-13.

Historians must not ignore the arguments of those such as Jonathan Sawday who argue convincingly that the practice of dissection alone exerted such a powerful influence on all facets of culture, not only in formal ways but also ideological ones. Encompassing Michelangelo's work beneath the humanist umbrella appears to have led historians to consider Michelangelo's anatomical study as merely a minor formal influence and certainly not as an ideological influence. Hence, there seems to be a need to break the disciplinary precedent of classifying Michelangelo's work in this manner, since such a picture gives an incomplete or unbalanced view of Michelangelo's creative mindset.

### **Michelangelo's Practice of Dissection<sup>111</sup>**

While it is well known that Leonardo da Vinci (1452-1519) studied anatomy through drawing, Michelangelo, as both artist and architect, was also deeply immersed in contemporary practices of dissection. Like Leonardo's drawings, Michelangelo's anatomical studies and fine artworks suggest to an observer that, at the least, he possessed an understanding of human anatomy based in visual anatomical study. However, it is important to examine the exact ways Michelangelo interacted with the corpses he studied. The character of his anatomical study – whether it was passive observation or active participation – likely determined the nature of the influence that dissection had upon him and his work.

During the Renaissance, universities held public dissections for a large audience and private professor-led dissections for a small audience. While it is possible that artists could have attended these dissections, oftentimes artists observed and illustrated other anatomists' dissections, or conducted private dissections of their own, if they had a source of bodies. The most intimate of these categories of dissection would have been the artists' first-hand encounter with a corpse, since

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<sup>111</sup> See Fig. 21 - Fig. 28 for Michelangelo's anatomical studies and drawings.

it would allow the artist to experience the body's texture, color, and structure in the most detail.<sup>112</sup> Ascanio Condivi's *Life of Michelangelo* places Michelangelo's work within this category when he states "there is no animal whose anatomy he [Michelangelo] would not dissect, and he worked on so many human anatomies that those who have spent their lives at it and made it their profession hardly know as much as he does."<sup>113</sup> In other words, Michelangelo saw great value in the study of anatomy for his body of work, and he took any chance to dissect a corpse, whether animal or human.

By the age of sixteen, Michelangelo had been taken into Lorenzo de' Medici's household, enabling him to study the two Marsyas statues located in the garden of the Palazzo Medici.<sup>114</sup> Therefore, Michelangelo had been exposed to the Marsyas myth early in his life, and this alone may lead historians to attribute the visceral, corporeal qualities of Michelangelo's architecture to his experience with Marsyas.<sup>115</sup> But, as I have mentioned earlier concerning the relationship between Marsyas and anatomical study – the Marsyas myth of antiquity carried many of the same symbolic and religious undertones as that of dissection. The significant difference between the two practices, however, is that Marsyas was flayed. The formal implications of flaying would stop at the skin, whilst those of dissection would extend below the skin: to tendon, bone, cartilage, and the like. Therefore, dissection would have been more likely to exert a *spatial* influence on Michelangelo's architecture, since its domain extended below the skin.

Moreover, both of these statues, especially the one crafted from red porphyry marble, likely acted as inspiration for Michelangelo's later studies of anatomy. The red porphyry statue depicted Marsyas's flayed torso in a highly-realistic manner; the marble's red color emphasizing the blood-filled muscle, and the marble's white veins recalling the white tendons or cartilage present within any

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<sup>112</sup> Cynthia Klestinec, "Theaters of Anatomy: Visual, Tactile and Conceptual Modes of Apprehension." [paper, forthcoming].

<sup>113</sup> Condivi, 93.

<sup>114</sup> When reading Jacobs' and Burroughs' articles, there is a slight discrepancy here about the location of the statues between the article of Fredrika Jacobs and Charles Burroughs. I am mentioning the location of the statues used by Charles Burroughs.

<sup>115</sup> Jacobs, 33-36.

human cadaver. Perhaps, as a child, these statues played a part in kindling Michelangelo's desire to gain the knowledge that seemingly lies beneath a corpse's surface.

Between the death of Michelangelo's patron Lorenzo de' Medici ('il Magnifico') in 1492 and Michelangelo's flight from Florence to Bologna in 1494 to avoid political upheaval, Michelangelo conducted dissections within the Florentine church of Santo Spirito.<sup>116</sup> Michelangelo crafted a wooden crucifix for the church (1492) (Fig. 19), and Schultz speculates that this crucifix acted as Michelangelo's request to the church's prior for permission to dissect bodies. Whether or not this was the case, according to Condivi, the prior of Santo Spirito allowed Michelangelo to study bodies from the church's hospital within one of the church's rooms.<sup>117</sup> Condivi states:

“At this time, Michelangelo, to oblige the prior of Sto. Spirito, a church greatly honored in the city of Florence, made a wooden *Crucifix*, a little less than life-size, which still today is to be seen over the main altar of that church. He was very intimate with the prior, from whom he received much kindness and who provided him both with a room and with corpses for the study of anatomy, than which nothing could have given him greater pleasure. This was the first time that he applied himself to this study, and he pursued it as long as he had an opportunity”<sup>118</sup>

Interestingly enough, this transaction between the prior and Michelangelo also appears to further the connection between the idea of Christian redemption (represented by the image of Christ) and dissection. Additionally, due to his experience conducting dissections within a church, Michelangelo could have seen the sensory qualities and dramatic emotions inherent to anatomical study as a necessary part of a religious setting, and most of Michelangelo's commissions are located within sacred buildings.

Because of the University of Bologna's centrality within the academic study of anatomy, Michelangelo likely continued to witness or conduct dissections in the years after he fled Florence to

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<sup>116</sup> Condivi, 17.

<sup>117</sup> Condivi, 17.

<sup>118</sup> Condivi, 17.

Bologna in 1494. He stayed in Bologna for two years, and traveled to Rome in 1496. When referring to the commissions which Michelangelo completed in Rome, such as the *Bacchus* (1496-98) (Fig. 20), Schultz emphasizes the degree to which Michelangelo's anatomical knowledge improved between 1492 and 1496. He compares the Rome commissions' anatomical veracity to the lack of it within the crucifix completed for the prior of Sto. Spirito (Fig. 19) and asserts that this visible shift towards increased realism reveals the anatomical knowledge Michelangelo gained during the four-year period of anatomical study in Florence and Bologna.<sup>119</sup> Some of Michelangelo's drawings from 1504 – a time preceding his first architectural commissions – record Michelangelo's participation with dissection; certain anatomical drawings even contain symbols that each correspond to different muscles (Fig. 21).<sup>120</sup>

Like many artists during the Renaissance, Michelangelo worked as an illustrator for anatomical treatises. In his later years, Michelangelo partnered with Matteo Realdo Colombo (ca. 1515 -1559), a famous Italian anatomist (Fig. 1).<sup>121</sup> Michelangelo met Colombo in Rome in 1547, and during this time Michelangelo resumed anatomical practice partly in response to the “Vesalius-Galenist controversy” – a contentious disagreement between Vesalius' discoveries and Galen's time-tested anatomical authority.<sup>122</sup> Michelangelo and Colombo were quite close during their professional collaboration; Michelangelo regarded Colombo as his personal doctor.<sup>123</sup> According to Vincenzo Danti, in his *Treatise on Perfect Proportions* (1567), after Michelangelo met Colombo, he would labor on anatomy continuously for twelve years.<sup>124</sup> During these twelve years, Michelangelo worked to assist Colombo with his treatise *De re anatomica*, both hoping to supersede Vesalius' work, but the vision

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<sup>119</sup> Schultz, 79.

<sup>120</sup> Schultz, 89.

<sup>121</sup> Condivi, 99.

<sup>122</sup> Schultz, 100, 109.

<sup>123</sup> Schultz, 104.

<sup>124</sup> Schultz, 4.

was never entirely realized; *De re anatomica* was published in 1559 without illustrations.<sup>125</sup> Due to his declining health, Michelangelo failed to complete all the illustrations for the treatise, but his influence did seem to appear within some parts of Colombo's descriptions; as Schultz emphasizes, Colombo makes analogies between the human body and architectural structure.<sup>126</sup> Michelangelo's work with Colombo represents just one way in which Michelangelo maintained an involvement with anatomical practice throughout his life.

During his lengthy practice, Michelangelo amassed a great amount of anatomical knowledge, and he intended to pass his knowledge on to others. In Condivi's words, "he has often had it in mind to write a treatise, as a service to those who want to work in sculpture and painting, on all manner of human movements and appearances and on the bone structure, with a brilliant theory which he arrived at through long experience."<sup>127</sup> Condivi does not mention explicit implications for architecture, but Michelangelo's ideas about painting and sculpture originating from anatomical study would likely be transferable to an architectural setting. Michelangelo had been desperate to share his findings with others, so when he realized that he could not write his own anatomical treatise before he died, he sought out ways in which he could pass his knowledge on to Ascanio Condivi. Condivi states:

"And, because by now Michelangelo has attained a grave and mature age and does not expect to be able to reveal this intention of his to the world in writing, he has disclosed everything to me with great devotion and in the most minute detail."<sup>128</sup>

Michelangelo used a corpse – inside a secluded room of the church S. Agata alla Suburra in Rome (renamed to S. Agata dei Goti in 1922) – to demonstrate his vast anatomical knowledge to Condivi.<sup>129</sup> Condivi hoped to convey his knowledge in a treatise; but despite all his talk, Condivi

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<sup>125</sup> Schultz, 4, 103.

<sup>126</sup> Schultz, 103.

<sup>127</sup> Condivi, 99.

<sup>128</sup> Condivi, 99.

<sup>129</sup> Condivi, 99.



never gives a clear account of Michelangelo's theory. Wohl gives us hope, mentioning another theorist who might have immortalized Michelangelo's anatomy-based theory. In a note for his translation of Condivi's *The Life of Michelangelo*, Wohl states that Vincenzo Danti may have written his *Treatise on Perfect Proportions* based on the notes that Michelangelo compiled for Condivi concerning his theory of architecture that was based on the body.<sup>130</sup> But historian Alina Payne seems to shed doubt on this theory's accessibility today, commenting that "Vincenzo Danti's offshoot of [Michelangelo's] project" has been lost.<sup>131</sup> Nevertheless, Schultz speculates that any treatise written by Michelangelo would have been based on the musculoskeletal systems, since he understands that Michelangelo's ideologies focused principally on bodily movement and muscular opposition, both of which rely mostly upon the muscles and bones of the body.<sup>132</sup> It is doubtful, however, that Michelangelo's experience with dissection had been a less-sensory experience than that of an anatomist that focused on the inner organs of the body. Since Michelangelo conducted many intimate dissections, it would have been unavoidable that he would vividly experience the texture and color of a dissected body – qualities he might later use in his architecture to evoke a dissection. Moreover, similar to every other Renaissance artist, Michelangelo had to obtain bodies from legitimate sources such as the gallows or hospitals, so it would be very likely that Michelangelo would have been highly aware of the allegorical meanings of dissection that came with the spectacle of any dissection. Hence, since dissection recalled martyrdom, Christ's Resurrection, redemption, and could act as a *memento mori*, Michelangelo likely used imagery he derived from his practice of dissection to enhance the Medici Chapel's ability to fulfill its programmatic purpose as a burial chapel. In the case of the Medici Chapel, the commission required a space where people could keep vigil, celebrating the Resurrection of Christ, praying for the Medici family's salvation, and honoring

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<sup>130</sup> Condivi, 99n114.

<sup>131</sup> Payne, *Architectural Treatise*, 211.

<sup>132</sup> Schultz, 106.

the sacrifices of the Medici family on the part of Florence. All of these programmatic purposes would be furthered by imagery of dissection, which would permeate all parts of the chapel: its architectonic forms, sculpture, design method, and narrative.

## Chapter Three:

### Dissection and the Medici Chapel

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The Medici Chapel, or New Sacristy, begun in 1521 at San Lorenzo in Florence, is one of Michelangelo's (1475-1564) most well-known architectural works and a notorious object of much disagreement between art and architectural historians. Multiple interpretations of the chapel have arisen not only from the ambiguity of Michelangelo's design process work but also from a lack of specific explanation of the chapel by Michelangelo himself. Two of the standard interpretations are metaphysical: Erwin Panofsky views the building as a Neoplatonic allegory of the soul, and John W. Dixon understands the building as a Resurrection allegory of the Christian afterlife.<sup>133</sup> Both of these interpretations understand the chapel as representative of the soul's ascent from earthly struggle to heavenly ecstasy. Two other historians – James Ackerman and Charles Burroughs – have instead noticed the chapel's body-like architectural characteristics that make the chapel appear flayed or excoriated. These characteristics are quite unusual, but only Burroughs has considered them as symbolically significant. In his analysis, he does not credit any of the chapel's character directly to dissection; rather, Burroughs attributes the chapel's corporeal walls to Michelangelo's familiarity with two flayed Marsyas statues that belonged to the Medici family, and his assessment of the iconographic significance of Marsyas to the Medici family.<sup>134</sup> While each of the scholars' theories has its own distinct validity, scholars who have written on the Medici Chapel have overlooked Michelangelo's fascination with the human flesh – his avid practice of anatomical dissection – as a possible generator of the Medici Chapel's form. In this analysis, I discuss how Michelangelo's

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<sup>133</sup> Edith Balas, *Michelangelo's Medici Chapel: A New Interpretation* (Philadelphia: American Philosophical Society, 1995), 15-17; John W. Dixon, Jr., "The Medici Chapel as a Resurrection," in *Michelangelo: Selected Scholarship in English*, vol. 3 *San Lorenzo*, ed. William E. Wallace (New York and London: Garland Publishing, 1995).

<sup>134</sup> Charles Burroughs, "Monuments of Marsyas: Flayed Wall and Echoing Space in the New Sacristy, Florence," *Artibus Et Historiae* 22, no.44 (2001): 33-36.

evocation of dissection within the chapel harnessed Renaissance religious and social understandings of dissection to strengthen the funerary chapel's function as a space that aimed to celebrate the Resurrection of Christ, expiate the sins of its deceased occupants, and secure a place in heaven for the members of the Medici family.

Pope Leo X (1475-1521, né Giovanni di Lorenzo de' Medici, pope from 1513 to 1521), commissioned the Medici Chapel in 1521 as a mausoleum for four of his family members: his father Lorenzo de' Medici (il Magnifico) (1449-1492), his uncle Giuliano de' Medici (1453-1478), his brother Giuliano di Lorenzo, duke of Nemours (1479-1516), and his nephew Lorenzo di Piero, duke of Urbino (1492-1519). The work was later continued by his cousin, Cardinal Giulio de' Medici (1478-1534, later Pope Clement VII from 1523-1534), son of Giuliano de' Medici. The remains of Lorenzo and Giuliano de' Medici, the famous brothers known popularly as the Magnifici, were placed underneath the trio of statues opposite the chapel's altar (Fig. 33), which includes Michelangelo's own marble carving, *Virgin and Child* (Fig. 34), and his pupils' carvings of *Cosmas* (Giovanni Angelo da Montorsoli) (Fig. 34) and *Damian* (Raffaello da Montelupo) (Fig. 34), the Medici patron saints.<sup>135</sup> The bodies of Leo X's brother and nephew, known also as the Capitani, are buried underneath the large tomb monuments that include the two pairs of statues, known by the Neoplatonic interpretation as *Day and Night* (Fig. 35) and *Dusk and Dawn* (Fig. 38). A pensive statue of Giuliano di Lorenzo sits above *Dusk and Dawn*, while the corresponding statue of Lorenzo di Piero perches above *Day and Night*.<sup>136</sup>

Following Florentine family tradition, Leo X commissioned the chapel to act not only as a place of burial but also as a display of Medici familial pride, unity, and identity.<sup>137</sup> Cardinal Giulio required that the chapel be dedicated to the Resurrection of Jesus Christ and adequately

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<sup>135</sup> Antonio Paolucci, *The Museum of the Medici Chapels and San Lorenzo*. Livorno, Italy: Sillabe, 2010, 76-79.

<sup>136</sup> The discourse will refer to the statues of Giuliano and Lorenzo as described in Richard C. Trexler, "True Light Shining: vs. Obscurantism in the Study of Michelangelo's New Sacristy," *Artibus Et Historiae* 21, no.42 (2000): 103.

<sup>137</sup> Edith Balas, *Michelangelo's Medici Chapel: A New Interpretation* (Philadelphia: American Philosophical Society, 1995), 146.

accommodate daily prayer services for the living and dead members of the Medici family. The cardinal promised Michelangelo free rein over the chapel's design as long as his proposal fulfilled the commission's requirements, and it was precisely this freedom that allowed Michelangelo to devise a unique solution to the commission's program. Art historian Edith Balas even argues that Michelangelo, armed with this artistic liberty, likely hid the true meaning of the Medici Chapel in recondite symbolism, in line with his personal Neoplatonic tenets. In the Renaissance, Florentine Neoplatonists, like Michelangelo, believed that the ancients had deliberately made their myths difficult to interpret so that they would be understood by only the learned. In emulation of this historical precedent, they tried to embed obscurity into their own works.<sup>138</sup> If Balas is correct, this Neoplatonic idea of purposeful concealment probably found its way into the Medici Chapel's design. Moreover, art historian Creighton Gilbert establishes in his article "Texts and Contexts of the Medici Chapel" that Michelangelo's work usually carries a sense of double entendre. He defines this essence as a "witty sense, full of paradox and live metaphor, keeping the literal sense going while using it figuratively, even if the figuration may work out to an opposed sense, and keeping the visual facts alive even while intellectual significance grows around them."<sup>139</sup> Perhaps Michelangelo, able to approach the chapel's design as he saw fit, chose to cleverly conceal, reveal, and manipulate the various cultural meanings and iconographic symbols of dissection within the chapel's architecture that have passed unnoticed by generations of historians.

Volumetrically, Michelangelo's design for the Medici Chapel of San Lorenzo is a cube topped by a dome on pendentives. Because of its shape, the chapel schematically relates to its domed counterpart on the opposite side of the transept, the Old Sacristy (1421-1440) (Fig. 31) designed by Filippo Brunelleschi (1377-1446) as a mausoleum for Giovanni di Bicci de' Medici

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<sup>138</sup>Balas, 31-32.

<sup>139</sup> Creighton E. Gilbert, "Texts and Contexts of the Medici Chapel," in *Michelangelo: Selected Scholarship in English*, vol. 3 *San Lorenzo*, ed. William E. Wallace (New York and London: Garland Publishing, 1995), 107.

(1360-1429), father of Cosimo de' Medici. Furthermore, in addition to the use of a dome, Michelangelo made some other choices similar to those of Brunelleschi: gray stone, *pietra serena*, for the chapel's pilasters and cornice, and white stucco for the chapel's planar, unornamented surfaces. But, despite these similarities, Michelangelo did not intend to copy his predecessor. The chapel diverges from Brunelleschi's chapel in its verticality, its use of white Carrara marble in addition to white plaster and *pietra serena* stone for its ornament, its lack of painted or gilded surfaces, and its mezzanine zone that extends the chapel's height in comparison to the Old Sacristy. Of course, Brunelleschi and Michelangelo saw architecture in two fundamentally different ways; Brunelleschi's work evidences the fifteenth century's fascination with mathematical rationalization, while Michelangelo's work reveals his desire to invigorate stationary forms with movement and emotion. But this commonplace interpretation of Michelangelo's architectural work does not go far enough; Michelangelo did more than evoke life within his human sculptures, he gave architectural form an uncanny essence of flesh which speaks volumes about dissection's influence on his spatial understandings.

Allegorically, the chapel's sectional configuration would have satisfied the cardinal's desire for the chapel to embody the divine ascension of Christ as well as facilitate Medici salvation. Michelangelo accomplishes this goal by dividing the Medici Chapel into four elevational parts (Fig. 31), divided horizontally by bands of *pietra serena*. The bottom two – the tomb zone and the mezzanine – are articulated more than the top two, which consist of the pendentive-lunette zone and the lantern-topped dome. The bottom layer is distinctly separated from the other three by a large, broken entablature. Multiple interpretations have related the chapel's dense lower regions to mortal existence and its upper regions to the heavenly realm.<sup>140</sup> The formal gradation caused by the differentiation between sectional zones deftly achieves the purpose of representing a journey from

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<sup>140</sup> These interpretations include the Neoplatonic interpretation, belonging to scholars Charles de Tolnay and Erwin Panofsky, and the Christian interpretation, belonging to historian John W. Dixon.

the earthly to the divine. This sectional movement, seemingly representative of both the Resurrection of Christ and the divine ascension of human souls, allegorically recalls the purpose of the chapel: to celebrate Christ's sacrifice and to ensure a place in heaven for Medici family members. All former interpretations of the chapel seem to acknowledge this metaphorical ascent as the overall purpose and schematic of the chapel, but looking at the chapel through the lens of dissection actually strengthens this view even further, due to dissection's connection to salvation.

As discussed earlier, dissection held great religious significance during the Renaissance: it analogically recalled the pain of martyrs and Christ's punishment and bodily sacrifice, and it also acted as a further punishment for criminals and as atonement for their souls in purgatory.<sup>141</sup> While the Medici Chapel has been compared to a flayed human body, scholars have not seen these characteristics as a consequence of Michelangelo's intimate involvement with dissection. Therefore, he undoubtedly encountered and understood the cultural meanings that accompanied dissection practice during the Renaissance. Indeed, a close survey of the similarities and differences among several interpretations of the chapel ultimately reveals the value of dissection's cultural significance as a lens for interpreting the chapel, since dissection holds the potential to justify both the allegorical meanings and the formal peculiarities of the chapel and connect them into one coherent whole.

### **Former Interpretations of the Medici Chapel**

The Neoplatonic interpretation, the prevailing reading of the chapel to-date, has been championed by several important Michelangelo scholars, including Charles de Tolnay, Erwin Panofsky, and Edith Balas. Charles de Tolnay is the original author of the Neoplatonic interpretation, Panofsky elaborated upon de Tolnay's work, and Balas followed the previous two, underpinning her own

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<sup>141</sup> Refer to Chapter 1: "Dissection, Bodily Transience, and Christian Redemption."

work with the ideas from both. The essential concept at the center of the Neoplatonic interpretation is that the chapel represents Plato's belief, in Balas' words, that "the transience of terrestrial life is overcome and eternity is achieved through death."<sup>142</sup> In Michelangelo's eyes, this is embodied within the "fight waged by the soul to escape from the bondage of matter," or the mortal fight to overcome the destructive power of time.<sup>143</sup> The chapel evokes these ideas mainly as a function of the chapel's sculptural pieces.

The Neoplatonic interpretation sees the chapel as a series of stacked layers, representing the different, ascending, levels of existence: the purely material, terrestrial, celestial, and super-celestial.<sup>144</sup> At the bottom of the chapel are four dark lines in the floor tiling; these represent the four rivers of Hades and personify the purely material level or the evil that prevents the soul from obtaining happiness.<sup>145</sup> Moving upward from the floor, the four statues (*Dawn*, *Dusk*, *Day*, and *Night*) symbolize the terrestrial level and the destructive powers of nature and time.<sup>146</sup> Panofsky later strengthens this claim by citing Condivi's account that Michelangelo intended to carve a mouse to sit near the statues of *Day* and *Night*; because throughout history, a mouse – because of its infamous gnaw – had often been associated with time's incessant consumption of all things. Only a few inches above the terrestrial is the celestial level, represented by the two statues of Lorenzo di Piero and Giuliano di Lorenzo.<sup>147</sup> Because the statues lack a distinct physical resemblance to the Dukes, the two statues are assumed to represent their immortal spirits in the celestial realm, rather than their mortal selves on Earth.<sup>148</sup> Both de Tolnay and Panofsky claim that the tabernacles flanking the Dukes were supposed to house statues. De Tolnay states that the two flanking Lorenzo and above *Day* and *Night* were meant to be "grieving Earth and smiling Heaven," and Panofsky claims that the

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<sup>142</sup> Balas, 14.

<sup>143</sup> Balas, 15; Erwin Panofsky, "The Mouse that Michelangelo Failed to Carve," in *Michelangelo: Selected Scholarship in English*, vol. 3 *San Lorenzo*, ed. William E. Wallace (New York and London: Garland Publishing, 1995), 88.

<sup>144</sup> Balas, 14-17.

<sup>145</sup> Balas, 15.

<sup>146</sup> Balas, 16.

<sup>147</sup> Balas, 16.

<sup>148</sup> Balas, 16.



statues above *Dusk* and *Dawn* on the opposite wall were intended to be Truth and Justice, as described in Psalms 94:12: “Truth shall spring out of earth, and righteousness shall look down from heaven.”<sup>149</sup> The rest of the chapel above the broken entablature comprises the super-celestial zone, containing the chancel arch on one side and three blank lunettes intended for paintings on the other three sides. There is some disagreement between de Tolnay and Panofsky concerning which paintings were actually intended to occupy these lunettes, but both seem to agree that at least two of the three murals were supposed to depict the Resurrection and the punishment and healing of the people by the Brazen Serpent.<sup>150</sup> Panofsky’s argument differs from de Tolnay’s in that he states that the third mural had been intended to depict Judith and Holofernes.<sup>151</sup> De Tolnay finally completes the interpretation with a statement that the openness of the lunette zone, pendentive zone, and dome alludes to heavenly “bliss and immortality.”<sup>152</sup> Overall, adherents to the Neoplatonic view look at the large sculptural forms within the tomb, couple them with their reasonable speculations about the non-executed works within the chapel, and then use all of these elements together to argue that the chapel allegorically depicts the stages of the soul’s ascent from mortal struggles to celestial delight.

Theologian John W. Dixon’s interpretation, “The Medici Chapel as a Resurrection,” emphasizes the importance of seeing the chapel through the eyes of the occupant, arguing that, when the chapel is seen through his or her eyes, “[it] is an enactment of the Resurrection, a mystery in which the worshiper is caught up in the sacred event. It is a work that requires participation.”<sup>153</sup> According to his interpretation, the chapel must be *viewed*, and the most important location from which to do so is the altar, because the priest performing the liturgy would be the most frequent

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<sup>149</sup> Balas, 16.

<sup>150</sup> Balas, 15.

<sup>151</sup> Balas, 17.

<sup>152</sup> Balas, 19.

<sup>153</sup> John W. Dixon, Jr., “The Medici Chapel as a Resurrection,” in *Michelangelo: Selected Scholarship in English*, vol. 3 *San Lorenzo*, ed. William E. Wallace (New York and London: Garland Publishing, 1995), 136-137.

occupant of the space.<sup>154</sup> Ultimately, the priest, in standing at the altar, starts a visual sequence in motion by making eye contact with the reclining statues atop each tomb; they, by proximity, lead his eyes to the Dukes, who then look at the Madonna with her Christ-child whose writhing motion seems to spiral upwards (Fig. 34).<sup>155</sup> His vertical movement culminates the motion sequence which recalls Christ's divine ascension following the Resurrection. Dixon also mentions that all the statues within the chapel exude a sense of frustrated "lassitude," creating a visual foil for the comparatively energetic Christ-child and thereby showcasing the idea of Christ's rebirth.<sup>156</sup> Furthermore, Dixon cites the formal gradation apparent within the chapel's elevational disposition: "the congestion of the lower ranges of the architecture loosens and lightens in the middle range and becomes clear and open in the third...the lines of the window continue into the ribs of the dome and are swiftly carried to the lantern and out to the light above."<sup>157</sup> This sectional movement, to him, parallels the Resurrection: an event beginning "in the tragic, paralyzed congestion of this world and [opening] out to the heavenly vision above."<sup>158</sup> Essentially, in Dixon's view, when the Medici Chapel's statues and architectural form are taken in tandem, they reveal a space that, by embodying Christ's Resurrection, allows the worshiper to experience the event.

I would argue that both the Christian and Neoplatonic interpretations are fundamentally compatible with one another. They both note the formal progression apparent within the chapel's elevation and relate it to an ascension of some sort, whether it is the ascent of Christ or the ascent of the human soul from the earthly to the heavenly realm. The only difference between the two is the way that the historian uses the human statues' locations, personalities, or appearances to justify his or her point. What is missing or underplayed within these two interpretations is an in-depth consideration of the significance of the architecture's form and disposition. It leads one to ask how

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<sup>154</sup> Dixon, 136.

<sup>155</sup> Dixon, 137.

<sup>156</sup> Dixon, 137.

<sup>157</sup> Dixon, 137.

<sup>158</sup> Dixon, 139.

the architectonic forms and sculptural ornament of the building – pilasters, cornices, tabernacles, pediments, garlands, to name a few features – might further strengthen the allegory of ascension evident in the sculpture.

In contrast, two scholars who do not regard the chapel's architecture as mere container or backdrop to the sculpture – architectural historian James Ackerman and cultural historian Charles Burroughs – have noted an *especially unusual* quality of the chapel, namely, that the chapel's wall surfaces resemble bone and flesh. In his book *The Architecture of Michelangelo*, Ackerman presciently described the chapel's walls in surprisingly cutaneous terms: “the wall is transformed from an inert plane to a vital, many-layered epidermis, and elements formerly assembled – niche, frame, pediment – are now inextricably bound together by an architectural anatomy.”<sup>159</sup> Burroughs makes analogous claims within his essay “Monuments of Marsyas,” stating that “the penetration and opening up of the wall, with its hidden and half hidden columns, hints at topographical correspondence beyond the wall.”<sup>160</sup> He goes further, observing that “under an exterior skin, bones and flesh are frame and fill” – to Burroughs, this ‘frame and fill’ analogically recalls pilaster and wall.<sup>161</sup> While Ackerman does not posit any specific origin (other than Michelangelo's ingenuity) for the chapel's fleshy forms, Burroughs suggests that the origin of these surfaces' bodily quality lies in Michelangelo's exposure to and the Medici family interest in the myth of Marsyas, a classical story of a satyr who was flayed alive as a punishment.<sup>162</sup> As seen earlier, Michelangelo studied two Marsyas statues possessed by the Medici Chapel during his childhood years spent with the Medici family.<sup>163</sup> Burroughs connects Marsyas's flayed skin to Michelangelo's treatment of the walls of the Medici Chapel, and argues that Michelangelo's evocation of Marsyas within the commission strengthens the pastoral theme within

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<sup>159</sup> James S. Ackerman, *The Architecture of Michelangelo* (Chicago: University of Chicago Press, 1986), 94.

<sup>160</sup> Burroughs, 42.

<sup>161</sup> Burroughs, 41.

<sup>162</sup> Burroughs, 33-36; also, more information on the Renaissance and Marsyas in Chapter 1.

<sup>163</sup> Refer to Chapter 2.

the chapel and solidifies the chapel's connection to the Medici family.<sup>164</sup> Hence, both of these provocative corporal-centric interpretations remain tentative or metaphorical.

Renaissance practices of dissection offer the missing link between the allegorical and architectonic interpretations of the chapel. I argue that the bodily qualities of the building owe their origin to Michelangelo's practice of dissection (rather than his exposure to Marsyas) and the Medici family interest and support of anatomical study. Furthermore, I believe that the chapel should be seen as an allegory of dissection. If the chapel is understood as representing the process of anatomization, both the Resurrection-ascension allegories are validated and strengthened. As discussed in detail in chapter 1, dissection held great spiritual significance because of its judicial and exploratory function, and its relationship to the bodily sacrifices of Jesus Christ.<sup>165</sup> When criminals were dissected in the Renaissance, as they often were, they were frequently perceived as making a great sacrifice for the greater benefit of society (or science) and this sacrifice would help atone for their soul's sins posthumously. Saints were dissected to prove their sanctity; after other nuns or priests confirmed a man's or woman's holiness through investigative surgery, he or she would be inaugurated as a saint and their immortal memory preserved. Furthermore, anatomists and artists often compared the humiliation and mutilation of the human cadaver that resulted from dissection to the experience of a martyr, or that of Christ, which led to the dissemination of anatomical treatises and artworks that compared dissections to self-castigation or Christ's crucifixion (Fig. 7). Hence, if the Medici Chapel is an allegory of dissection, it encompasses both to the Resurrection of Christ and the agonizing Neoplatonic quest for the soul to transcend earthly suffering in search of heavenly bliss.

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<sup>164</sup> Burroughs, 33-36, 41-42. On page 33, Burroughs argues that the Marsyas statues located at the Palazzo Medici emphasized the Palazzo's central axis and then visually linked the Palazzo Medici to the Medici Chapel. He implies that this linkage between these two buildings, formed by the two Marsyas statues, reveals the important symbolic significance of Marsyas within the Medici Chapel and to the Medici family.

<sup>165</sup> Refer to Chapter 1: "Dissection, Bodily Transience, and Christian Redemption."

## The Medici Chapel: A Visceral Space of Redemption

The nature of the architectonic forms of the Medici Chapel and their relationship to one another reveals the significant influence that anatomical dissection had upon the Medici Chapel. While Burroughs and Ackerman have established that the Medici Chapel's walls seem excoriated or eviscerated, neither historian has connected the walls' appearances to Michelangelo's avid anatomical study. It is not farfetched to think that Michelangelo's experiences with dissection would influence the Medici Chapel's form, because Michelangelo interacted with corpses through the intimate venue of private dissection: a highly visual and tactile experience of the spaces, textures, colors, and fluids of the human body.<sup>166</sup> Michelangelo likely saw iconographic value in these sensory qualities due to their ability to evoke dissection, and by association, the ideas of salvation and sacrifice. Also, because of Michelangelo's allotted artistic freedom in the chapel's design, these sensual qualities could transfer to an architectural setting. In sum, because of Michelangelo's autonomy and the nature of its program, the New Sacristy commission would be fertile ground for Michelangelo's aesthetic interests and anatomical discoveries to merge with the era's spiritual understandings of dissection as a path to salvation.

### *The Medici Chapel's Lower Zone: Embalmed Memories of the Dissection Chamber*

Since Michelangelo, in his theoretical writing, regarded anatomical knowledge as integral to the practice of architecture, the Medici Chapel would be a likely place to find evidence of his anatomical-spatial understandings.<sup>167</sup> It appears that Michelangelo used his anatomical experience to analogically relate the chapel's lower zone to a dissection, in order to heighten its tension and create

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<sup>166</sup> Klestinec, "Theaters: Visual, Tactile."

<sup>167</sup> Ackerman, 37. Ackerman mentions that Michelangelo regards a knowledge of anatomy as integral to architectural practice, see Chapter 2 for more information.

a more potent contrast with the chapel's serene upper reaches. In this way, Michelangelo used the lower zone's body-like qualities to emphasize the allegorical ascension latent within the chapel's entire design.

For Michelangelo, anatomical study must have revealed that the body consisted of discreet systems with shared formal characteristics (Fig. 43), such as the nervous system, or muscular system. The architectural form of the Medici Chapel seems to intentionally parallel the body's organic, yet systematic layering. In the chapel, each visual system has been crafted of its own characteristic material, distinguishing it from the others. As visible in the chapel walls, the pilasters and cornices carved from *pietra serena* stone serve a purpose – representing a skeletal system of support, for instance – different from those carved in white Carrara marble. However, as with the human body, the chapel's material distinctions do not create a distinct formal hierarchy: all systems are necessary to the function of the whole. In the chapel, no system dominates, and the systems seem to exert their influences equally upon one another. For example, the rounded marble pediment of the entrance tabernacles emerges above the *pietra serena* pilasters, while the pilasters otherwise dominate the composition of the wall (Fig. 42). The Carrara marble forms, especially the pediments, confine the side of the pilasters, while the cage-like framework of pilasters and cornices appears to bind the white marble surface in place – bondage which it yearns to break (Fig. 42). One of Michelangelo's anatomical drawings even depicts the body as a composition of struggling systems, stuck at a desperate stalemate (Fig. 22). In this anatomical study, the spine appears to be a constricting line, away from which the muscles bulge. The muscles also seem constricted in relationship to one another – tendons bind them to the skeleton and each group bulges away from others nearby. This tension, created by the writhing wall forms, calms in the upper reaches of the chapel where the white stucco surfaces lay placid below the thinner regulating lines formed by the *pietra serena* mouldings (Fig. 35). The anatomical knowledge of bodily systems that Michelangelo gained during his

anatomical studies provided him with spatial understandings that he used to intertwine the lower walls' forms. This co-mingling strengthens the ability of the lower zone of the chapel to represent the painful human struggle to transcend mortal flesh and achieve heavenly bliss, perhaps through dissection.

Further clues to the Medici Chapel's relationship to anatomical dissection are embedded in the chapel's alternately fleshy and skin-like ornament. For example, the slippery volutes located under the entrance tabernacles take the form of soft, slippery bumps, and do not appear to serve a direct structural purpose – just flaps of 'architectural skin' (Fig. 42). They essentially could be cut away, much like skin; in a dissection, this is a common process to reveal the muscle and bone behind. An observer can find this fleshy essence within many other structural and sculptural forms of the chapel. The white marble from which the majority of the lower sculptures are carved has a veiny and membranous quality – it is thinly netted with orange and red lines, evocative of veins that lie just below the skin and are revealed when a corpse is flayed. Many of the chapel's fleshy forms are carved from this marble, and also evoke flesh in their form. First, the scaled, leg-like forms that support the tombs of the Capitani and the scaled volutes supporting the arched pediments above the tomb (Fig. 41) both evoke human flesh. While scales are not human skin, perhaps they better evoke the qualities of a dermis than a representation of human skin would, through their direct reference to a skin-like substance. Additionally, since these sculpted scales appear wet and slippery, they conjure up imagery of bodily fluids and ooze. Surely skin, fluids, and bones are all visually experienced during a dissection; by layering these scales into the design of chapel's bounding walls, Michelangelo wanted to provide a blatant hint that the surface of the wall was a composition of flesh and should be interpreted as such.

When cutting into the body, anatomists must have confronted the thinness of the skin's layers as opposed to the density of underlying muscle tissue. Because of this, formal thinness in the Medici Chapel helps to further emphasize the connection between the chapel's forms and anatomical dissection. A visitor to the Medici Chapel would likely notice that the pilasters to the left and right of the large tomb monuments are composed of very thin layers of gray *pietra serena* marble, and that the way that the unarticulated corner of a gray *pietra serena* pier slips out from behind the pilaster (Fig. 35) emphasizes the thin, skin-like quality of the pilaster above. Michelangelo also seems to have designed the chapel's volutes with the intention to emphasize the skin-like thinness of their surfaces. The volutes flanking the entrance doors that support the tabernacles above the door (Fig. 44) appear solid from the front, but when seen from the side, a deep cut allows the top surface to float above the shape below. The tabernacles above the doors also contain a peculiarly thin element: a ribbon-like strip of marble moves along the sides of the pilasters and outlines a rectangle shape within the otherwise empty interior of the rounded pediment (Fig. 45). This thin strip of marble makes the surface look as if soft flesh was removed to reveal the tabernacle, much in the same way anatomists remove flesh to reveal the inner spaces of the human body. The number of thin layers is unlike the sharp binary juxtaposition of surface and membering found in the fifteenth-century Old Sacristy on the opposite end of the transept, yet it is also antithetical to the volumetric quality of spaces just designed in the early sixteenth-century workshop of Bramante in Rome at St. Peter's Basilica (itself a mausoleum), the evolution of which Michelangelo had witnessed in person. It is telling that Michelangelo first explores his own anatomical take on humanistic architecture in a funerary chapel.

The chapel's thin elements give the lower walls great figural depth and cause the wall to appear composed of many overlapping layers (Fig. 35). Burroughs' interpretation of the wall as flayed paints a picture in which the grey *pietra serena* stone pilasters define a top surface for the wall,



causing everything below to appear revealed as if layers of skin were peeled away to reveal the subject's muscle. However, when the chapel is seen as resembling a dissection and not just a flaying, Burrough's 'topographical correspondence' instead becomes the human viscera: various organs waiting to be revealed by an anatomist's knife. A violent flaying reveals only the muscle and may not leave the skin intact, but an intimate, careful engagement with the human body (such as a dissection) reveals, in detail, the many interdependent layers of which it is comprised. Therefore, the formal configuration of the chapel's walls – a composition reminiscent of strategically incised human tissue – directly connects the chapel to Michelangelo's practice of dissection. The chapel's unusual breaks in classical elements, such as the broken entablature, seem to evoke the incisions made by anatomists on human corpses, and iconographically symbolize the chapel's connection to dissection. As part of Michelangelo's architectural theory, the confluence of all Michelangelo's unsettling and visceral forms serve to make the vital connection between the chapel's representation of systematic evisceration and salvation, as prefigured in cases of saintly martyrs or dissected bodies of executed criminals, where their dissections promise eventual redemption.

### *The Beholder Dissected*

Renaissance culture connected dissection to Christ's agony, the pain of martyrdom, and the penitent sacrifice of a criminal's body, so evocations of anatomical study could have easily acted as a reminder of mortal suffering within the Medici Chapel. Michelangelo invoked the hypothetical experience of dissection within the Medici Chapel to empathetically remind visitors of the excruciating shackles of their own mortal shell, highlighting the Christian hope for heavenly escape from earthly suffering. During a dissection, the subject would not feel pain because the soul would have already left the body, and with its sins expiated by punitive dissection, it may find eventual

restitution. The circumstances are different for the chapel's occupants -- for the living visitor to the chapel, the chapel's evocations of dissection might act as a reminder of the physical and psychological pain one must endure to attain salvation.

Evocations of bodily dismantling can first be said to manifest within the pilasters of the Medici Chapel. Throughout history, pilasters, like columns, have visually represented the human form: a column's base, shaft, and capital are often seen as analogous to the human foot, torso, and head. Most importantly, Michelangelo saw columns as suggestive of the human form in a literal way, as seen in one of his process sketches in which he shows a column base as a human face (Fig. 47). This anthropomorphic view of Classical architecture was actually quite common during the Renaissance; as has been made clear within the *Vitruvius Teutsch* (1548), several Renaissance architects saw analogies between column bases and capitals and human heads (Fig. 46). But in Michelangelo's work, generally speaking, the depiction of the lifelike served two purposes: to suggest movement and emotion (*moti* and *apparenze*) and to empathetically involve the viewer.<sup>168</sup> So, when thinking in terms of anthropomorphic qualities, a pilaster in a corner of the chapel space can be reinterpreted as a human body bound in a quite claustrophobic space (Fig. 42). The confining of the body might empathetically cause discomfort for the beholder, while also reminding him or her of dissection. Michelangelo's confined, anthropomorphic columns recall the anatomical practice of restraining the subject in a desired position; as an example of this practice, oftentimes subjects of dissection were suspended in vertical positions which would better demonstrate the objective of the anatomical lesson (Fig. 48). By analogy, these pilasters also recall the process of anatomical study because they are almost "bound" by the extension of the tabernacle pediments across their necking (Fig. 42). The pain which occupants of the Medici Chapel saw embodied in the architectonic elements of the chapel would likely disturb them, possibly into reforming their own behavior,

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<sup>168</sup> *Moti* and *apparenze* are terms mentioned in Ackerman, 41-42.

especially if they were sinful and understood that the unsettling fate of dissection may be waiting for them after their death.

Some artists, like Michelangelo, were also capable of linking practices of the dissection room and the vicarious experience of pain to the subject of their artwork. Raphael (1483-1520), a contemporary of Michelangelo, suspended the corpses that he studied for his paintings in desired poses, using rope, nails, or other humans to hold them still (Fig. 49).<sup>169</sup> This system of restraint actually made its way, uncannily, into poses of figures in his compositions; for example, Raphael used anatomical studies of the agonizing crucifixion of Christ to enhance the emotional veracity and empathetic quality of his *Deposition* (Fig. 50).<sup>170</sup> Other anatomists even projected the findings of their anatomical studies onto Christ's body, recalling the connection between dissection and Christ's martyrdom and Resurrection, and heightening the emotional pitch of the image itself (Fig. 7). In this way, the anatomists were doing the opposite of Raphael; Raphael used anatomical study to improve his religious artwork naturalistically and emotively; anatomists used religious images to add a sense of emotional realism to the act of flaying. But both used anatomical study as a method of enhancing the ability for their images to communicate emotionally with the viewer.

The walls of the Medici Chapel began to make the visitors feel anatomized, prompting them, through emotional disturbance, to lay their emotions and sins out for their mind's harsh scrutiny. The sculptures of *Day*, *Night*, *Dawn* and *Dusk* on the sarcophagi of the Capitani achieve the same purpose – they appear to be subjects of an anatomical dissection, either gripped by the pain of being dissected alive or possessed by quiet resignation to their agonizing fate. The statues might even be more successful than the pilasters at heightening the viewer's emotion: beholders might not be able to hold back their emotions when seeing an *actual* human body contorted and in pain. In fact,

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<sup>169</sup> Laurenza, 17-18.

<sup>170</sup> Laurenza, 17.

Italian theorist Lodovico Dolce (1508-1568) once commented about how Michelangelo's sculptures remind him of flayed cadavers: "The man who practices a detailed elaboration of the muscles is really aiming to give an organized picture of the bone structure, and this is commendable; often, however, he succeeds in making the human figure look flayed or shriveled up or ugly."<sup>171</sup> His commentary hints at the statues' emotional power – Dolce is using quite strong, emotional language when he describes a flayed statue as "ugly."

In the Medici Chapel these supine human figures at the observer's eye-level objectify dissection in several ways. One of the first elements to establish the statues as subjects of dissection is the unusual slant of the pedestals on which they rest. Quite astutely, art historian Creighton Gilbert noticed that the slanting pedestals underneath *Day*, *Night*, *Dusk* and *Dawn* are the first of their kind, a "novel form, both for tomb tops and statue bases."<sup>172</sup> He also seems to open the door to a scholarly consideration of their symbolic significance, commenting that "iconographic interpretations that account for the curvature would seem preferable to ones that don't."<sup>173</sup> Viewing the sculptures through the lens of anatomical study reveals that the sloping surfaces may owe their origin to Michelangelo's familiarity with Renaissance practices of dissection. Klestinec's in-depth survey of the practices of dissection reveals that the display of the corpse during a public dissection had been a difficult issue during the Renaissance.<sup>174</sup> Therefore, slanted pedestals are likely to have been very popular, since the inclined anatomical table would have helped mitigate the problem of visibility in public anatomical settings.<sup>175</sup> As depicted in plates that accompanied several different anatomical treatises (Fig. 51, Fig. 52), the sloping pedestals in the Medici Chapel mirror these pitched

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<sup>171</sup> Jacobs, 440-441.

<sup>172</sup> Creighton E. Gilbert, "Texts and Contexts of the Medici Chapel," in *Michelangelo: Selected Scholarship in English*, vol. 3 *San Lorenzo*, ed. William E. Wallace (New York and London: Garland Publishing, 1995), 104.

<sup>173</sup> Gilbert, 104.

<sup>174</sup> Klestinec, "Theaters: Visual, Tactile."

<sup>175</sup> In surviving material, however, fewer illustrations depict a canted dissection table than a horizontal one,

surfaces on which cadavers were dissected in public, helping to better establish the statues' connection to the contemporary settings of dissection.

Between the statues' bodies and their pedestals below lies what seems to be a thin, folded layer of cloth, another motif that appears throughout a wide range of Renaissance anatomical illustration. Bodies were often placed upon fabric when they were dissected, and in both North and South European anatomical imagery, the flayed skin accompanying any form of dissection often appears to be a folded cloth or drapery, as if it were a garment removed from the body (Fig. 53, Fig. 54). As mentioned before in Chapter 1, during a discussion of Michelangelo's own obsession with the shedding of the skin, Michelangelo depicted flayed skin as cloth-like within his painting *The Last Judgment* (Fig. 56).<sup>176</sup> It would not be farfetched to think that Michelangelo, too, would have been familiar with the work of other anatomical artists who represented skin in this manner, so perhaps the thin layer of cloth that lay beneath all the statues provides the viewer with a hint that the statues have been flayed. This would be yet another way in which dissection has informed the design of the chapel, and as will be mentioned later, the fact that the statues appear to be flayed is important in the overall allegorical understanding of the chapel.

The statues, while they also appear to be flayed, even behave and look like the subjects depicted in a typical anatomical study. The apathy in their expression and their emphasized musculature resembles the subjects of anatomical *écorchés*, one of the main ways in which anatomists chose to depict their anatomical material (Fig. 10). In the Renaissance, the *écorché* is depicted,<sup>177</sup> surprisingly often, as a live subject who calmly assists in the display of his or her raw musculature or organ cavity by holding the flayed skin apart so that the viewer might peer inside. The apathy of an *écorché* is surprising, because if the subject was alive and truly being vivisected, the subject's body and

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<sup>176</sup> Refer to Chapter 1: "Dissection, Bodily Transience, and Christian Redemption."

<sup>177</sup> An *écorché* is an anatomical diagram revealing the muscles with the skin removed.

face would be contorted with pain. Likely, the Medici Chapel time statues would fit in the same category of an *écorché*, because not only do they appear to have no concern about their bodily integrity, they also appear to display their muscles like an *écorché*. Of course, the statues of the Medici Chapel do not pose in such an explicitly medical manner, but they do recline in positions that seem make a pointed display of a different part of the body: both *Day* and *Night* appear to reveal the anatomy of the leg and the twisted torso, while *Dusk* and *Dawn* depict different muscle groups – that of the relaxed torso, twisted leg, and raised arm. A popular goal of Renaissance anatomical study was to analyze the widest variety of human bodies in order to create the most complete body of knowledge concerning human anatomy; Michelangelo could have likely used both male and female bodies within the Medici Chapel to try and demonstrate the broadest range of muscular conditions.

If Michelangelo intended to compare these statues to the *écorché* in manner, pose, and look; one might notice that the statues also have over-emphasized musculature: another hallmark of an *écorché* and a quality many critics have noted perhaps starting with Dolce (quoted above). In the Renaissance, anatomists would often increase the size of muscles in *écorchés* to make sure that the placement and relative size of muscles was of utmost focus. And like anatomical illustrations, all of the time statues have distinct muscles, seemingly free of the skin above, and the women's breasts are placed widely apart, as if the chest cavity has been opened between them (Fig. 36, Fig. 37).<sup>178</sup> So, now, in addition to their mood; Michelangelo has crafted the statues' musculature in a way that also strengthens their connection to anatomical study. Michelangelo seems to have intended for the statues to evoke dissected bodies on an altar: in this way they recall yet again the Resurrection of Christ, where his body was offered up sacrificially for the sake of humankind (Fig. 7). They might also make their beholder feel uneasy, and perhaps Dolce's strong language describing the sculptures

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<sup>178</sup> An *écorché* is a type of anatomical study that demonstrates the muscles without skin. Jacopo Berengario da Carpi, a contemporary of Michelangelo, included many of these studies within his *Commentaria* (1521). *Écorché* is mentioned within Park, 23.

attests to their ability to create such an unpleasant feeling in their viewers. Michelangelo harnesses both this uneasiness and the *écorché's* metaphorical relationship with Christ to empathetically involve the occupants with his design and cause them to contemplate and revere Christ's resurrection – again strengthening the programmatic purpose of the chapel.

In addition to tweaking their emotions to emulate that of an *écorché*, Michelangelo also displayed the time statues' explicit musculature in ways characteristic of Renaissance anatomical practice; as with the pilasters, the statues are restrained in certain poses that best display the target anatomical features. The figures most restrained are *Day* and *Night*. Since they may have been intended to display the twisting torso or leg anatomy, Michelangelo restrained them in a contorted position best suited to the display of these muscle groups. The sculpture of *Day* reclines in a starkly uncomfortable position, his right arm pulled behind him while his left leg crosses over his right knee (Fig. 37). *Night* has twisted and locked her elbow in front of her left thigh; this allows the sculpture to demonstrate the way the abdominal muscles react to twisting (Fig. 36). While *Dusk* and *Dawn* (Fig. 39, Fig. 40) both display their muscles calm, accepting manner of a typical *écorché*, *Day* and *Night* seem to express discomfort in their facial expressions – fear, shame, or pain – in response to their positions or flayed skin. According to Condivi, Michelangelo would even comment late in his life that viewing dissections had come to appall him and cause him gastric problems.<sup>179</sup> Thus, through postures and facial expressions of his figures, Michelangelo was able to elicit in the viewer the varying emotions that accompanied the practice of dissection in the Renaissance: the fear of bodily violation, the shame of naked display in a public setting, or the pain and discomfort that accompanied the sight of an open cadaver.

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<sup>179</sup> Condivi, 99.

In sum, accounting for all the similarities and references of anatomical practice; the walls of the Medici Chapel and flayed bodies of *Day*, *Night*, *Dawn*, and *Dusk* mirroring the viewer's own potentially dissected body back to him or her. It incites fear in the viewer who knows that dissection is a punishment and a way for a desperate sinner to attain salvation, although, it does so in a manner that differentiates the space in which one lay waiting for Judgment Day from that of anatomical theaters (which, at this date, were still makeshift rooms within other buildings, including churches).<sup>180</sup> In the flayed statues' placement just above eye level, they reverse the usual positions of a viewer and a dissected corpse. In the Medici Chapel, the observer would not be able to look down upon them as if from the elevated setting of an anatomical theatre (Fig. 2). Instead, an occupant of the Medici Chapel would have to look up in awe, scrutinized by the flayed subjects above his or her head. If Michelangelo's design of the Medici Chapel ultimately seeks to celebrate dissection's virtue, the elevated position of these 'anatomized' statues would indeed help to further solidify this purpose. But the immediate goal he accomplishes is to discomfort viewers and cause them to contemplate their sins, their eventual death, remind them that dissection may be their only option for attainment of heavenly release, and prompt them to take action to repent for their iniquities, before it is too late.

### *The Medici Chapel as a Sacrificial Chamber*

In the Renaissance, dissection, through its mutilation and violation of the body, recalled the painful, humiliating sacrifices of Christ, disciples, saints, and criminals. Quite naturally, since the Medici Chapel evokes dissection through its architectonic forms and sculptures, it celebrates the idea of sacrifice by dissection to obtain heavenly rewards such as knowledge or redemption. Precedents for

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<sup>180</sup> Refer to Chapter 2.



such a space lay in the past: while they did not look similar in form to the Medici Chapel, the temples and altars of ancient Greece and Rome, where animal sacrifice was often conducted to ensure the gods' bounty, were ritually centered on sacrificial violation of a body to obtain the god's favor. It seems that within the Medici Chapel, Michelangelo uses isolated ornaments from these antique spaces in order to better define the space as celebrating sacrifice. Several sacrificial symbols typical of the sacred spaces of Greco-Roman antiquity, especially *bucrania* and garlands, are found in many of Michelangelo's architectural works including the Medici Chapel. *Bucrania* (representations of animal skulls) typically decorated the frieze zone of the Doric order in Greek temples, where they referred to the animals, typically the oxen and rams that were sacrificed on the altar to the gods (Fig. 58-Fig. 60). The garlands found in these frieze zones represented the garlands placed on the horns or bodies of sacrificial animals by the ancients to express, in classicist Paul Zanker's words, "thanks to the god and at the same time convey the notion of blessings and abundance."<sup>181</sup> Renaissance artists and anatomists were aware of these symbols' sacrificial meaning, having learned it from ancient narratives which were then widely circulated via the printing press. They would have known from actually reading or hearing about translated classical works such as Vitruvius' *De architectura* (15 B.C.E, translation published in 1511), which provided narrative descriptions concerning how the ornamentation of the Doric, Ionic, and Corinthian orders originated from practices of human punishment and animal sacrifice.<sup>182</sup> Other literary works familiar to Renaissance intellectuals that give accounts of animal sacrifice include Homer's *Odyssey* and Cicero's *On Divination*.<sup>183</sup> Visual proof that both anatomists and artists were aware of these sacrificial meanings is found in a sixteenth-century anatomical study of an ox throat which resembles a *bucranium*, especially in its exposed horns and isolation from the rest of the ox's body (Fig. 61). In this study, Swiss anatomist Joseph Maurer

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<sup>181</sup> Zanker, 118.

<sup>182</sup> See Hersey, chapter 3: "Images of Temple Founders," 47-69.

<sup>183</sup> David Fredrick, interview by author.

even paired the *bucranium*-like ox-head with garlands, thereby explicitly linking animal sacrifice with the study of anatomy enabled by dissection. In the Medici Chapel, Michelangelo did the same as Maurer, by including both garlands and *bucrania* as part of his ornamental palette. In this way, he could evoke associations of sacrifice, death, or even reference the abundance that the sacrificial victim – a dissected subject – would bestow upon society in the form of anatomical knowledge.

Indeed, Michelangelo placed garlands and *bucrania* in specific ways that would strengthen the space's allegorical narrative which extols the virtues of bodily sacrifice – via dissection – to obtain heavenly bliss. In the Medici Chapel, Michelangelo incorporates the *bucrania* on each side of the supporting structure for the reclining statues (Fig. 62) and each *bucranium* is draped with a rope, recalling the ancient practice of tying a garland around an ox's horns as it was being led to the altar.<sup>184</sup> Michelangelo places garlands within the otherwise empty tabernacles (Fig. 45) and in the upper structure of the tomb monuments dedicated to the Capitani (Fig. 38). The locations of both the *bucrania* and garlands seem arbitrary when compared to the classical placement of these symbols within a temple entablature's frieze zone. He also de-contextualizes these ornaments in other commissions, placing a lone *bucranium* at the tip of each archivolt in the Sistine Chapel ceiling (Fig. 63), and ovals of garlands and *bucrania* on the ceiling and floor of the Laurentian Library (Fig. 64). These locations are far from the typical location of these symbols in antique works; hence, Michelangelo deliberately isolated them from their usual context to imbue his own work with symbolic significance. In the case of the Medici Chapel, Michelangelo uses sacrificial ornament to celebrate heavenly bounty and remind visitors that entry into heaven might require a measure as drastic as the sacrifice of their own body – be that on the dissection table or elsewhere.

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<sup>184</sup> Zanker, Paul. *The Power of Images in the Age of Augustus*. Translated by Alan Shapiro (Ann Arbor, MI: University of Michigan Press, 1990), 117.

In the Medici Chapel, Michelangelo makes use of another Classical motif – the screaming face or theatre mask– but modifies the typical mask in a way that conspicuously strengthens the allegory of dissection latent within the chapel. His various permutations of the mask represent corporeal pain, flayed skin, sacrifice, and the movement of the soul from the earthly to heavenly realm. Whether they appear next to the arm of *Night* (Fig. 36), on the altar candelabra (Fig. 65, Fig. 66), or the moulding behind the time statues (Fig. 67), all of these faces seem to scream in agony, their mouths gaping open. Like the painful constriction of the pilasters and contortion of statues within the chapel, these faces remind the visitor to the Medici Chapel of the pains of mortal existence, the only escape from which was ascent into a blissful afterlife. While at first glance these agonized masks may seem quite unrelated to the grisly facts of dissection, Michelangelo plants hints to the contrary. The face on the candelabra (Fig. 65) is special and only occurs *once*, very discreetly; it is draped over by a garland suspended by two hooks above its head, and the garland covers its eyes. In this instance, it seems clear that Michelangelo has swapped out a human head for a cow skull, eerily modifying the classical motif of *bucrania* to represent a human sacrifice. Here, the human sacrifice alluded to would be the sacrifice of a body on the anatomy table in hopes of obtaining God’s deliverance. It might also represent an anatomical sacrifice for the overall betterment of society, where a dissection is conducted to gain expanded knowledge of God’s creation, the human body.

Even the seemingly innocuous moulding behind the time statues (Fig. 67) plays into the chapel’s overall allegory of redemption microcosmically, in that Michelangelo modifies the classical egg and dart moulding to represent the ascent of the soul, via flaying, into a peaceful afterlife. As Hersey states in *The Lost Meaning of Classical Architecture*, some egg and dart mouldings are composed of a shell and yolk, and the ancient Greeks understood the yolk as representing the soul of a future

creature.<sup>185</sup> Michelangelo uses this typical Greek ornament within his moulding in canonical fashion, but places it above a modified version of the egg and dart moulding, where flayed, screaming faces emerge from clamshells. Burroughs has also described these faces as flayed, because they have long, thin strips of flesh seemingly hanging from their cheeks.<sup>186</sup> In this way, since both the ancient and modified mouldings are placed next to one another, Michelangelo creates a contrast with its own embedded allegory – symbolizing the movement of the soul from the world of corporeal pain to the ideal world of heavenly calm. In Michelangelo's modification of the egg and dart moulding, the flayed face is located where the egg yolk should be – what, to the Greeks, represented a future soul. Therefore, these faces, located in the yolk's position, represent a flayed human body and its tormented soul. And when these flayed face-shells are placed under the placid egg and dart moulding above, the viewer can immediately see that Michelangelo intends to create a contrast between both the agonized and calm soul, and implies a vertical progression between the two by placing the idealized egg and dart moulding above the modified face-shells. The vertical progression is only a small hint towards understanding the entire vertical allegory embedded within the chapel, representing the movement of the soul from earth to heaven that could likely be assisted by anatomical dissection.

The parts of the Medici Chapel that evoke or represent dissection strengthen the ability of the lower zone of the chapel to represent mortal existence. Some of the architectural and sculptural imagery connect directly to anatomical studies; therefore, they act as an explicit reminder of dissection's influence on the form of the chapel. Others represent corporeal pain, and provoke uneasy feelings within the viewer, thereby reminding him or her of the agony of mortal existence. Sacrificial symbolism, placed in a context of anatomical study, gives further hints that dissection's

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<sup>185</sup> Hersey, 104-107.

<sup>186</sup> Burroughs, 42.

redemptive role may offer the subject escape from suffering by offering entry into heaven. In this way, the dissection-based imagery helps the lower zone perform the same role given to it in both the Neoplatonic and Christian interpretations, as the area that embodies earthly torment and provides a contrast to the chapel's serene upper reaches that represent heaven.

### *The Vertically-Disposed Allegory of Dissection in the Medici Chapel*

While the lower zone of the chapel contains the bulk of dissection-related imagery, the upper reaches are essential to a complete understanding of the chapel, because only in elevation is the early modern allegory of redemption via dissection demonstrably complete. Viewed through the lens of anatomical culture, the lower part of the chapel – what was called the ‘earthly’ zone in other interpretative frameworks – must now be considered the embodied realm as it portrays the agonizing state of the body as it lies on the dissection table. The ‘heavenly’ upper region describes the state of the body after dissection, when its unencumbered, redeemed soul has ascended into heaven, and the knowledge hidden within the body has been passed on to society.

For this narrative to live and breathe, the chapel must create a sense of upward movement between the two zones. Upon entering the Medici Chapel, a visitor would immediately notice the space's towering height (Fig. 31) but might also be disturbed by the anatomized display of architectural layers that confronts him or her at eye level, and the mood of anguish, discomfort, claustrophobia, and overall suffering established by the lower portion's pilasters and sculptures. Thus, if a visitor was distressed by the lower portion of the chapel, most likely his or her eyes would seek release by looking upward to the serene dome above -- the somatic experience of the occupant acting to magnify the space's vertical axiality. The beholder's eyes would then seek to escape from the offending imagery – following the escape route given by the chapel's grey pilasters. Through

their repetition, they funnel a visitor's eyes up to the dome's coffers, thereby exaggerating the skyward pull of the space. Other features contribute to the chapel's dynamic vertical dominance; the converging lines of the windows' frames above the second cornice leading toward the radiating lines of the dome's coffers (Fig. 68) create a funneling effect.

The peculiar white gap that breaks the entablature—located between the first and second zones – acts as a perfect symbol of the chapel's redemptive allegory of dissection. In normative classical architecture, the entablature is a solid horizontal member consisting of three parts: architrave, frieze, and cornice. According to classical convention, it is unheard of for the frieze to be cut away or disappear, so this cornice acts as nothing less than a visual incision: the cut of the anatomist's knife creating both an opening to heavenly bliss and a breach between it and earthly sorrow. The upper zone, following this decisive break in the cornice, seems to represent the state of the anatomy table after a dissection, where the anatomist has removed the skin or organs of the body and logically laid the body out for visual scrutiny. Each element of the upper zones has far more space around it to breathe: the pilasters are not confined by rounded pediments or cornices, rather, they are thin and stand alone. The windows have their own white, stuccoed space surrounding them; they stay noticeably farther away from the tabernacles in the lower zone, at least a few inches on all sides. The perspectival windows in the pendentive zone have even more room – the mouldings that outline the pendentives are thin and wire-like and the window is the only feature that occupies the lunette-shaped area formed by the pendentives. So, in comparison to the tumultuous lower zone, the features of the upper zone seem distinctly separated and logically placed. Including the gap and the vertical movement within the chapel, the complete allegory reads as follows: the bottom zone represents both the tormented earthly existence and the penitent body on the dissection table, the mezzanine, pendentives, and dome represent the state of the body post-

dissection, and the lantern<sup>187</sup> atop the dome represents the final state of the body, decayed on earth but immortalized as knowledge. The chapel's vertical axis ties all the elevational zones together, symbolizing the transformation of the human soul – by way of dissection – from tormented, to redeemed, to ecstatic.

Twenty years after the initial design of the Medici Chapel, Andreas Vesalius (1514 – 1564) published his anatomical treatise, the front plate of which illustrates the pervasiveness of the Renaissance connection between dissection and vertical ascension represented within the Medici Chapel. The composition of the opening plate to Vesalius's *Fabrica* (Fig. 16), published in 1543 and an exemplar of late 16<sup>th</sup> century anatomical treatises, centers on a vertical axis, beginning in the womb of the dissected woman and continuing up through the ceiling.<sup>188</sup> In Sawday's interpretation, the axis represents the drama of life and death; the dissected woman's womb represents life, and the skeleton death.<sup>189</sup> The skeleton points the viewer upward along the axis since it is the only figure that looks upward. As the viewer's gaze ascends upwards, he or she will encounter the frieze zone of the cornice – this frieze departs from classical convention in that it contains an irregular pattern of symbolic images – a two garlanded *bucrania*, a cat head, and a screaming face. It would also likely be symmetrical if it was following classical convention, but it is not. In this way, Vesalius' artist is also modifying the typical Doric frieze (Fig. 58) to emphasize the dissection space's sacrificial quality. He has included both a cat and man's head in place of the typical *bucrania* to cite both target groups of dissection: the animal and the human. Thus, after the viewer encounters this symbolic cornice, which acts also as a border between a realm below and a realm above, the image ends, releasing the viewer's gaze into an ambiguous nothingness that likely represents the heavenly realm – a place ultimately incomprehensible to the human mind. Regarding the Vesalius' plate, since a

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<sup>187</sup> Lanterns, in the past have emblematically represented the light of knowledge.

<sup>188</sup> Sawday, 70.

<sup>189</sup> Sawday, 71.

viewer moves from the realm of dissection, through life and death, upward to the ‘ambiguous’ realm, Vesalius’ image appears to parallel the vertically-disposed allegory of ascension within the Medici Chapel. Hence, while I agree with Sawday that the axis represents an upward movement between life and death; I interpret it somewhat differently in light of the analysis of the Medici Chapel. It seems that the surrounding spectators, in their movement and tumult, symbolize the unpleasant turmoil of earthly existence, while, together, the cadaver’s womb and the skeleton’s upward gaze represent the hope for new life through death and humiliating dissection. The Vesalius plate also shows connections to ancient funerary architecture, because, in its roundness, the space depicted is similar to an ancient *tholos*, which commemorated and celebrated death and the passage into the afterlife, much as the Medici Chapel does. In its similarity to the allegory hidden within the Medici Chapel, Vesalius’ plate again demonstrates that the connection between dissection and redemption was not only familiar to Michelangelo – it was familiar to his anatomist contemporaries, and surely Renaissance society as a whole.

Therefore, since such an allegory was not peculiar to Michelangelo’s work, visitors to the Medici Chapel were more likely to be able to understand the salvation-focused narrative within the space. While Vesalius’ artist was working on a two-dimensional medium and had to use the skeleton’s gaze to cause the viewer’s gaze to move upward, Michelangelo played with three-dimensional perspective to create his vertical movement. All of the features enumerated above increase the space’s sense of depth from the point-of-view of a beholder on the ground and extend the upper reaches of the chapel (Fig. 68). So, the three-dimensional architectural medium had an advantage over the woodblock print: the perspective depth of the space and its signifying lines would make a viewer’s gaze feel as if it was being pulled skyward. It would become a somatic experience, where the viewer’s neck would have to move to accommodate the view of the dome. In this case, the architectural medium has a great advantage over the two-dimensional print; where the



Vesalius print would not require the viewer's body to move at all, the visitor's somatic experience of the Medici Chapel's verticality might induce a sensation in the visitor that he or she is actually ascending, a way of relieving discomfort in the chapel's visitors and physically emphasizing dissection's redemptive role, in which a body atones for its past iniquities when it is sacrificially subjected to the anatomists' knife. This vertical, physical movement was also uncommon to past burial chapel interpretations. As a foil to Michelangelo's presentation of the heavenly realm, Brunelleschi's Old Sacristy does not contain any elements that exaggerate the space's sense of verticality, such as a great preponderance of pilasters (the Old Sacristy has only six, and none above the cornice), canted window frames, or radiating coffers. Instead, the space is a calm, stationary, undisturbed composition of rationalized shapes and regulating lines that exudes confidence about human existence on earth and in heaven. Far different, Michelangelo's Medici Chapel uses its form to remind visitors of suffering on earth and provoke anxiety about whether or not heaven is truly accessible without drastic measures that rival the agonies of martyrdom.

### **Mannerism and Dissection in the Medici Chapel**

As we have seen earlier, Renaissance anatomical study, through its highly sensual imagery and power as a religious and social metaphor, influenced cultural realms that are outside of its assumed purview, such as architecture. Up to this point, Michelangelo's Medici Chapel has demonstrated that dissection could influence the *form* and *idea* of a building, but it could also inform his architectural theory as expressed in style. Michelangelo's particular Mannerist approach to the design of architectural elements – where he modifies the forms of established classical canon to suit his own

design goal – can be seen within the Medici Chapel and could be indebted to his practice of anatomical dissection.<sup>190</sup>

As mentioned at the beginning of Chapter 1, Sawday, throughout his entire book, establishes that with anatomical study came an associated ‘culture of dissection,’ and argues that at the center of this culture lie practices of division, which analogically rose from the partition-based study of the human body. He states, “in this urge to particularize [...] ‘Renaissance culture’ can be termed the ‘culture of dissection.’”<sup>191</sup> Therefore, in his view, even Renaissance literary devices that were based on fragmentation and reconfiguration – such as satire and the poetic *blazon* – would inevitably owe their Renaissance popularity to the practice of anatomical study. Both satire and the *blazon* imply a creative mind that has mastery over an original subject, which he or she reconfigures or redesigns to achieve a new, usually witty, purpose. Satire criticizes its subject by reinterpreting its elements to present a humorous, sometimes humiliating construal of the topic. Similarly, the *blazon*, the brainchild of Italian poet Petrarch (1304-1374), divides the female body into a series of parts, metaphorically comparing each to an unrelated object. In this way, the typically male poet would demonstrate his mastery of the female body, using his wit to create an idealization of female beauty over which he had control.<sup>192</sup> To Sawday, satire and the *blazon* (both fascinations of Renaissance society) paralleled the actual anatomization of the body, in which an anatomist asserted his mastery over the body, studying and dividing it “so that, in lieu of a formerly complete ‘body’, a new ‘body’ of knowledge and understanding [could] be created.”<sup>193</sup> These divisive and recombinant literary devices, which gained their appeal from the Renaissance ‘culture of dissection,’ both have their parallels in Michelangelo’s Mannerist style.

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<sup>190</sup> The Laurentian Library is another example of Michelangelo’s Mannerist approach to architecture. See conclusion for more information on the relationship between the Laurentian Library, Mannerism, and dissection.

<sup>191</sup> Sawday, 3.

<sup>192</sup> Sawday, 191-192.

<sup>193</sup> Sawday, 2.

Art historian John Shearman's definition of Michelangelo's Mannerist approach to architecture closely parallels Sawday's definition of satire and the *blazon* as a display of virtuosity. Shearman states that, to Mannerism, Michelangelo contributed "the notion of imposing an all-powerful artistic will on forms of classical derivation, of converting in this sense the mastery of those forms achieved in the High Renaissance into a God-like relation to his raw materials."<sup>194</sup> In this way, Michelangelo, who, as Shearman emphasizes, "knew the *anatomy* [italics added] of antique architecture as well as he did that of the human body," exerted his intellectual mastery onto the body of Classical architecture by manipulating it into an uncanonical idiom. But he did more than this: with his penetrating wit, he conducted a satirical emblazoning of Classical architectural canon where Classical forms were dissected and reconfigured to serve Michelangelo's own ideological purposes, one of which may have been to undermine the unquestioned hegemony of classical forms. While firmly sticking to some classical conventions in order to extol their virtues, Michelangelo might have broken others to emphasize that, in his eyes, classical architecture formed a body of knowledge that was malleable and should be used as a mere departure point for the creation of a more superior Renaissance architecture.

In the Medici Chapel, Michelangelo's architectural departures reveal both his knowledge of the 'anatomy of Classical architecture' and his dissection-related reasons for its reconfiguration. Through an enumeration of the Medici Chapel's Mannerist forms, it becomes evident that Michelangelo uses Mannerism to strengthen the chapel's allegory of dissection. The chapel's volutes are a great example: both the Medici Chapel and the Old Sacristy contain volutes, but a comparison of each in its context reveals exactly how Michelangelo broke classical precedent in their design. Brunelleschi, in the conventional manner, uses small, compact volutes to provide visual support the entablature which encircles the space (Fig. 4) – in the Old Sacristy, the volutes actually appear to

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<sup>194</sup> John Shearman, *Mannerism: Style and Civilization*. (Harmondsworth, UK: Penguin Books, 1967), 71.

support that which rests above them. In contrast, Michelangelo typically stretches his volutes. The volutes beneath the entrance door entablature are elongated, rendering them unable to convincingly support the entablature's weight. Instead, they seem to languidly hang from the wall surface: as mentioned earlier, Michelangelo elongated the typical proportions of the chapel's classical volutes to give the wall a flesh-like sensation (Fig. 44). He also carved atypical scales on the surface of other lengthened volutes, departing from usual Classical convention in order to give the surface a heightened sense of slipperiness (Fig. 41). As another Mannerist departure, Michelangelo removed the space's garlands and *bucrania* from their usual context within the frieze zone of a Doric entablature, not as a mere iconic citation of antiquity, but to signify their symbolic importance as sacrificial icons. Michelangelo's Mannerist design choices also appear in the upper half of the chapel. For instance, Michelangelo modifies the windows in the chapel's pendentive zone: he took the conventional rectangular window and pulled out both of its bottom corners to form a trapezoid (Fig. 68). This trapezoid, almost arrow-like, has a clear visual direction and helps to emphasize the chapel's vertical axis – a component integral to the understanding of the chapel as an allegory of dissection. Taken as a whole, all of these reconfigurations demonstrate Michelangelo's knowledge of classical canon and his willingness to bend it to his own will to better serve his overarching design concept. But, Michelangelo's Mannerism has also concocted a special brand of Mannerism: unlike the other Mannerists, Michelangelo uses his dissective approach to emulate the human body and provoke an empathetic response in the beholder.

Historians have noticed most, if not all, of Michelangelo's classical reinterpretations, but they have not attributed their origin or purpose to the Renaissance 'culture of dissection.' Aware of Michelangelo's knowledge of Petrarch, architectural historian Cammy Brothers has compared Michelangelo's creative approach to that of a *blazon*; she notices that, in his drawings, he isolates

specific fragments of the human body – a “specific muscle group or a particular twist of a torso.”<sup>195</sup> And when describing his ‘Mannerist’ departures from the classical canon, she states that, for Michelangelo, classical architecture “constituted a kit of parts to be reassembled and recombined at will.”<sup>196</sup> However, unbeknownst to Brothers, her conception of Michelangelo’s design process nearly parallels Sawday’s description of the literary anatomization. Thus, when considered in the light of Michelangelo’s experiences as an anatomist, Brother’s interpretation helps to establish that Michelangelo’s ‘Mannerist’ design process can be clearly linked to anatomical dissection in the Renaissance.

In addition to helping establish the connection between Michelangelo’s Mannerism and dissection, Brothers’ commentary also unknowingly provides reason why Michelangelo’s Mannerist approach would be able to strengthen the chapel’s dissection related narrative. By refusing to use Classical canon in a historically accurate manner and thereby undermining the viewer’s ability to relate to and understand the work, “Michelangelo forced the viewer to respond more directly to his work, which has certainly and consistently provoked strong reactions, both positive and negative.”<sup>197</sup> Extended to what has been observed of the influence of dissection, Michelangelo’s Mannerism, which denied the visitor a cultural foothold, placed the user in an awkward position, conjuring visceral responses within the user and forced him or her to become introspective. In this way, Brothers’ observations reveal that Michelangelo’s Mannerism performed the same purpose as the many other emotionally disturbing elements of the chapel; they strengthened the chapel’s narrative of the soul’s ascension by causing the visitor to reflect on the quality of his or her existence on earth, the looming specter of death, and the possible ways that a soul could secure a place in heaven – including dissection.

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<sup>195</sup> Cammy Brothers, *Michelangelo, Drawing, and the Invention of Architecture* (New Haven, CT: Yale University Press, 2008), 65.

<sup>196</sup> Brothers, 64.

<sup>197</sup> Brothers, 67.

So, in addition to the connections between the chapel's form and narrative to dissection, Michelangelo's architectural style appears to arise from Renaissance anatomical culture. It views classical architectural components as parts to be reassembled, in hopes of creating a more evocative architecture and an empathetic experience in the visitor. Indeed, especially in this satirical anatomization of classical canon, Michelangelo's architecture seems to be a product of the divisive Renaissance 'culture of dissection.'<sup>198</sup>

### **Dissection and Flayed Skin as a Medici Trope**

The Medici family itself is enmeshed with dissection – the patron saints of the Medici family, SS. Cosmas and Damian, historically have represented barbers and surgeons – the practitioners who most commonly performed anatomical dissections, especially before the sixteenth century.<sup>199</sup> Following the Italian tradition of electing patron saints with similar names, the Medici family may have chosen these saints as their patrons because Cosmas was the namesake of paterfamilias Cosimo, and because their last name Medici is plural for the Italian word *medico*, or doctor. In any case, the Medici family seems to have chosen the patron saints with the closest connection to dissection, so it is perhaps no surprise that these doctor-saints would make an appearance in the Medici Chapel, a building which, as demonstrated, seems to have far-reaching links to Renaissance anatomical study. Thus, the statues of the doctor-saints in the chapel – whether they were Michelangelo's idea or his patrons' – could not help but evoke associations with dissection. These connections would strengthen the chapel's ability to fulfill Lorenzo de' Medici's desire to be perceived as a martyr and also emphasize dissection's metaphorical ability to redeem the Medici family of its iniquities and secure them a safe position in heaven.

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<sup>198</sup> For more information, refer to Sawday, 2-3.

<sup>199</sup> British Medical Journal, "Ss. Cosmas and Damian, the Patron Saints of Medicine," *The British Medical Journal* 2, no. 2180 (October 11, 1902): 1176.

As established earlier, martyrdom and dissection were connected through their common purpose as violent paths leading towards heavenly ecstasy. Therefore, if the Medici family intended to portray themselves as martyrs, they might see value in associating themselves with dissection – a practice in which society sacrificed one person’s bodily integrity for intellectual bounty. Lorenzo ‘il Magnifico’ especially saw himself and his brother as warranting such a holy comparison; according to historian Richard Trexler, after the death of his brother Giuliano, Lorenzo ‘il Magnifico’ “initiated a cult of martyrs honoring himself and his assassinated brother Giuliano.”<sup>200</sup> As a basis for this cult, Lorenzo stated that he had sacrificed his brother and nearly himself for the well-being of Florence.<sup>201</sup> Lorenzo sought to be venerated for his gruesome sacrifice and the tragedies he endured for the sake of his people; hence, it would likely be appropriate for Michelangelo to use any means necessary to remind the chapel’s visitors of dissection, since, by association, it would help the chapel emphasize the martyrdom and sacrifices of the Medici family members.

Likely intended to strengthen their connection to martyrs, *il Magnifici* (Lorenzo and Giuliano de’ Medici) were entombed under the *Cosmas* and *Damian* statues (Fig. 34), thereby associating the Medici brothers with all of the saints’ characteristics. As described in the *British Journal of Medicine*, SS. Cosmas and Damian were martyr-like saints, did not take money for their work and “lived in complete abstinence, studying medicine and surgery the better relieve the sufferings of their infirm and wounded neighbours [sic].”<sup>202</sup> They bridged the gap between pagan myth and Christian practice, as the saints are said to be a Christian reinterpretation of the Greek god of medicine and healing, Asclepius (Fig. 69). Because of their piety and holy tenacity, when officials attempted to execute them for their adherence to Christianity, Cosmas and Damian survived being thrown into a fire, a pelting of stones, and a rain of arrows. Their bodies finally succumbed to death when they

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<sup>200</sup> Richard Trexler, “Lorenzo de’ Medici and Savonarola, Martyrs for Florence,” *Renaissance Quarterly* 31, no. 3 (Autumn 1978): 294.

<sup>201</sup> Trexler, 298.

<sup>202</sup> “Ss. Cosmas and Damian,” 1176.

were “mutilated with the sword,” a fitting punishment as it resembles an operation or a dissection visited upon them by agents of Satan.<sup>203</sup> Perhaps, similarly to Park’s accounts of autopsies of saints in the Middle Ages, Cosmas and Damian’s god-like imperviousness startled the executioners to such a degree that it warranted a bodily investigation – in the saints’ case, a violent search to find the tangible secret to their survival.<sup>204</sup> So, accounting for the entirety of their narrative, the Renaissance public must have seen the saints as representing unwavering strength, ascetic magnanimity, sacred healing, and dissection-based martyrdom. In this way, Cosmas and Damian were perfect representative images for the Medici family to project the idea that they selflessly martyred themselves for the good of the Florentine public.

With martyrdom comes the idea that earthly pain is inevitable and to be endured in order to secure a place in heaven. Michelangelo uses this trope over and over within his poetry<sup>205</sup> and artwork (Fig. 56), and Cosmas and Damian evoke this transformative narrative through their close relationship to the Greek god Asclepius. In ancient representations, Asclepius could be identified by his stave and the snake which tightly coiled around it (Fig. 69). Throughout history, snakes have commonly acted as a symbol of healing because they are one of the only animals which sheds its skin and still remains alive.<sup>206</sup> The snake’s moulting represented a regenerative process – the transformation from one bodily state to another – and in Asclepius’ case, the healing of the body. Because of their connections to serpents and bodily regeneration, the presence of *Cosmas* and *Damian* makes perfect sense within the context of an allegory of dissection, where the skin is flayed from the body in hopes of obtaining heavenly release. Furthermore, these overtones would have been blatantly visible if the intended lunette paintings of the Brazen Serpent and the Resurrection

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<sup>203</sup> “Ss. Cosmas and Damian,” 1176.

<sup>204</sup> For more information on Park’s research of autopsy in the Renaissance, see Chapter 1.

<sup>205</sup> Refer to Chapter 2 for more information on this motif in Michelangelo’s poetry.

<sup>206</sup> For a look at all different types of symbolic significances of the snake, see Varina Anne Davis, “Serpent Myths,” *The North American Review* 146, no. 385 (February 1888): 161-171.



had been executed within the chapel.<sup>207</sup> The story of the Healing of the People by the Brazen Serpent centers around the idea of sacred healing and regeneration -- Moses used a bronze serpent mounted upon a pole to heal the Israelites' illness.<sup>208</sup> Michelangelo's knowledge concerning this story is visible within Michelangelo's painting of the Brazen Serpent on the Sistine Chapel ceiling (1508-1512) (Fig. 70), where the Brazen Serpent coils tightly around a tall wooden stick, in a quite similar manner to the Rod of Asclepius (Fig. 69), the implement of the deity to which *Cosmas* and *Damian* have been declared to be so closely connected with. Michelangelo's work seems to connect all three ideas together – under the guise of the story of the Brazen Serpent, he evokes the pagan god Asclepius and the saints Cosmas and Damian. It makes sense that Michelangelo might evoke all three iconic figures in tandem, because each recalls the human hope for transformational, regenerative redemption. Such a concept, related to the shedding of the skin, takes a central role not only within Michelangelo's creative work<sup>209</sup> but also Renaissance anatomical treatises (Fig. 9, Fig. 53).

If Michelangelo connected such ideas in his painting of the Brazen Serpent in the Sistine Chapel (which pre-dates the conception of the Medici Chapel), one would assume that he might do the same within the Medici Chapel, in hopes of creating visual reminders of holy regeneration. However, past interpretations of the chapel have ignored the possibility of symbolic meanings associated with the two statues of *Cosmas* and *Damian*: de Tolnay and Panofsky do not seem to assign these figures any iconographical importance, and while Dixon uses them as part of the chain of visual movement throughout the chapel, he does not speculate on their symbolic purpose. Perhaps historians have minimized the saints' importance in a reading of the chapel because their statues were not executed by Michelangelo, but by two of his pupils, Montelupo and Montorsoli, and also because they became a part of the chapel around 1550, quite late in the chapel's

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<sup>207</sup> These paintings were intended to occupy the lunettes above the broken entablature. Refer to the earlier discussion in Chapter 3 on previous interpretations and the history of the chapel for more information.

<sup>208</sup> 1 Numbers 21: 4-9.

<sup>209</sup> Refer to Michelangelo's poetry and his painting *Last Judgment*.

construction.<sup>210</sup> This is not to say that Michelangelo did not intend these sculptures as a part of his design; Michelangelo is said to have made models for either one or both of the statues before August 1532, and he also depicts two similarly seated figures flanking the Madonna in his *modello* drawing for the entrance wall of the chapel (Fig. 71).<sup>211</sup> Indeed, these statues are not an afterthought, and they likely play a significant part in the iconography of the chapel.

In this *modello*, the statues that would represent *Cosmas* and *Damian* are facing away from the Madonna, opposite of how they are actually facing in the Medici Chapel today. Till Verellen, in the article “Cosmas and Damian in the New Sacristy,” enumerates the reasons why there is ambiguity surrounding the true intended positioning of the statues. Since, in Verellen’s research, various Renaissance accounts conflict with the positioning of the statues today, it seems as if the correct positioning may mirror that drawn in the *modello*. In this new positioning, the gaze of barber-surgeons Cosmas and Damian would move away from the Madonna and instead rest upon the reclining statues. Thus, if the time statues represent flayed anatomical subjects, *Cosmas* and *Damian* would, in this new position, appear to play the part of anatomists who behold their subjects, and their awe-stricken expressions (Fig. 34) might be in response to the sacred nature of the dissection-based transformation taking place in front of their eyes. Michelangelo seems to even include a subtle hint that the time statues are dissected cadavers awaiting redemption – the sacrificial entablature behind them (Fig. 67), as interpreted earlier<sup>212</sup>, represents the transformational movement of the soul from the earthly to heavenly realm. Similar to the part played by the broken entablature within the chapel’s vertical allegory of dissection, the cornice here acts as the delineation between the dissected cadavers on the table (the time statues) and the soul awaiting redemption in purgatory (represented by the statues of the Capitani resting in the tabernacle above). The

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<sup>210</sup> Till Verellen, “Cosmas and Damian in the New Sacristy,” *Journal of the Warburg and Courtauld Institutes* 42 (1979): 274.

<sup>211</sup> For more information on the models, see Verellen, 274; for more information on the *modello*, see Paul Joannides, “Michelangelo: The Magnifici Tomb and the Brazen Serpent,” *Master Drawings* 34, no. 2 (Summer 1996): 148-150.

<sup>212</sup> For more information, refer to this chapter’s section on the Medici Chapel as a sacrificial chamber.

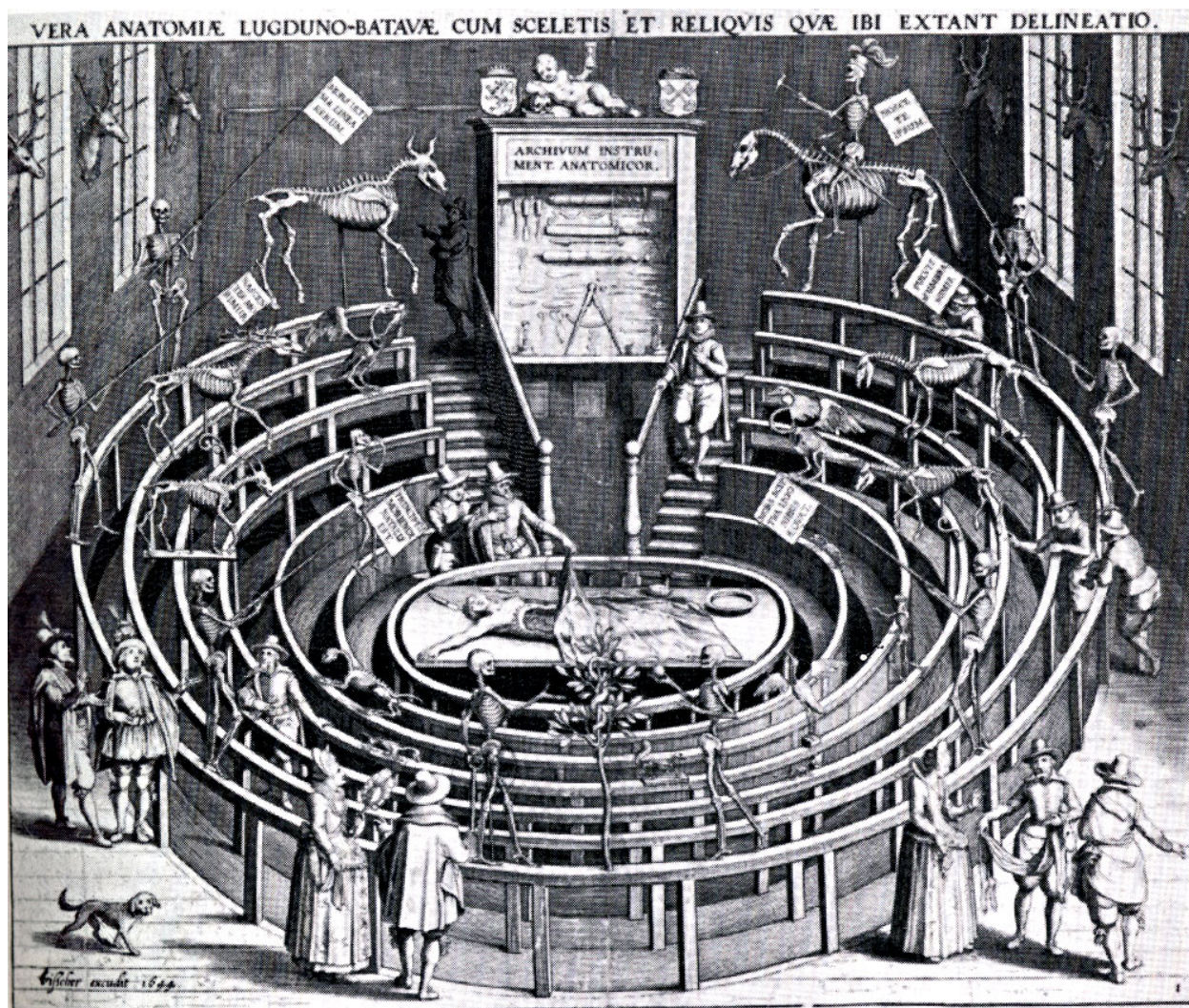
pendentive zone and dome above, with its calm and heavenly light, would then represent the dissection process in its completed state – where the souls of the Capitani have moved from purgatory into Heaven.

Through their symbolic connection to martyrdom, regeneration, and redemption, the presence of the statues of *Cosmas* and *Damian* are iconic representations of the chapel's dissection-related allegory, which in its totality embodies the martyr-like image that Lorenzo had hoped to establish in the minds of the Florentine people. All of the references to dissection, including the *Cosmas* and *Damian* act as a reminder to chapel visitors of the noble sacrifices of the Capitani and the other Medici family members on behalf of Florence, helping to legitimize the daily prayers and vigil kept to assure the Medici family's deliverance. And in light of the chapel's narrative, it may even be accurate to see the chapel as representative of the dissection of the body of the Medici family. Since the Medici family was not unanimously respected during the Renaissance, and many people perceived their artistic patronage and practice of usury as decadent, sinful, and corrupt, Michelangelo may have intended that, through the allegorical imagery related to dissection, the chapel would depict the dissection of the members of the Medici family, where their metaphorical bodies become a dissected offering to God aimed at securing the eternal expiation of their sins.



Fig. 1: Realdo Colombo, *De re anatomica* title plate, 1559. Michelangelo may be represented as the figure grasping the hand of the cupid or child, to the right of the frame. (Image: Giuseppe Olmi, *Rappresentare il corpo*).







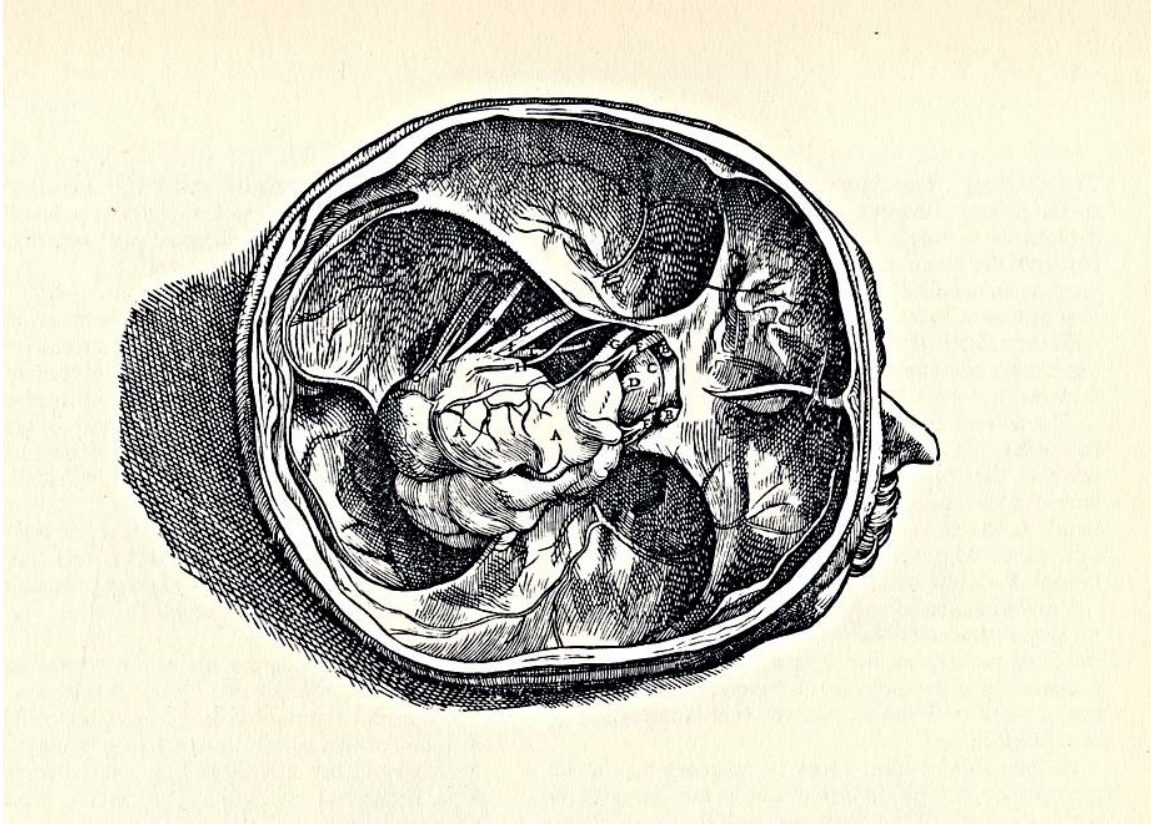


Fig. 3: Vesalius, anatomical study. Demonstrates the cavities in the skull. (Image: Saunders, *Vesalius*).

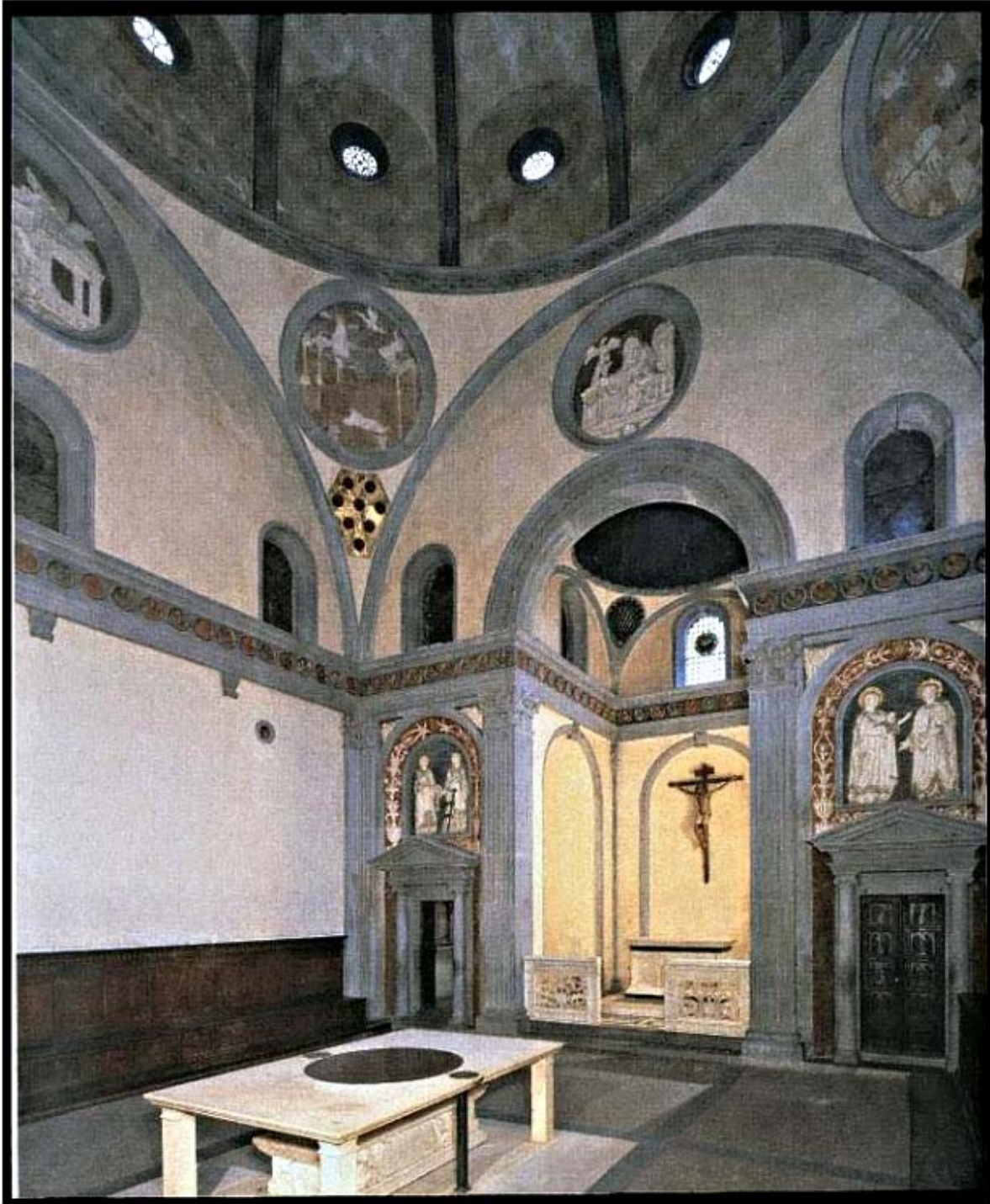


Fig. 4: Old Sacristy, Brunelleschi, 1421. (Photo: MDID, accession no. 200030026)





Fig. 5: Medici Chapel, Michelangelo, 1521. View towards altar and tomb of Giuliano de' Medici. (Corrected for Trexler's analysis; Image: Cammy Brothers, *Michelangelo, Drawing and the Invention of Architecture*).





Fig. 6: Hugues Sambin, female column from *De la Diversite des Termes*, 1572. (Image: Hersey, *The Lost Meaning of Classical Architecture*).

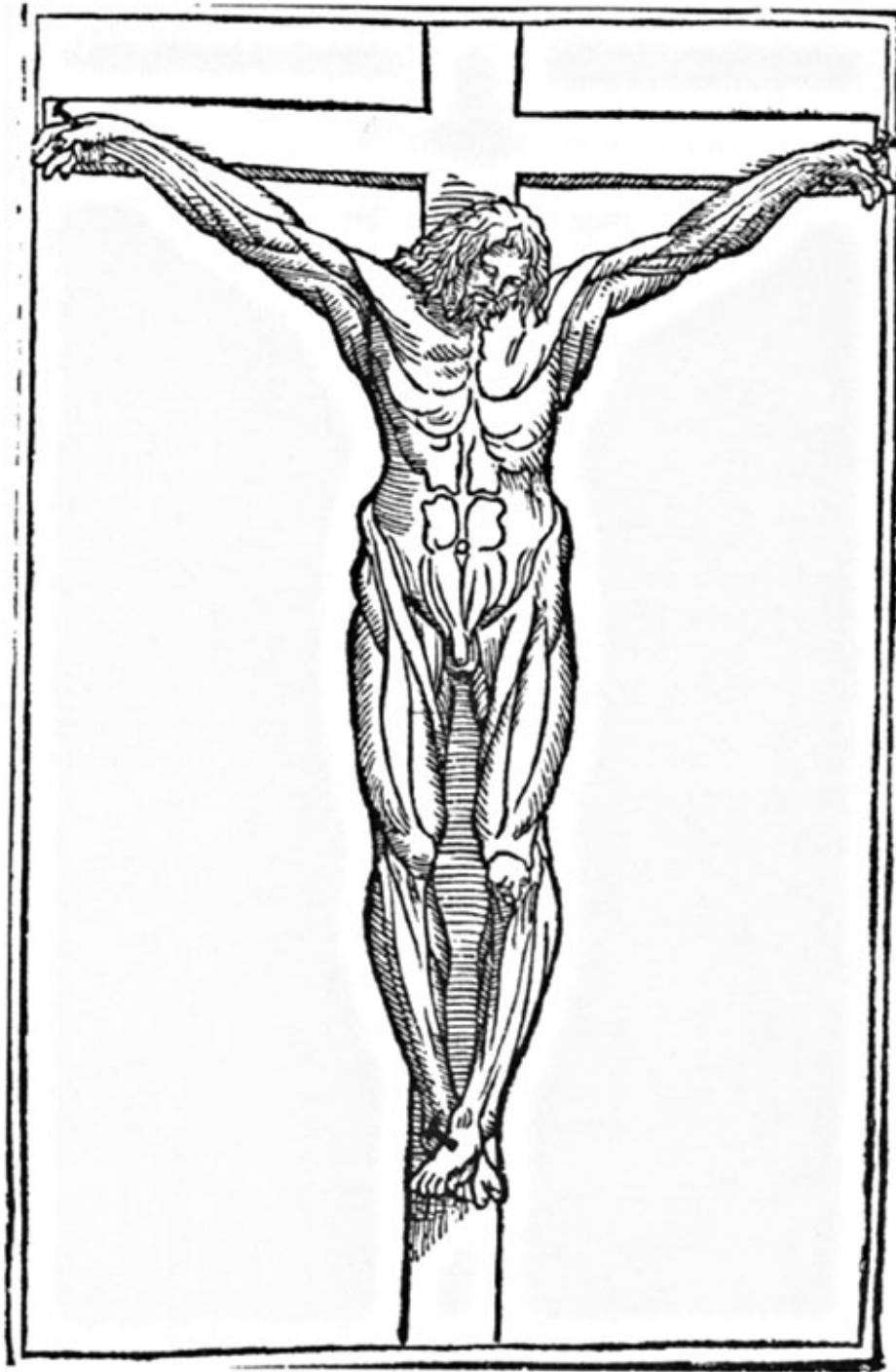


Fig. 7: Écorché of Jesus Christ. Berengario da Carpi, *Commentaria*, fol. 519v. (Image: Park, *Criminal and Saintly*)



Fig. 8: Martyrdom of St. Bartholomew, Scholar of Lochner from Upper Rhine Region, c. 1450-1500 (Image: aiwaz.net)



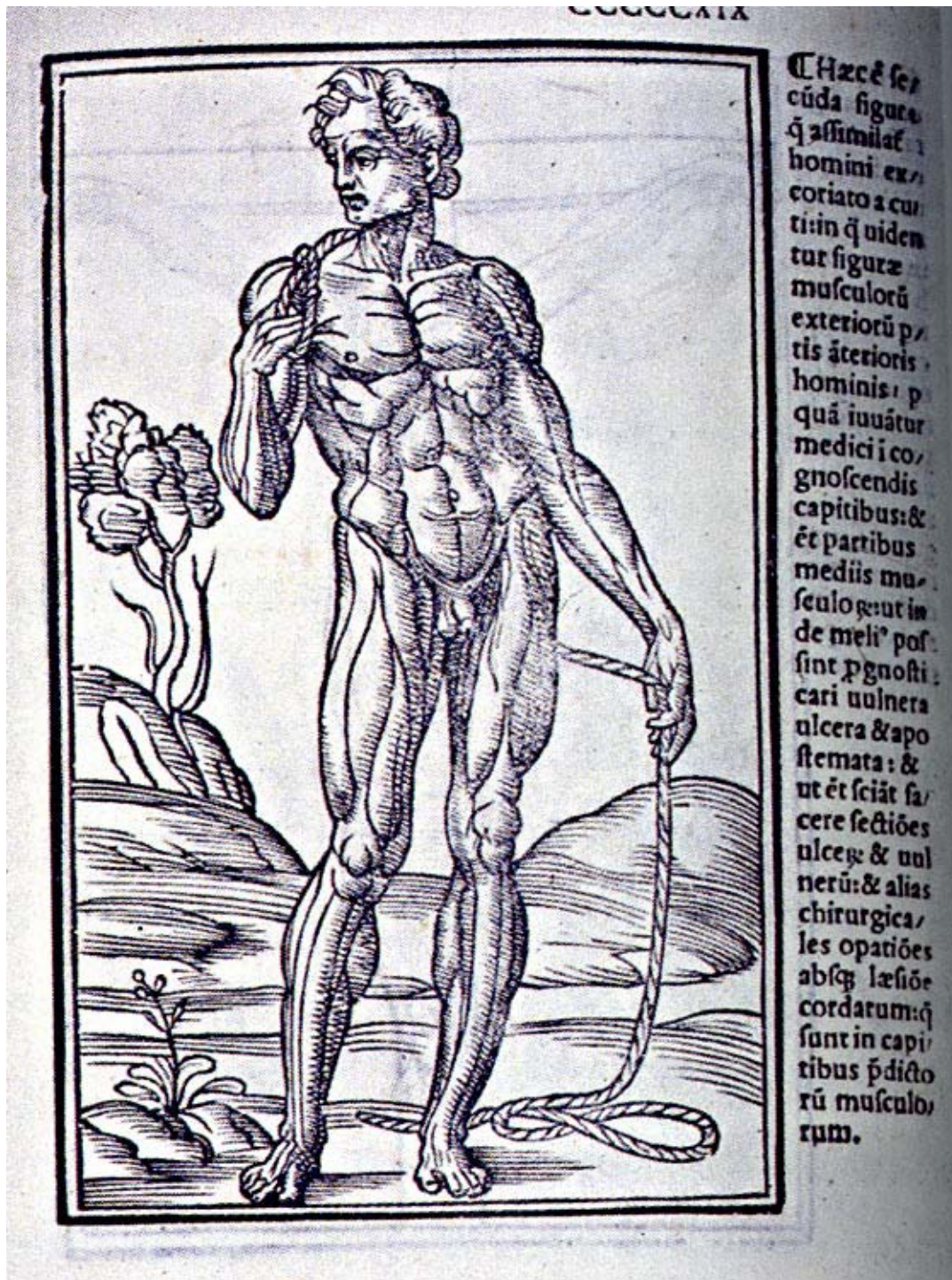


Fig. 9: Écorché, Berengario da Carpi, *Commentaria*, 1521. The man stands with his own weapon of martyrdom, a noose.  
 (Image: Giuseppe Olmi, *Rappresentare il Corpo*).





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ciūt simul  
gurā .X. l  
grace: &  
og musculi  
rū ēt ps ca  
nea ē a late  
bus. Cord  
uero eog f  
in medio  
tris / q̄ sūt  
duar pellic  
larū: & hab  
unā pellicu  
lā tm̄ super  
tantē musc

los lūgos: alia v̄o pellicula ē īfra musculos lūgos: q̄ adheret cordis latitudinē

Fig. 10: Écorché, Berengario da Carpi, *Commentaria*, 1521. The man shines with a holy aura as he rips off his own skin.  
(Image: Giuseppe Olmi, *Rappresentare il Corpo*).



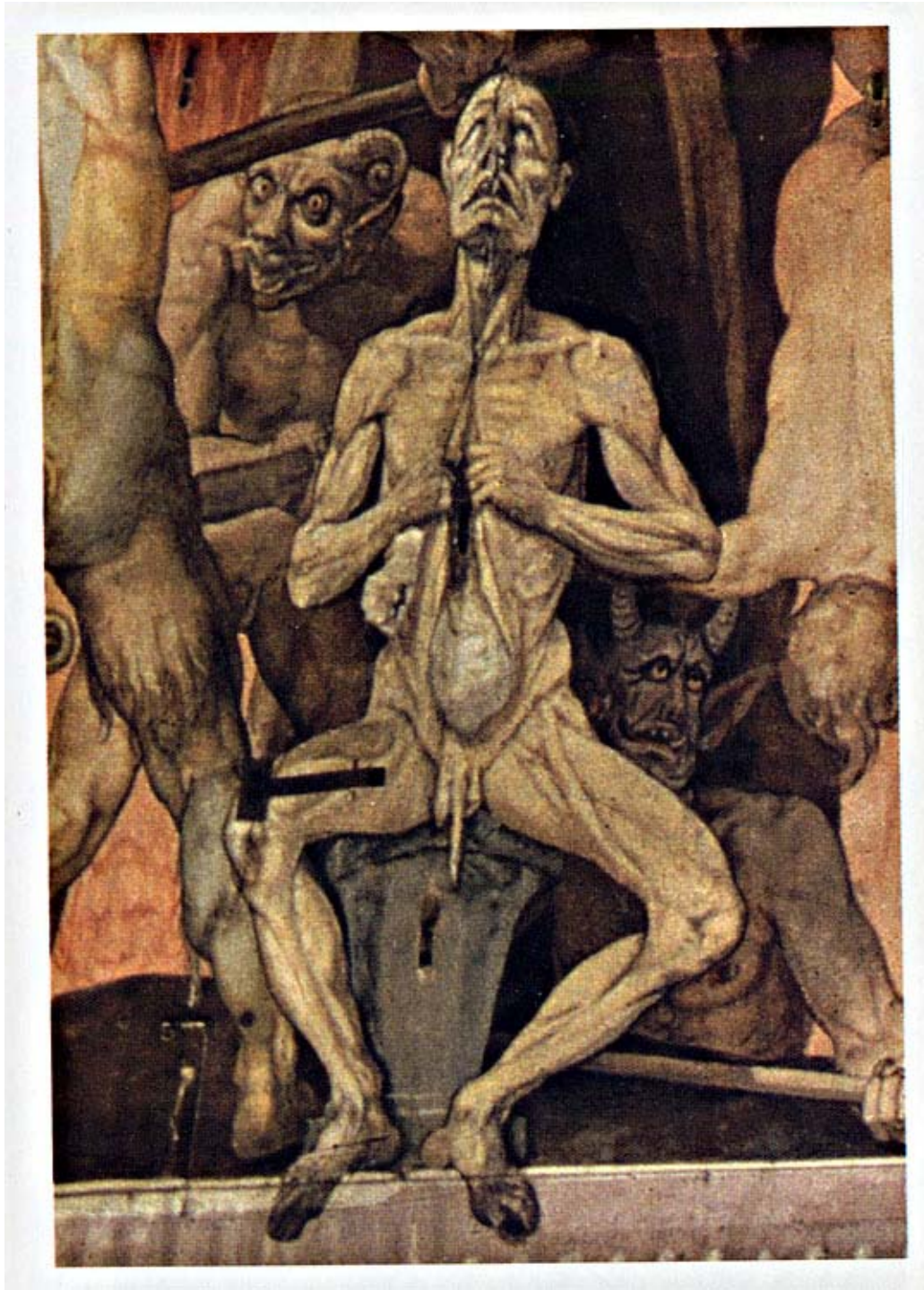


Fig. 11: Federico Zuccaro, *Last Judgment*, fresco, 1575-79, Florence Cathedral cupola. (Image: Laurenza, *Art and Anatomy*).





Fig. 12: Écorché, Berengario da Carpi, *Commentaria*, 1521. The man presents his insides to the viewer, skin hanging from his waist like cloth. (Image: Giuseppe Olmi, *Rappresentare il Corpo*).





Fig. 13: Cropped view of Leiden anatomy theatre, c. 1610 (Image: Sawday, *The Body Emblazoned*).





Fig. 14: Prisoner (Awakened Slave), Michelangelo Buonarroti, 1517-19 (Image: artSTOR, SCALA archives).



Fig. 15: Titian, *Flaying of Marsyas*, 1575, oil on canvas (Image: artSTOR, Lessing archives id.no. 40-08-03/29).





Fig. 16: Vesalius, *Fabrica*, title plate, 1543. (Image: Saunders, Vesalius).





Fig. 17: *Apollo and Marsyas*, from *Vita e t Metamorfosei d'Ovidio: Figurato abbreviario informa d'epigrammi*, 1559.  
(Image: Jacobs, *Marsyas*, Michelangelo...).



Fig. 18: Historiated letter V (Saunders, *Vesalins*).

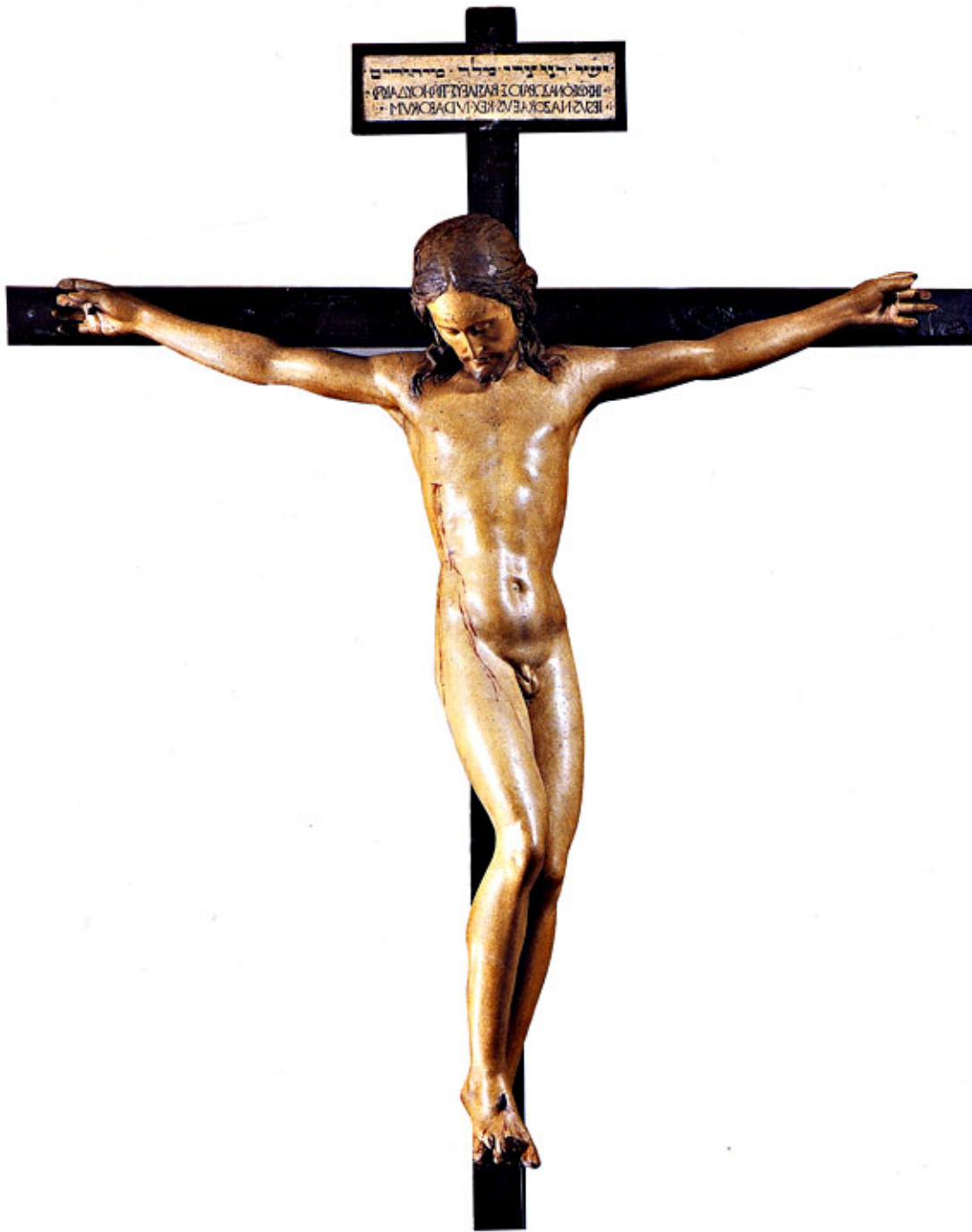


Fig. 19: Wooden Crucifix at Sto. Spirito, attributed to Michelangelo, 1492. (Image: Capretti, *The Building Complex of Santo Spirito*).



Fig. 20: Michelangelo, *Bacchus*, 1496-98. (Image: artSTOR, SCALA archives).



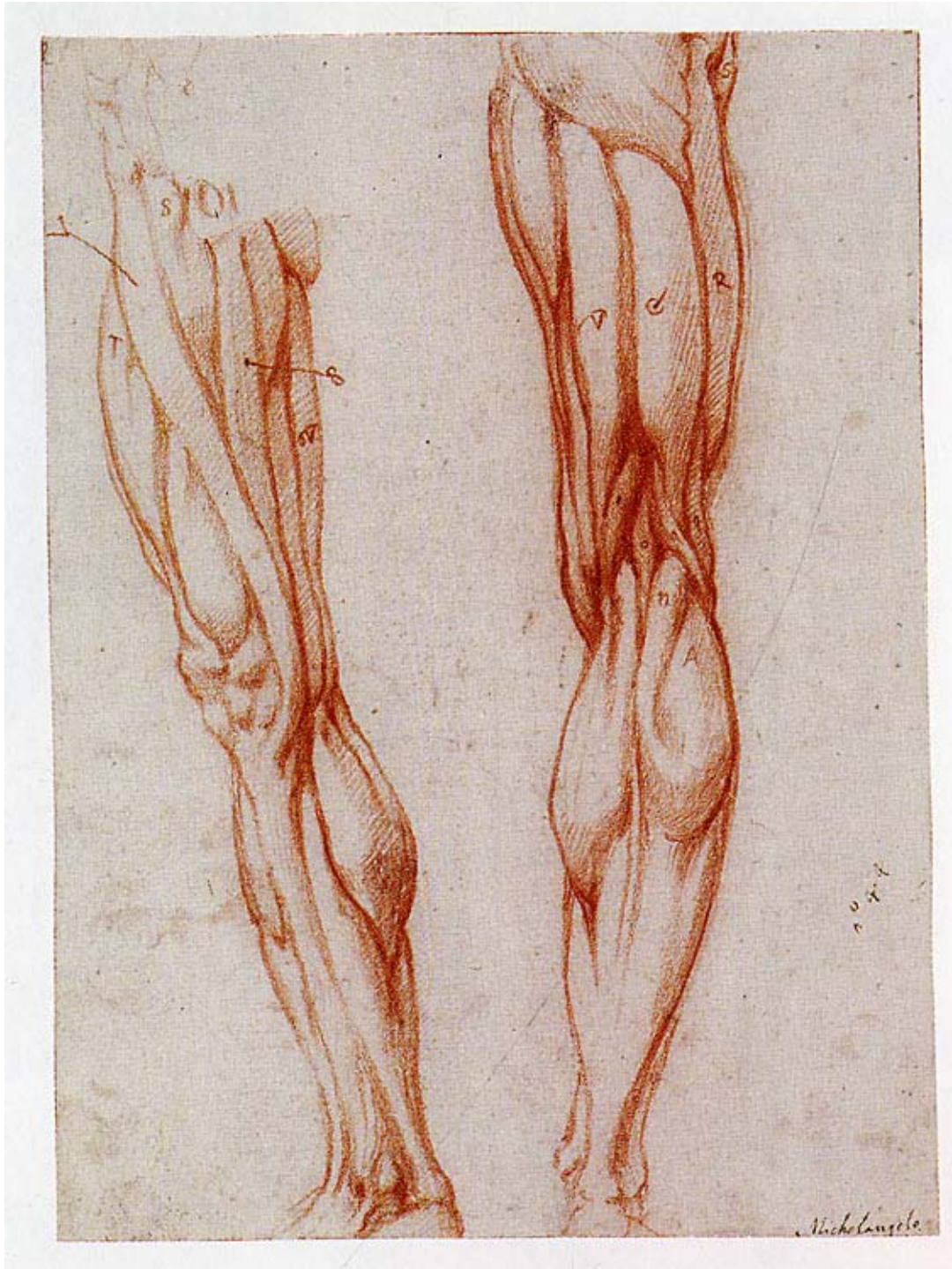


Fig. 21: Michelangelo (or a copy after), muscles of a male leg, c. 1518. (Image: Laurenza, *Art and Anatomy*).

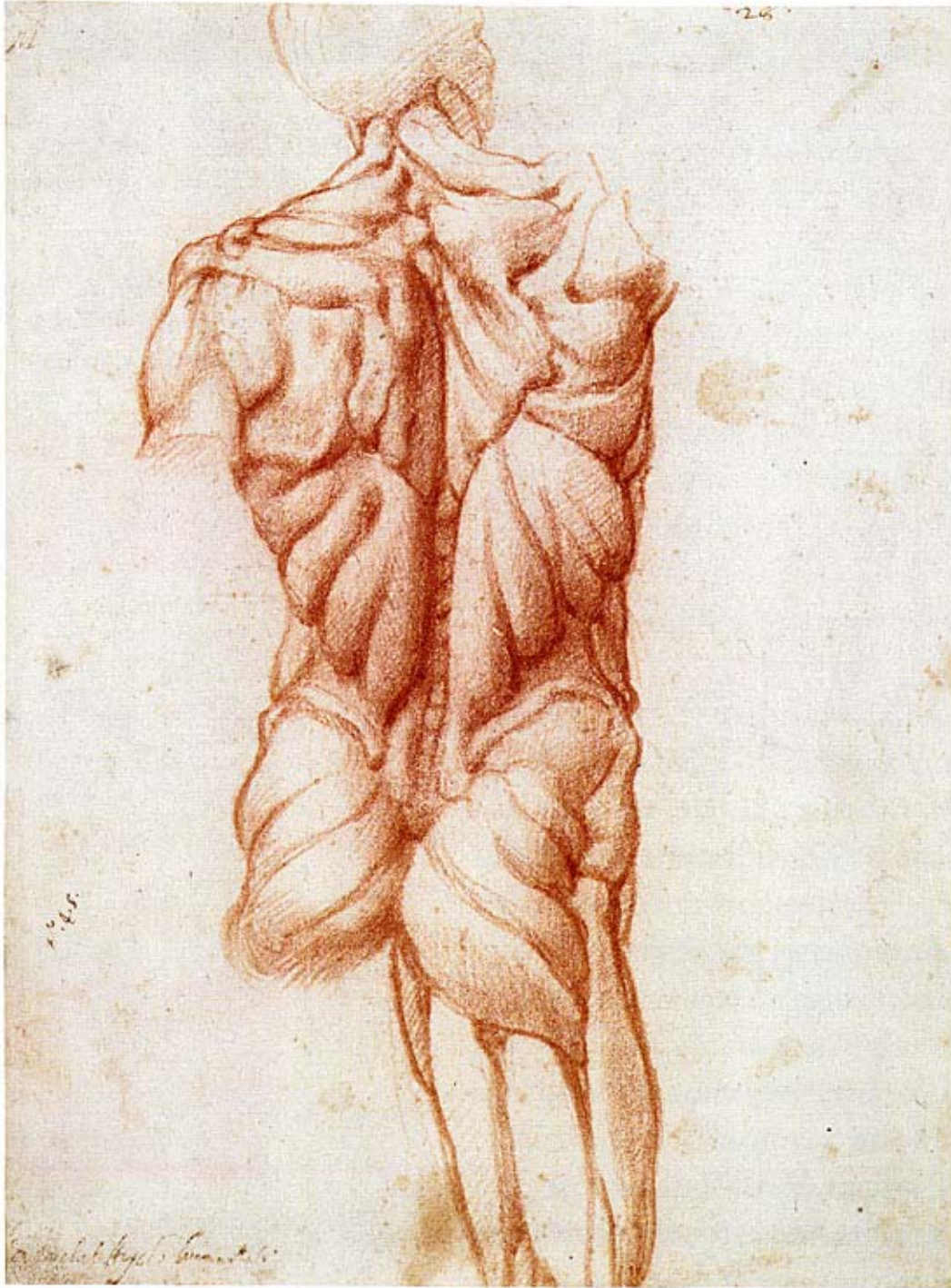


Fig. 22: Michelangelo (or a copy after), muscles of the torso and thigh seen from behind, c. 1518. (Image: Laurenza, *Art and Anatomy*).



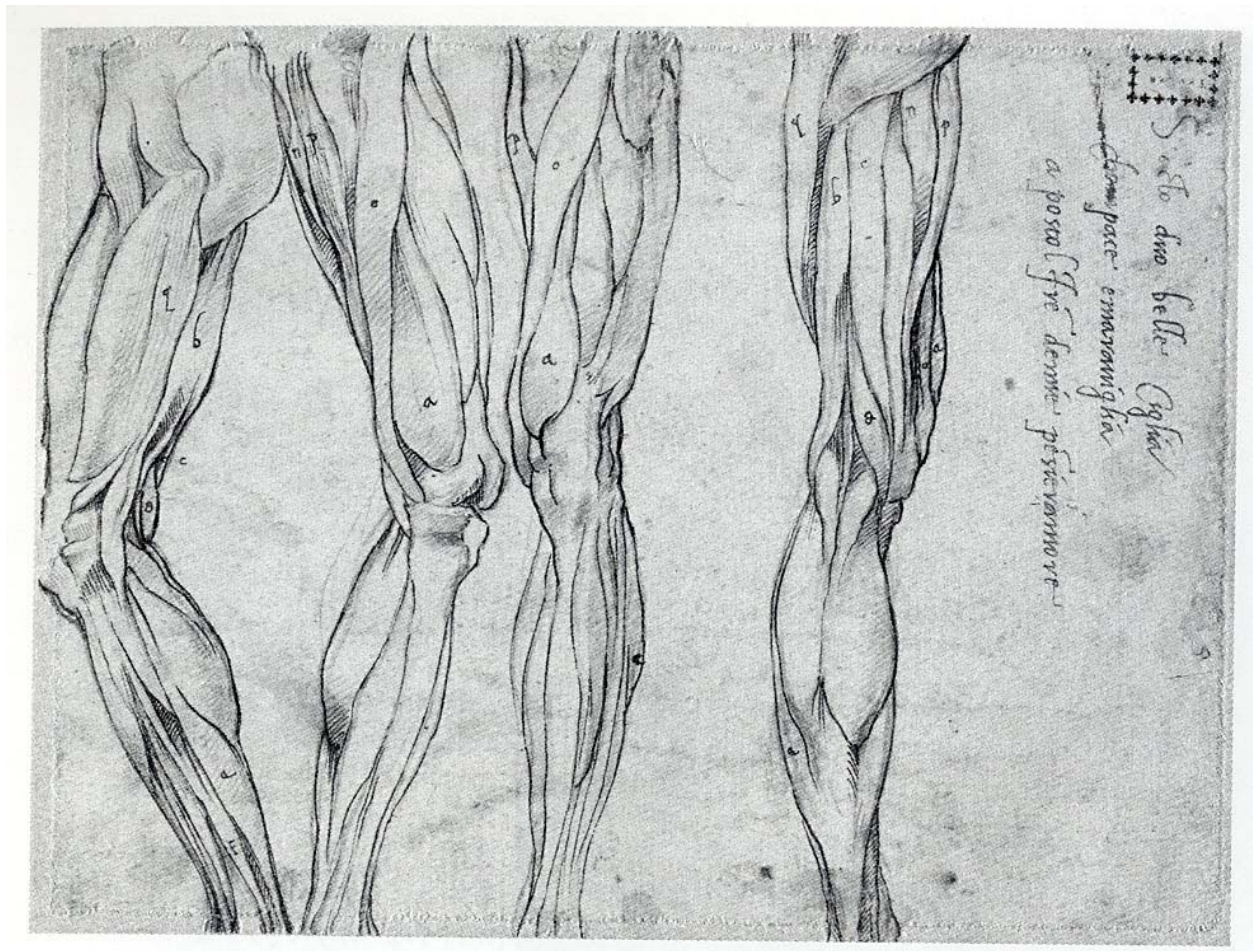


Fig. 23: Michelangelo, leg anatomical study (Image: Cammy Brothers, *Michelangelo, Drawing and the Invention of Architecture* ).



Fig. 24: Michelangelo, anatomical study (Image: Mariani, *Leonardo e Michelangelo*).





Fig. 25: Michelangelo, anatomical study (Image: Mariani, *Leonardo e Michelangelo*).



Fig. 26: Michelangelo, leg anatomical studies (Image: Mariani, *Leonardo e Michelangelo*).





Fig. 27: Michelangelo, anatomical study (Image: Mariani, *Leonardo e Michelangelo*).

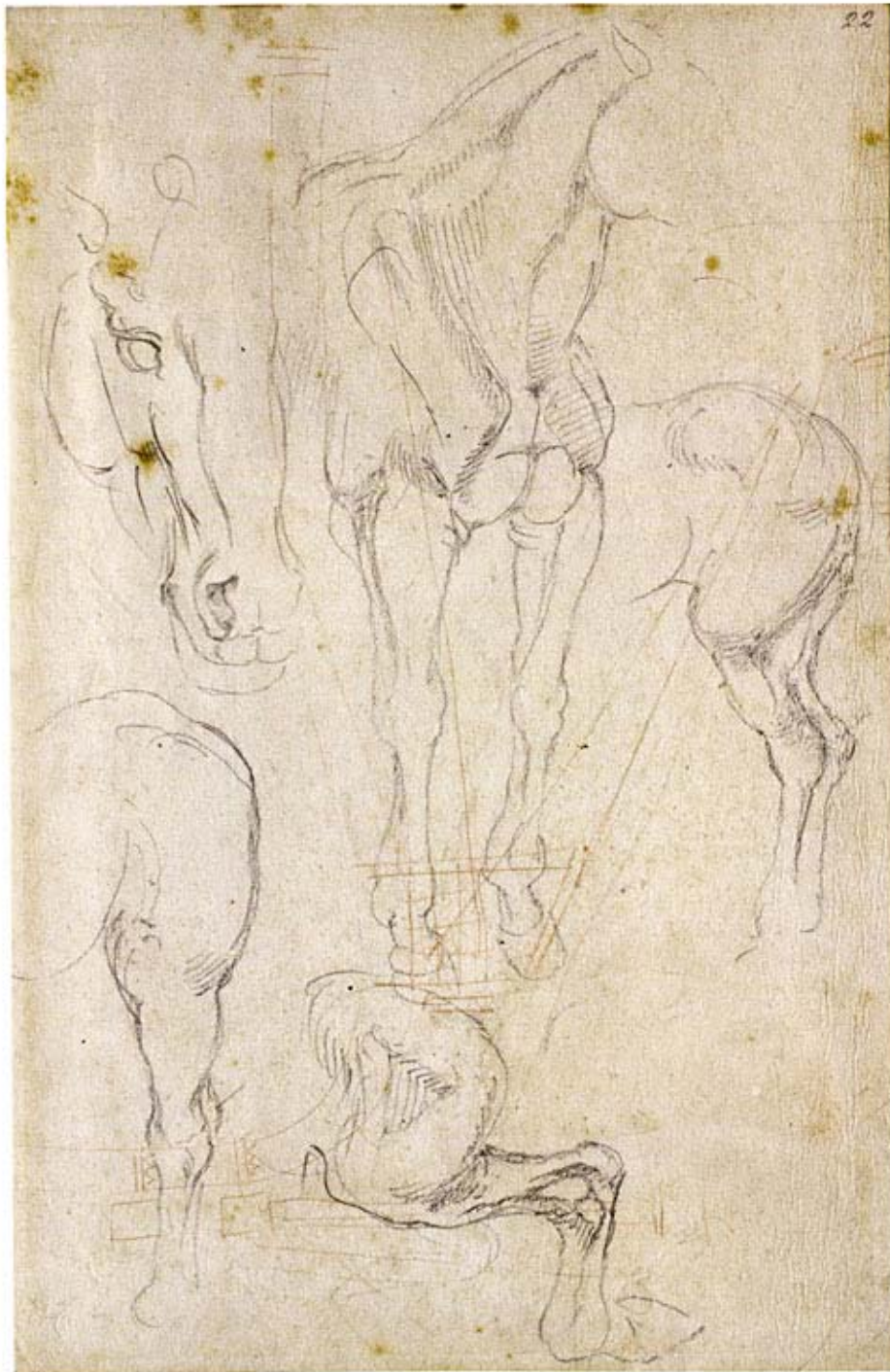


Fig. 28: Michelangelo, horse anatomical study (Image: Mariani, *Leonardo e Michelangelo*).



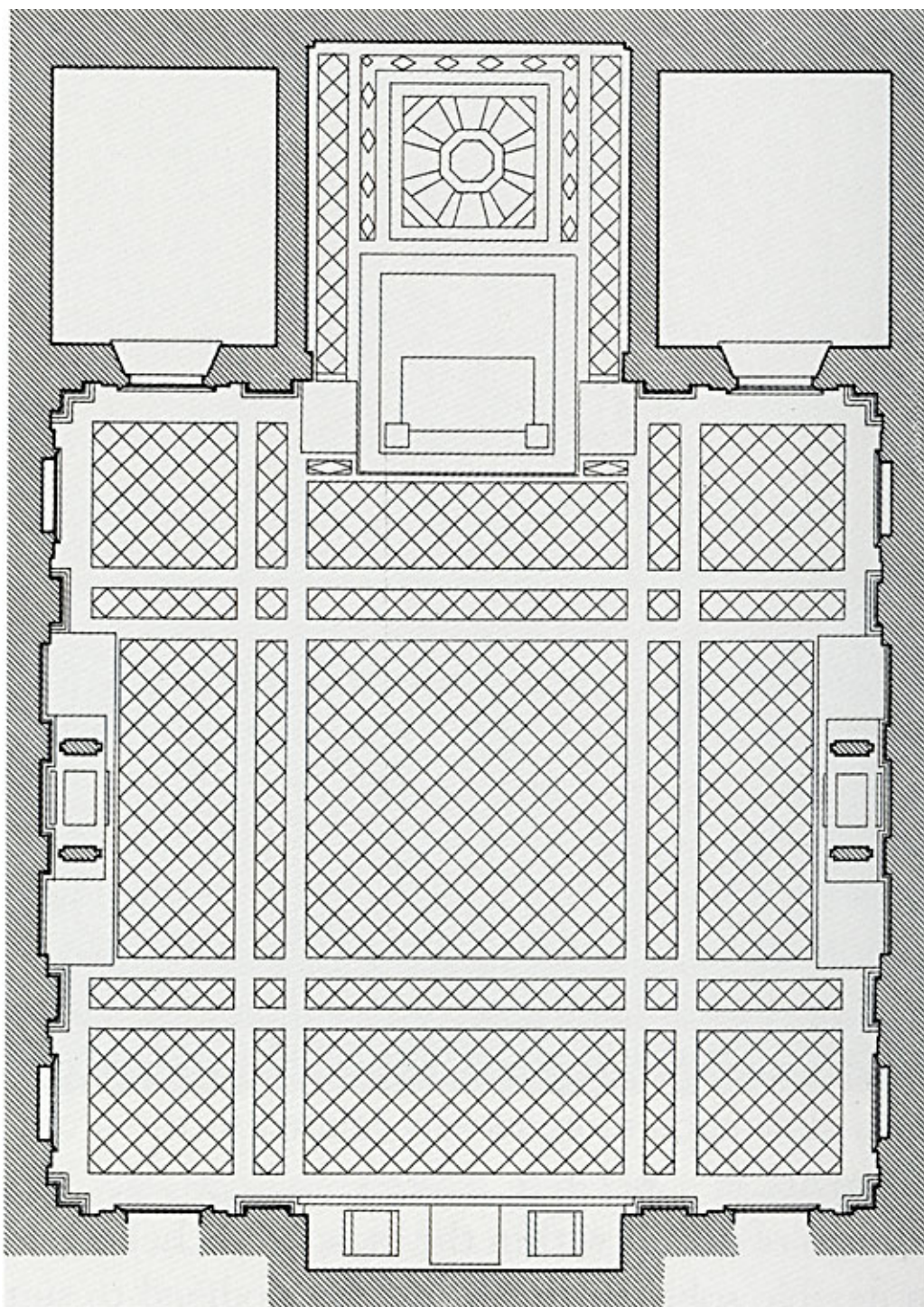


Fig. 29: Zevi Portoghesi, Medici Chapel plan (Image: Cammy Brothers, *Michelangelo, Drawing and the Invention of Architecture*).



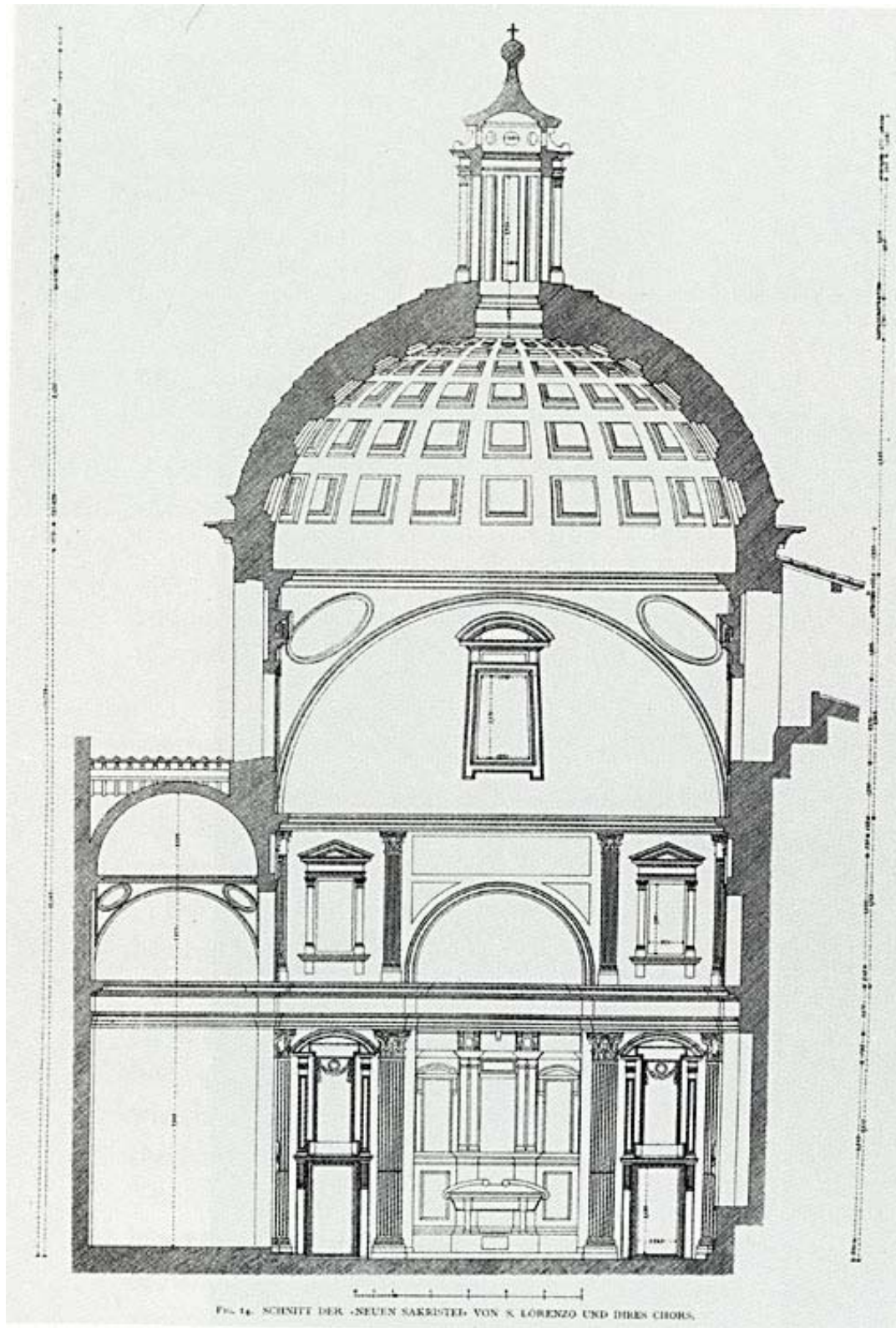


Fig. 30: Geymuller, Medici Chapel section (Image: Cammy Brothers, *Michelangelo, Drawing and the Invention of Architecture*).



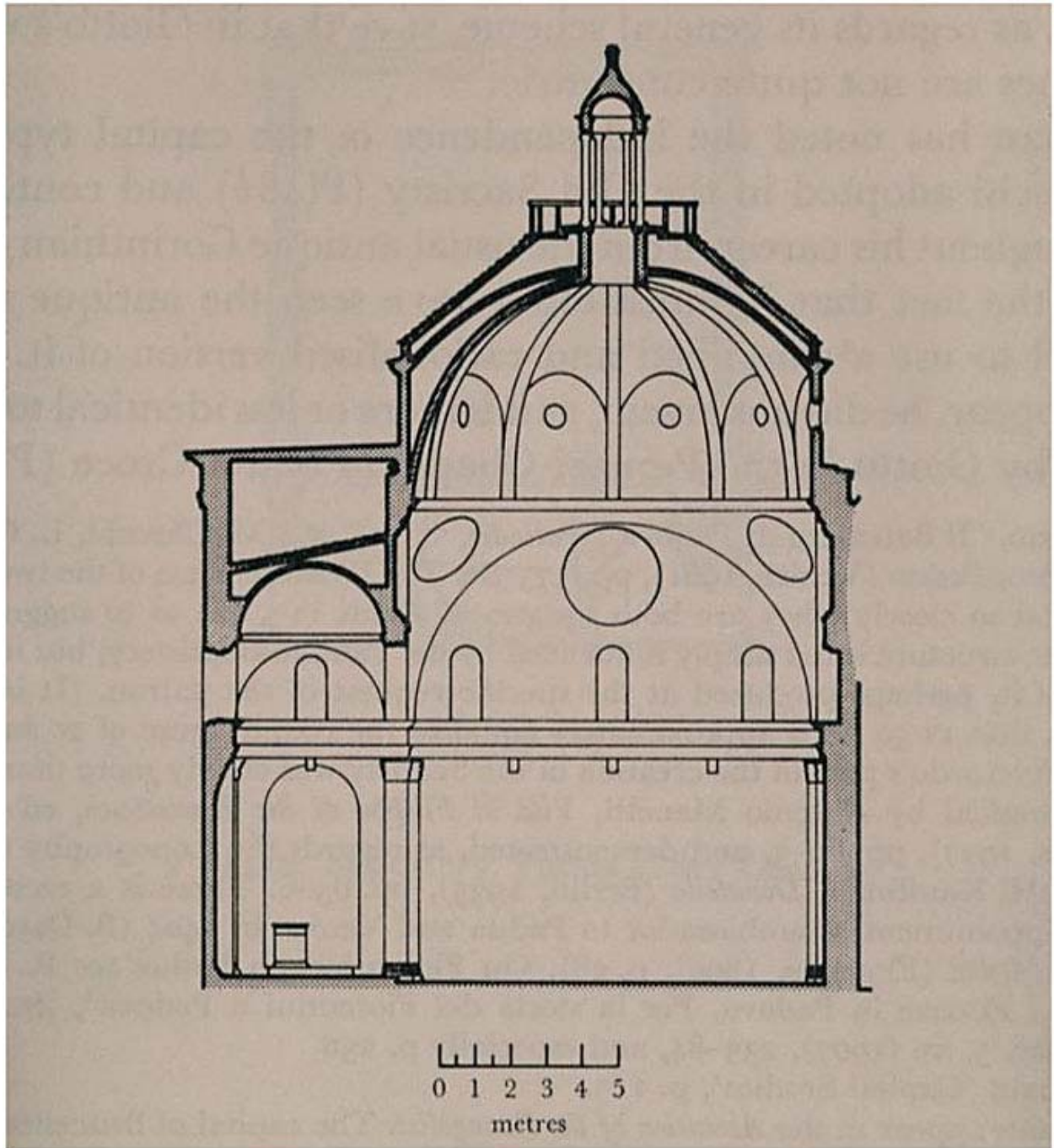


Fig. 31: Old Sacristy section (Image: artSTOR, SCALA archives).



Fig. 32: Bird's eye view, *Dawn and Dusk* (left), *Day and Night* (right) (Image: artSTOR, SCALA archives).



Fig. 33: Medici Chapel entrance wall (Image: artSTOR, Ralph Lieberman Gallery).



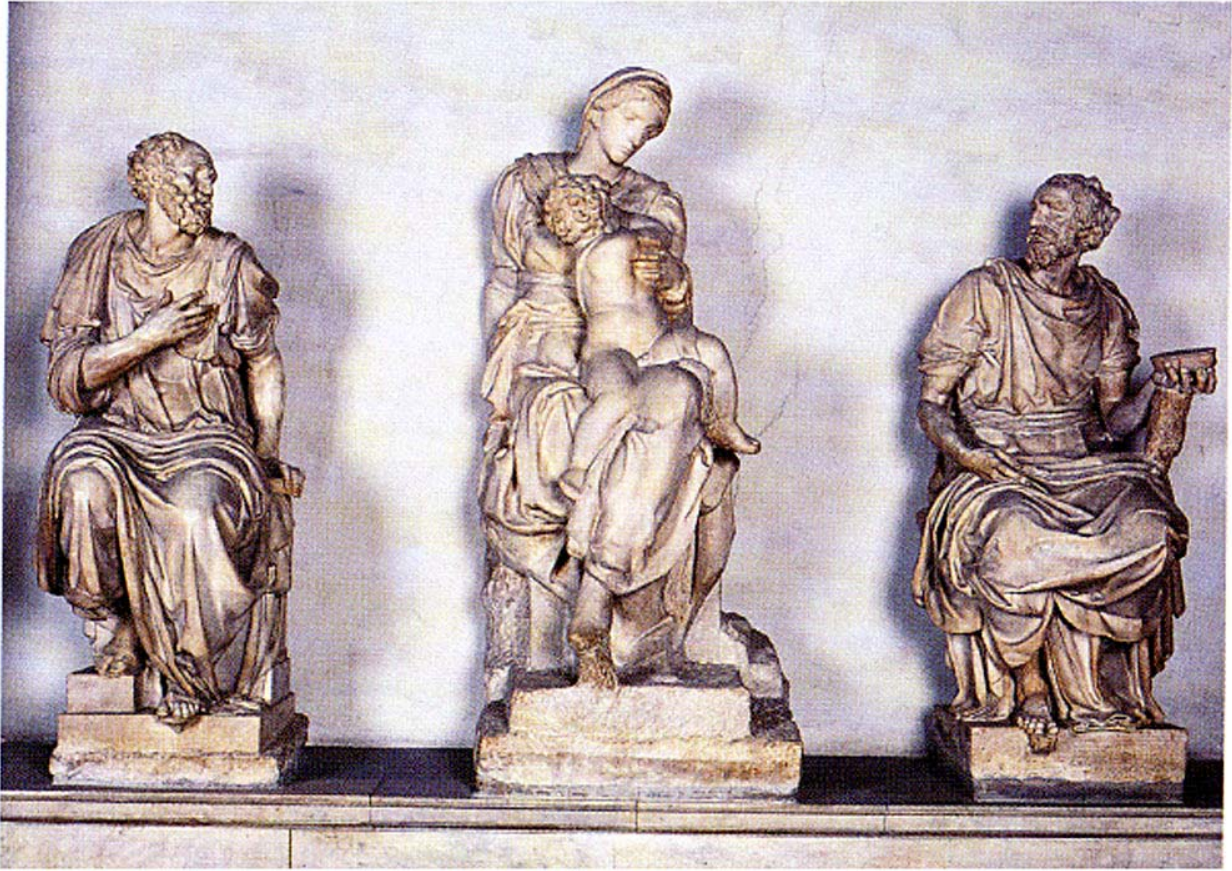


Fig. 34: *Cosmas* (left), *Virgin and Child* (center), *Damian* (right). (Image: Paolucci, *The Museum of the Medici Chapels and San Lorenzo*).



Fig. 35: Wall with *Lorenzo* (above), *Day* (left), *Night* (right) (Image: artSTOR, Ralph Lieberman Gallery).



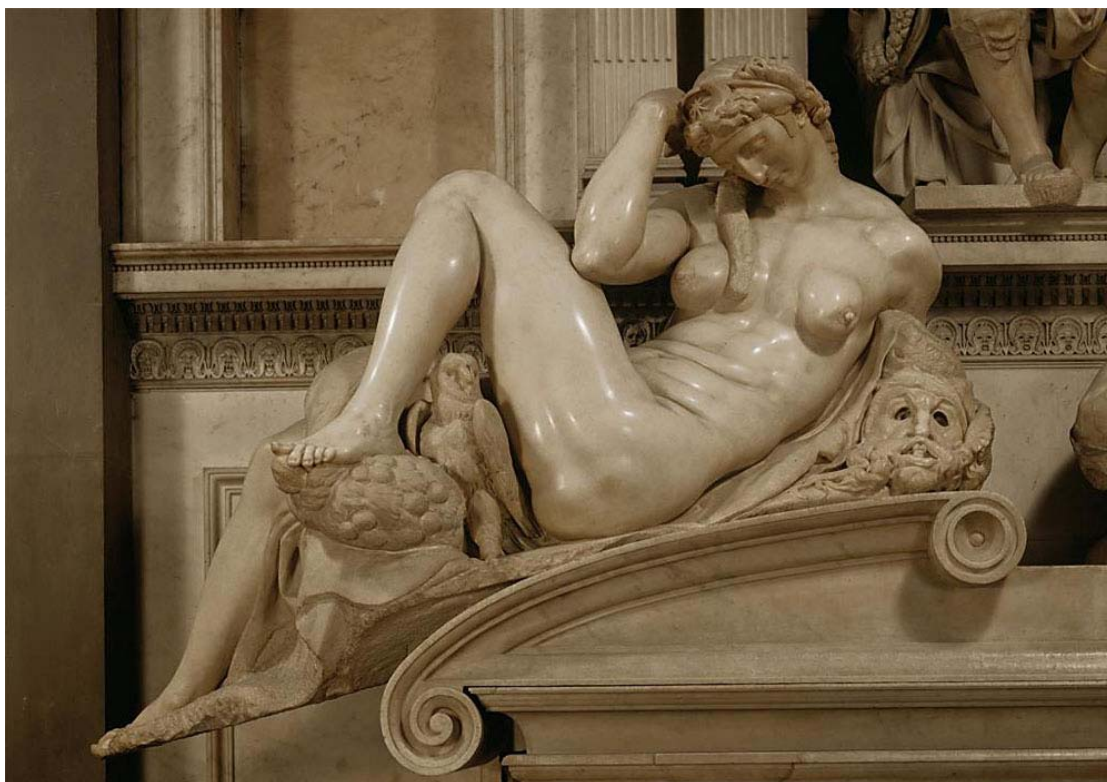


Fig. 36: *Night* (Image: artSTOR, SCALA archives).



Fig. 37: *Day* (Image: artSTOR, SCALA archives).





Fig. 38: Wall with *Giuliano* (above), *Dusk* (left), *Dawn* (right) (Image: artSTOR, Ralph Lieberman Gallery).



Fig. 39: *Dawn* (Image: artSTOR, SCALA archives).



Fig. 40: *Dusk* (Image: artSTOR, SCALA archives).

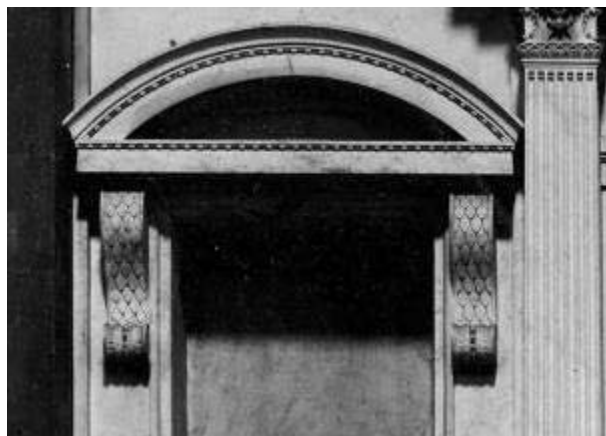
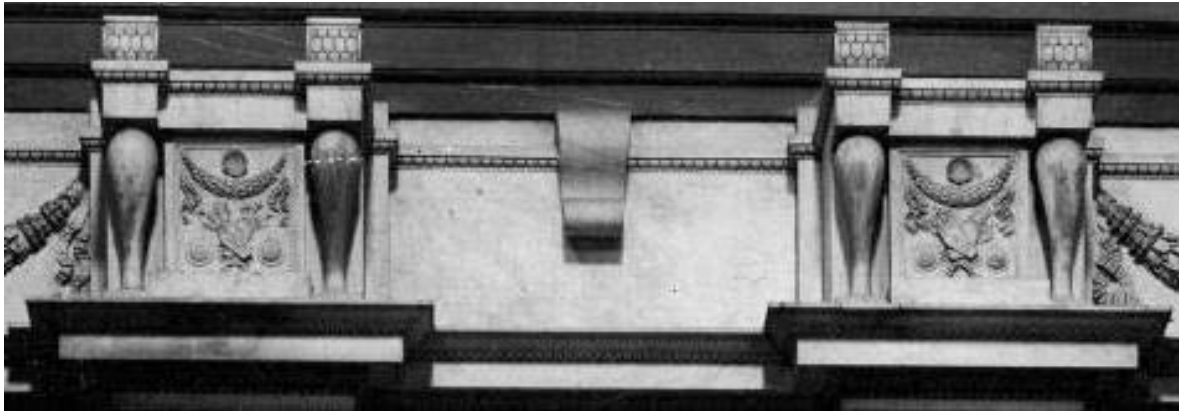


Fig. 41: Details of scaled surfaces.





Fig. 42: Medici Chapel corner near altar, with two “entrance tabernacles.” All the doors except the ones opposite the altar are blind doors. (Image: artSTOR, SCALA archives).

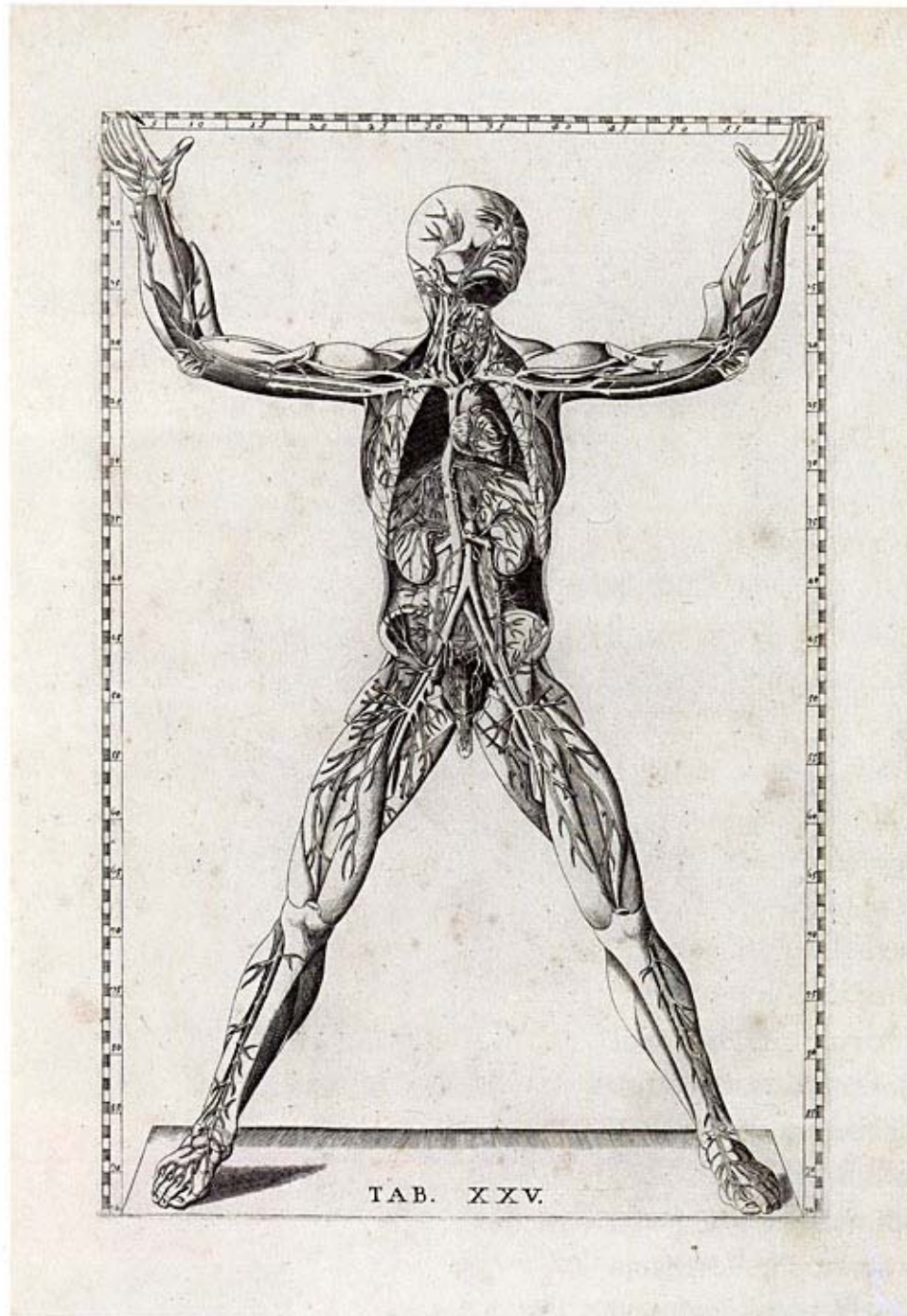


Fig. 43: G.M. Lancisi, *Tabulae anatomicae clarissimi viri Bartholomaei Eustachii*, 1728. This image demonstrates the systems of the body. (Image: Laurenza, *Art and Anatomy*). This image is not relevant to the formal argument since it is from the 18<sup>th</sup> century; the image is only significant as a diagram to illustrate how the systems of the body interact.



Fig. 44: Detail of entrance tabernacle volute. (Image: artSTOR, Ralph Lieberman Gallery).





Fig. 45: Entrance door tabernacle, detail (Image: artSTOR, SCALA archives).



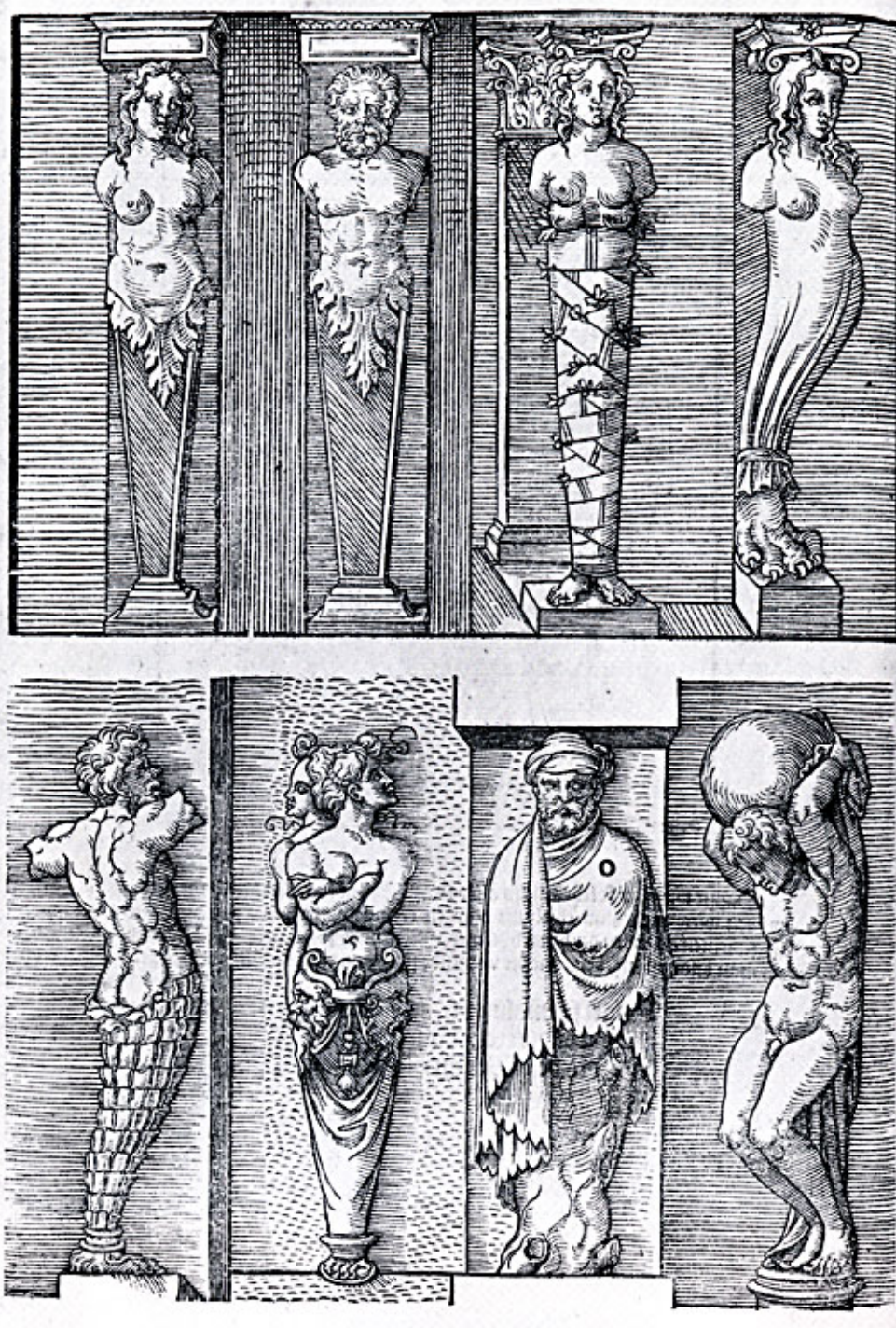


Fig. 46: Caryatids, herms, and atlantes. *Vitruvius Teutsch*, 1548. (Image: Hersey, *The Lost Meaning of Classical Architecture*).



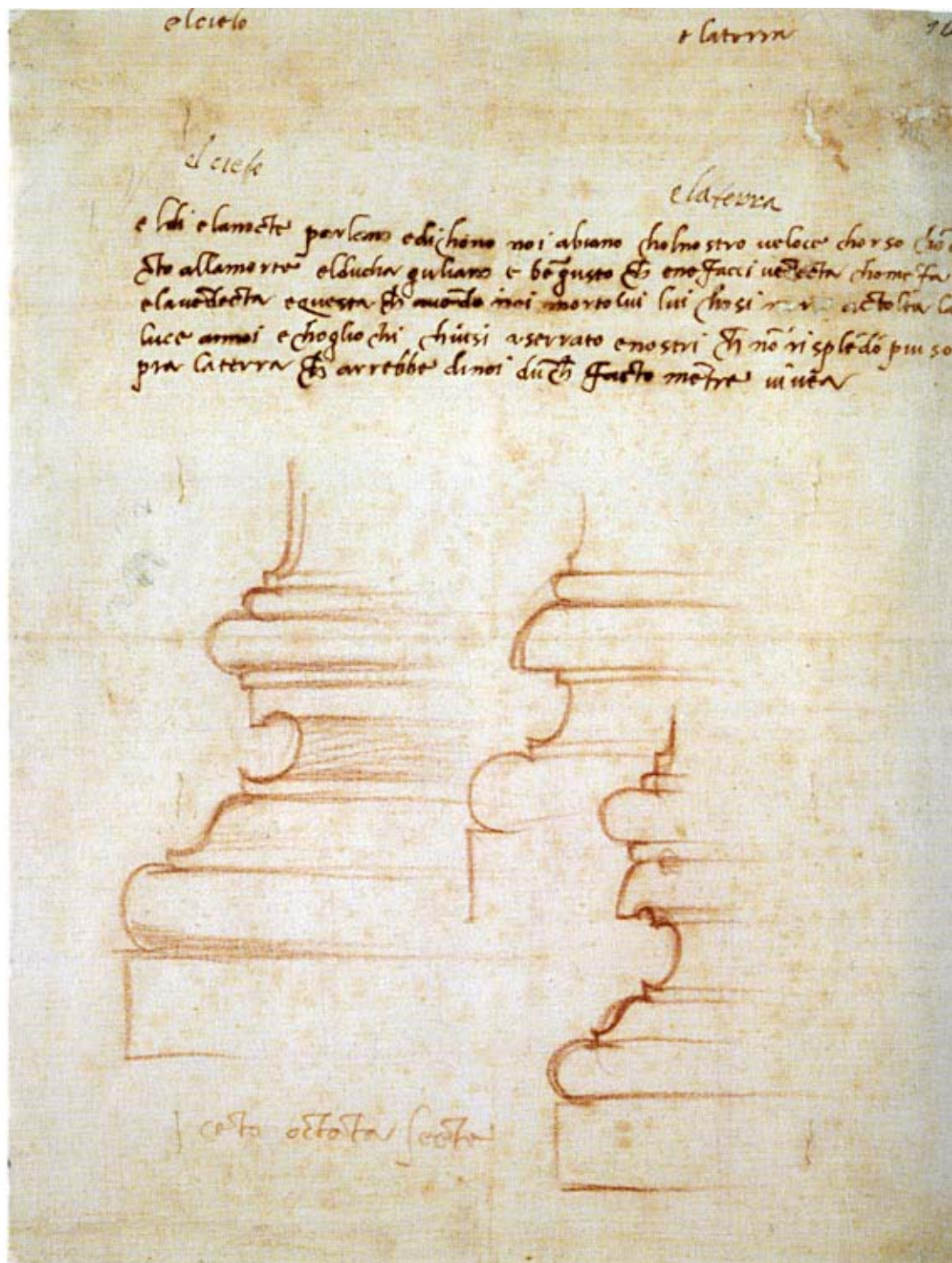


Fig. 47: Michelangelo, sketch of column bases for the Medici Chapel (Image: Casa Buonarroti, Florence).





Fig. 48: Jan Van der Straet, *L'accademia delle arti*, 1578. (Image; Giuseppe Olmi, *Rappresentare il corpo*).





Fig. 49: Raphael, *Lifeless body held up by cords*, 1509. (Image: Laurenza, *Art and Anatomy*).





Fig. 50: Raphael, *Entombment (Deposition)*, 1507 (Image: artSTOR, SCALA archive).





Fig. 51: Bartolomeo Passerotti, *Anatomy Lesson* (reproduction) (Image: Giuseppe Olmi, *Rappresentare il corpo*).



Fig. 52: Anatomical illustration from Guinter's translation of part of Galen's *Anatomical Procedures* (Image: French, *Dissection and Vivisection*).



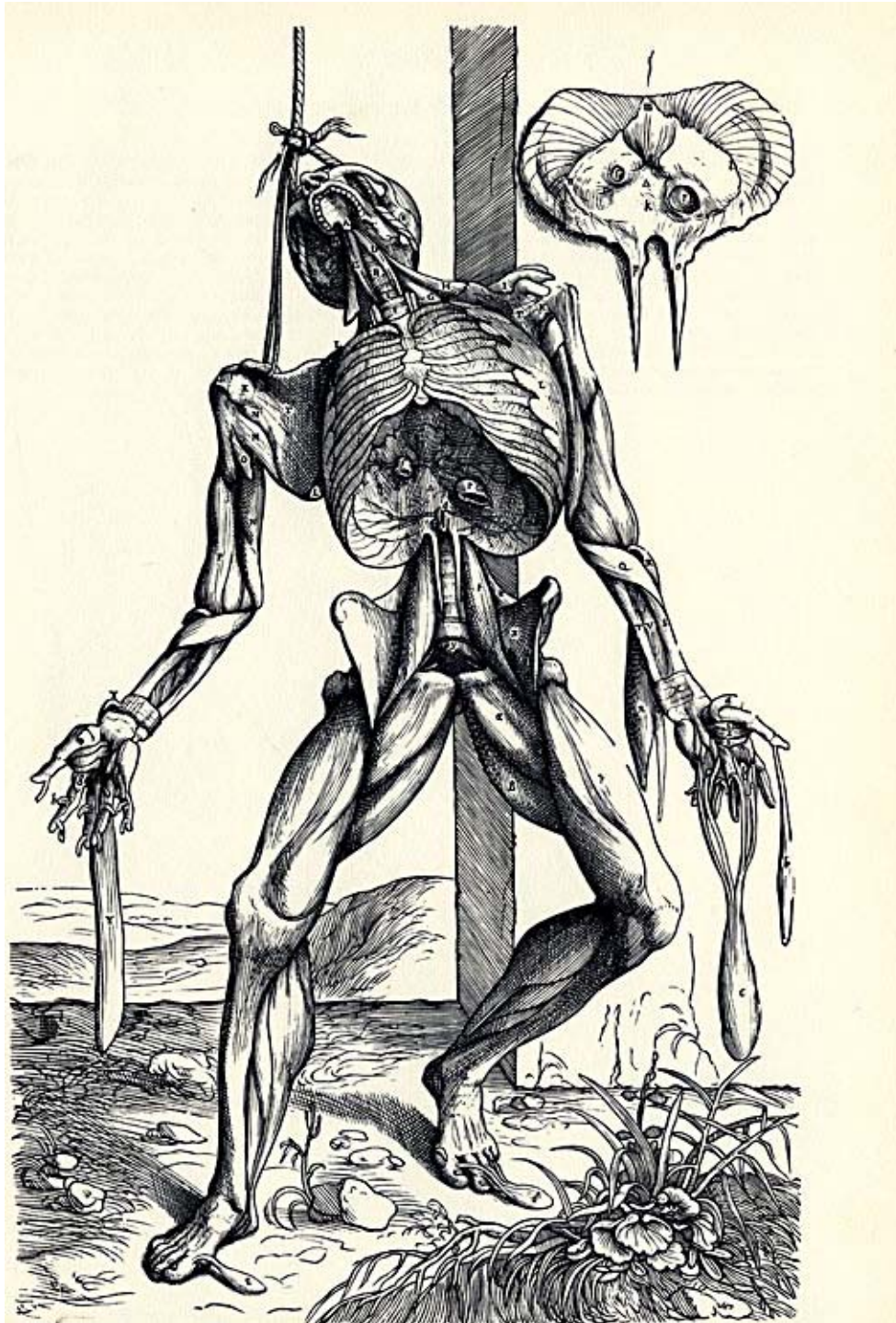


Fig. 53: Vesalius, *Fabrica*, anatomical study, 1543 (Image: Saunders, *Vesalius*).



Fig. 54: Image with his right side flayed. Italy, 16<sup>th</sup> century. (Image: Laurenza, *Art and Anatomy*).





Fig. 55: Michelangelo, *Last Judgment*, 1534 (Image: artSTOR, SCALA archives).



Fig. 56: Detail of St. Bartholomew in *Last Judgment* (Image: web).



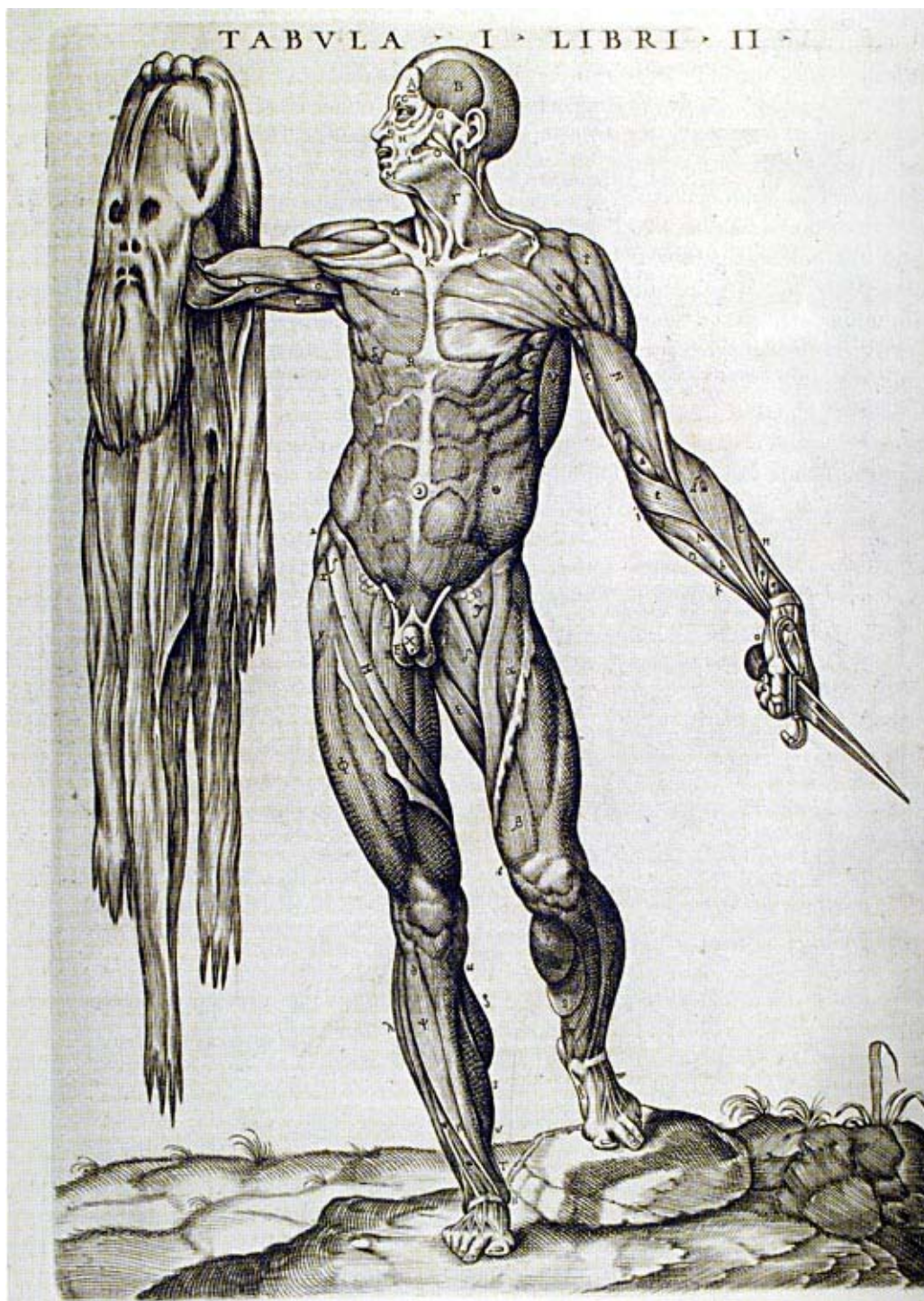


Fig. 57: Valverde, anatomical study, 1586 (Image: Giuseppe Olmi, *Rappresentare il corpo*).

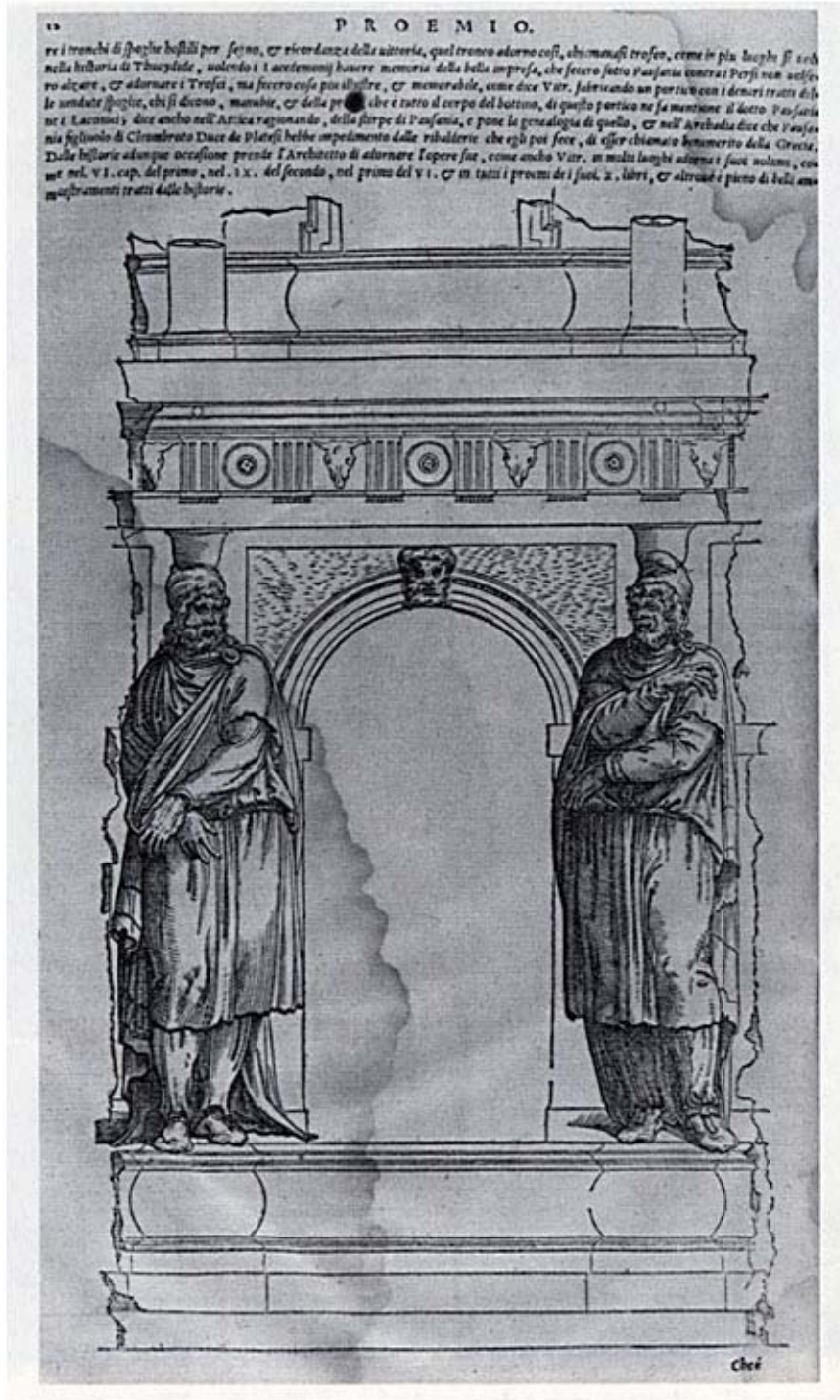


Fig. 58: Daniele Barbaro, Persian portico. Note the alternating bucrania and triglyphs. From *Vitruvius*, 1556. (Image: Hersey, *The Lost Meaning of Classical Architecture*).



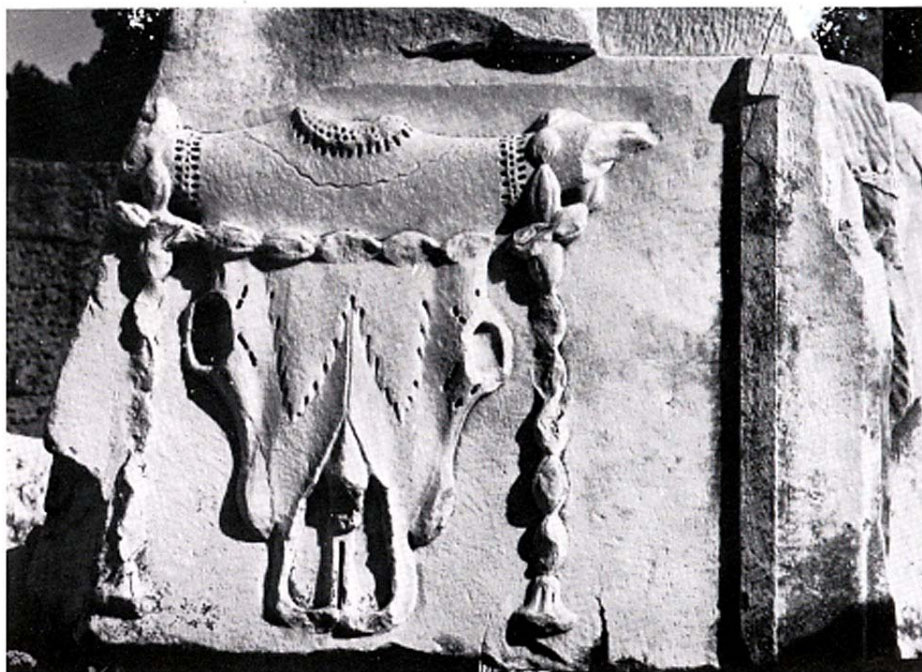


Fig. 59: *Bucranium* with garlands over the horns (Image: Zanker, *The Power of Images...*).

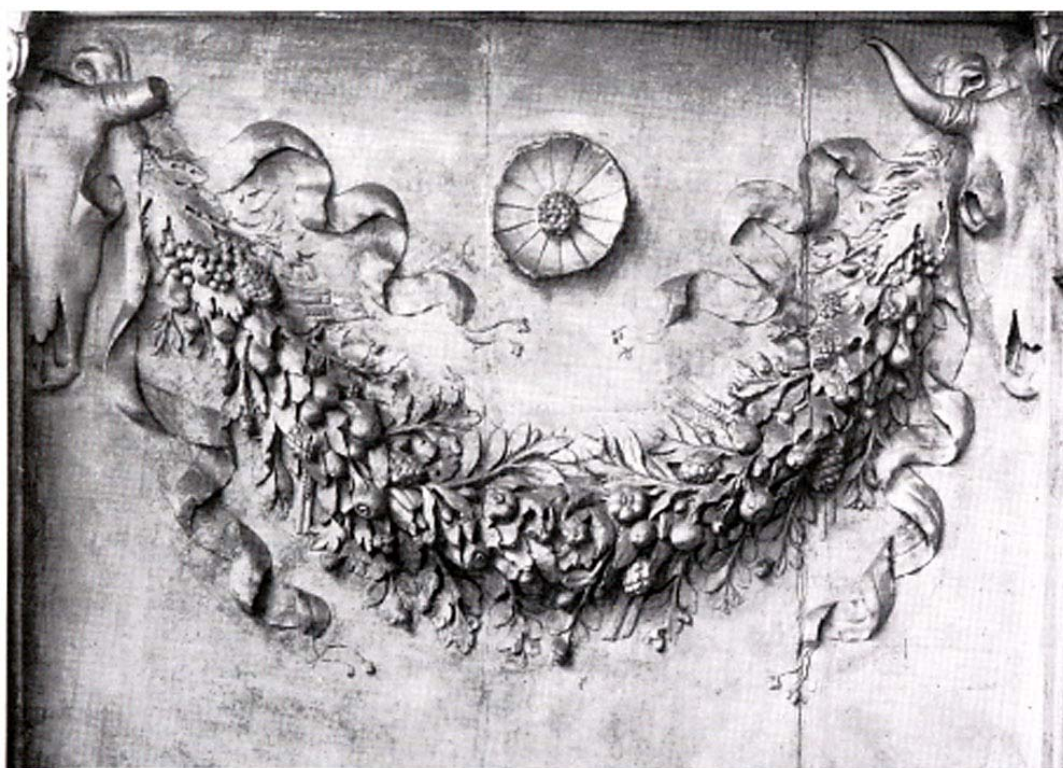


Fig. 60: *Bucrania* with garlands in the Ara Pacis (Image: Zanker, *The Power of Images...*).









Fig. 63: Bucrania on tips of architrave, Sistine Chapel Ceiling, 1508-12 (Image: web).

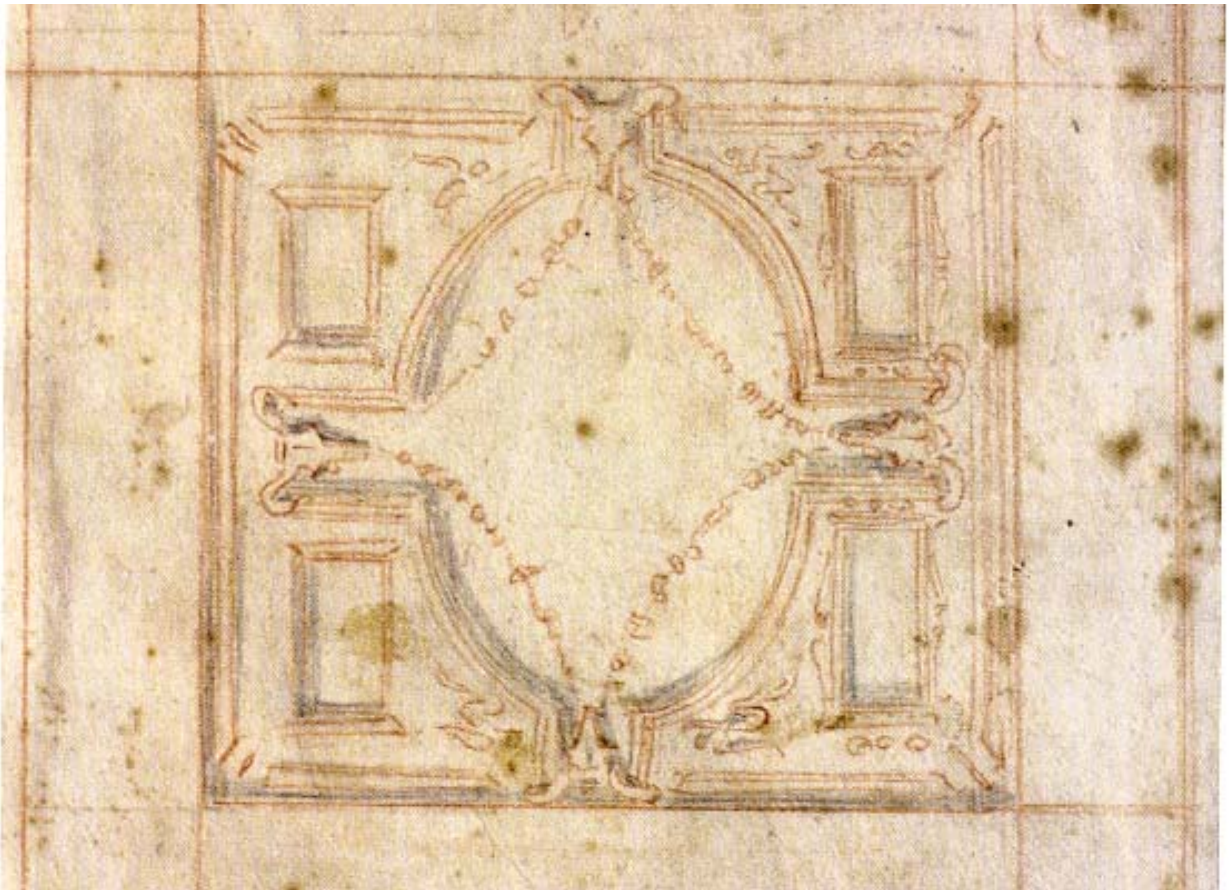


Fig. 64: Bucrania on Medici Chapel ceiling (Image: Mariani, *Leonardo e Michelangelo*).





Fig. 65: Altar, see candelabras (Image: artSTOR, Ralph Lieberman Gallery).



Fig. 66: Detail sketch of altar candelabra's screaming face with garland over the eyes (Image: author).



Fig. 67: Detail of moulding (entablature) behind time statues, and below the Capitani statues (Image: artSTOR, SCALA archive).



Fig. 68: View from altar upwards towards coffered dome and lantern. Note the trapezoidal window in the lunette area of the pendentive zone. (Image: artSTOR, SCALA archive).



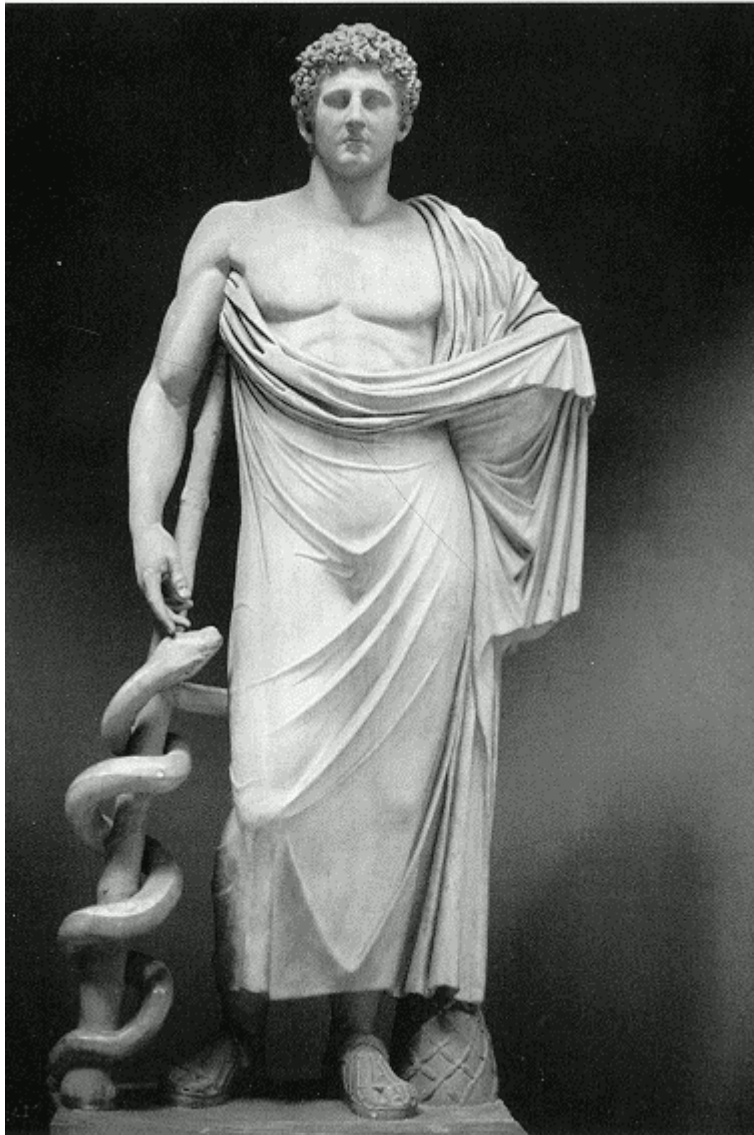


Fig. 69: Asclepius and the Rod of Asclepius (Image: web).



Fig. 70: Sistine Chapel ceiling: *Brazen Serpent*. Notice the serpent coiled around the staff in the top center of the image. (Image: artSTOR, SCALA archive).



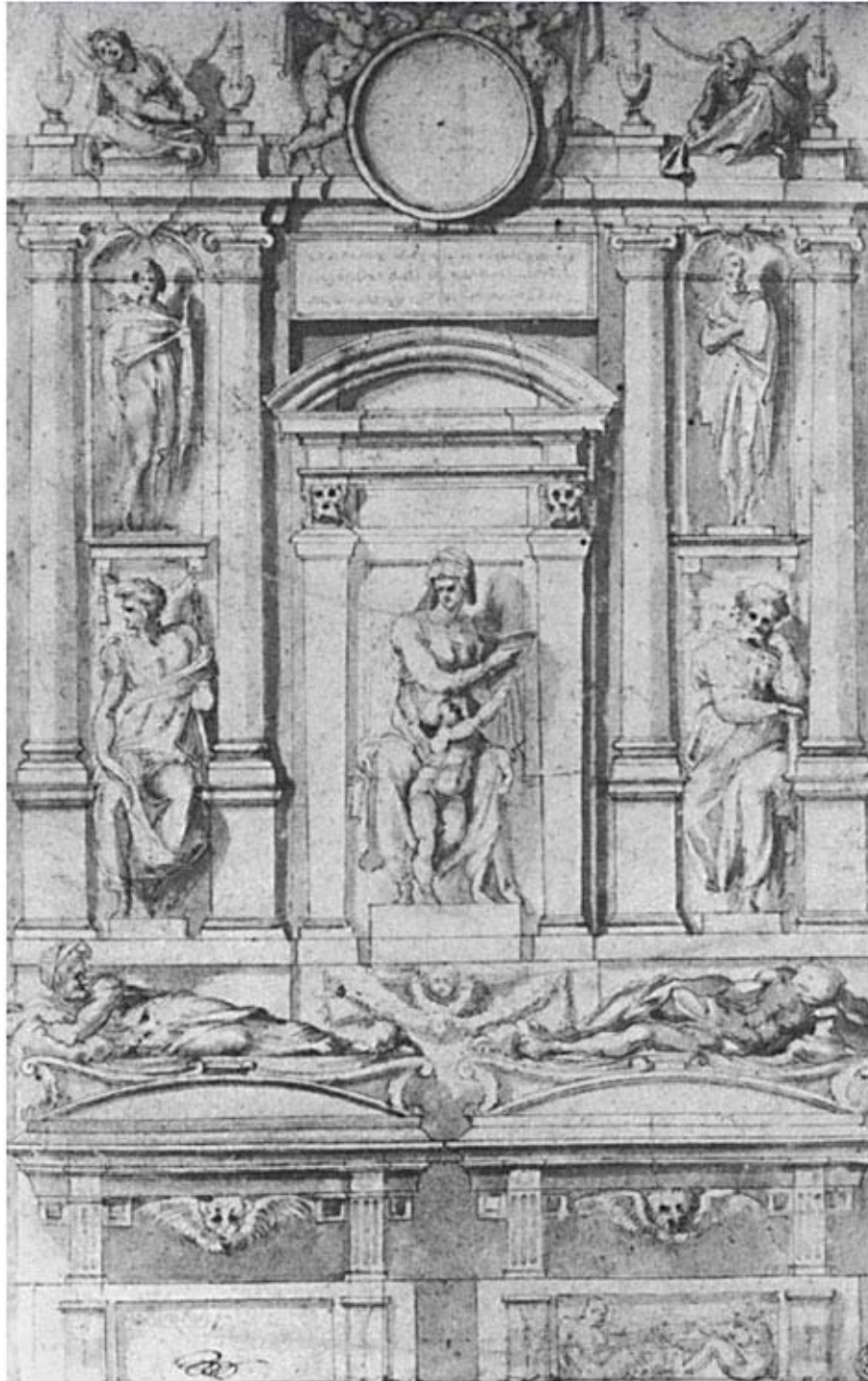


Fig. 71: *Modello* for the Medici Chapel, showing the figures looking opposite directions from the *Virgin and Child* at center. (Image: Joannides, *The Magnifici Tomb*).

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