

## Measure of a Man: Leonardo da Vinci's *Vitruvian Man*

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"The Renaissance came to realize that Pan was dead—that the world of ancient Greece and Rome... was lost like Milton's Paradise and capable of being regained only in the spirit. The classical past was looked upon, for the first time... as an ideal to be longed for instead of a reality to be both utilized and feared."<sup>1</sup> Charles Homer Haskins in 1927 published *The Renaissance of the Twelfth Century* in which he, as a historian of the medieval period, reassessed the academic world's perception of the Middle Ages. Buried in "ignorance, stagnation, and gloom," the medieval period was historically regarded as being completely devoid of the "light and progress and freedom of the Italian Renaissance which followed."<sup>2</sup> Haskins countered that the Middle Ages deserved to be reconsidered for the culture that it preserved and enhanced. With these words a great debate of modern historiography was born. In response to Haskins' thesis, Ervin Panofsky, a prominent figure in the field of art history, wrote *Renaissance and Renascences in Western Art* to defend the innovation of the Italian Renaissance from medievalist's intent on elevating the Petrarchian "Dark Ages" above the fifteenth and sixteenth cultural rebirth in Italy. The scholars involved in the Renaissance-Renascence debate have since moved between these two camps at times taking the offensive or defensive positions to prove which period was of most worth. The debate has raged and ultimately each scholar involved must individually arrive at his own conclusions of the uniqueness of the Italian Renaissance or the cultural revivals of the Middle Ages.

Most often these historiographical battles are fought by art historians who feel the innovations of the Italian Renaissance are threatened by medieval historians' seizure of the term, "renaissance" to apply to medieval movements. Art historians find that in the Renaissance-Renascence debate stylistic trends in painting, drawing, and sculpture serve as evidence. The reemergence of the classical nude into the corpus of the Renaissance artist exemplifies the rebirth of classicism that characterized the Italian Renaissance. Though virtually forgotten in the Middle Ages, the nude was revived in the artwork of Italy in the late fourteenth century and was again established as a standard art form. Leonardo da Vinci's anatomical studies, specifically the *Vitruvian Man* represent a revival of a classical art form almost completely ignored in the Middle Ages and thus are a

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representation of how the Italian Renaissance culture is a rebirth worthy of the term "Renaissance." (Figure 1.)

Of the masters of the Renaissance and recognized leaders of the arts, Leonardo da Vinci emerges as the first of the lofty individual artists. A paradigm of the ideal Renaissance artist and man, Leonardo da Vinci's life and career are explored in one of his earliest biographies written by Giorgio Vasari. *Lives of the Artists* by Giorgio Vasari explored the lives of his artistic contemporaries and was meant to both inspire and teach future artists and the public. Vasari's work, reflecting the period in which it was written, emphasizes the philosophical character of his subject and gives evidence of the considerable reputation that had developed around the artist during his lifetime.<sup>3</sup> Vasari writes, "in [Leonardo] was... a spirit and courage ever royal and magnanimous; and the fame of his name so increased, that not only in his lifetime was he held in esteem, but his reputation became even greater among posterity after his death."<sup>4</sup> In her article "What Men Saw: Vasari's Life of Leonardo da Vinci and the Image of the Renaissance Artist," Patricia Rubin provides a complete analysis of the historical representation of Leonardo da Vinci as transmitted through the writings of Vasari. She found that though Vasari's account of the life of Leonardo da Vinci was not based on sound evidence, it does illuminate the character and attitude of this Renaissance master.<sup>5</sup> In highlighting Leonardo's intelligence, Vasari establishes da Vinci's reputation as a scientist and observer of nature.

As a scientist, Leonardo da Vinci recorded his theories and hypotheses in journals he kept throughout his career. These journals give a voice to his written and drawn thoughts. Leonardo once wrote of the thoroughness of his studies, "abbreviations do harm to knowledge and to love, seeing that the love of anything is the offspring of this knowledge, the love being the more fervent in proportion as the knowledge is more certain."<sup>6</sup> In the tradition that the visual is more expressive than the audible and the most elevated of the senses, Leonardo drew in these journals studies for paintings, but more often studies "of intellectual development seldom matched in the history of western thought."<sup>7</sup> Of his explorations in nature, Leonardo was drawn to the study of human anatomy, which he felt was necessary for the accurate depiction of figures in paintings. Leonardo drew first to develop his draftsmanship and later for scientific understanding. Here again the visual was key and Leonardo built upon his observations of the nude human body to create reasoned drawings to reflect his ideas of how the human body functioned.<sup>8</sup> Leonardo's exploration into the realism of the human body reflected the Italian Renaissance's greater freedom and increased interest in classical idealized realism and individualism.

Leonardo da Vinci's drawing of a nude male figure inscribed in both a

circle and square represents a complex culmination of Greek artistic techniques and ideals that had been lost or ignored during the medieval period. Art historian Kenneth Clark in his biography of the master da Vinci wrote of the connection between the Renaissance and anatomical drawings:

With proportion it [scientific realism] lay at the root of Renaissance aesthetics, for if man was the measure of all things, physically perfect man was surely the measure of all beauty, and his proportions must in some way be reducible to mathematical terms and correspond with those abstract perfections, the square, the circle, and the golden section.<sup>9</sup>

Among da Vinci's journals was found the drawing of a man inscribed within both a circle and a square that followed this recipe for Renaissance perfection. *The Vitruvian Man*, as it has been called, represented the pinnacle of Italian Renaissance classicism. *The Vitruvian Man* drew directly from the work of Vitruvius as well as from the tradition of Greek art and classical philosophy.

Leonardo, inspired by the ancient Roman architect Vitruvius, set out to draw with great delicacy the perfected proportions of man. Vitruvius conjectured, according to Leonardo, "the measurements of man are arranged by nature in the following manner: Four fingers make one palm and four palms make one foot; six palms make a cubit; four cubits make a man, and four cubits make one pace."<sup>10</sup> Then using geometric forms (triumphed by Italian Renaissance reason), Leonardo found the human body to be qualifiable as an equilateral triangle inscribed in the circle and square. Thus, Leonardo's drawing illustrates a nude adult male with one head and torso, but with duplicated limbs—four arms and four legs.<sup>11</sup> The additional limbs demonstrate the relationship between the figure and the geometric shapes. However carefully planned is Leonardo's drawing, the artist has missed real perfection. The navel, which is portrayed by Vitruvius as the center of the body, is not the central point of the circle and square.<sup>12</sup> This slight deviation was later corrected by Cesariano in his ape-like version of the *Vitruvian Man*.<sup>13</sup> (Figure 2.) Though the most famous realization of Vitruvius's treatise on the proportion of the human body is Leonardo da Vinci's drawing, Vitruvian proportions were adapted in the art of many Renaissance masters. The realism and idealism combined in these drawings to create the Renaissance human form elevated humanity and reflected the influence of Italian Renaissance Neo-Platonism and humanism. Da Vinci's drawing and others like it may then be seen as a representation of why the Italian Renaissance marked a distinct break with medieval culture and is the movement worthy of the distinction of the term "renaissance,' with a capital R."<sup>14</sup>

Further evidence of the uniqueness of Leonardo's *Vitruvian Man* and its singular appearance in the Italian Renaissance can be found in the examination of

the progress of the nude as an art form. The nude was a singular innovation of classical Greek culture. It existed in the form of a body devoid of clothing, yet was respectfully depicted to highlight the beauty and idealism of the human form.<sup>15</sup> "Not the subject of art, but a form of art," Greek artists first developed the nude in the fifth century.<sup>16</sup> Greek sculptors were obsessed with the task of replicating the accomplishment of creation and used mathematical reason infused with human emotion to eventually achieve this excellence in the Classical male nude. The tradition of the nude was perpetuated through Etruscan and Roman imperial art and became an art form particularly unique to the Western world. The nude was not simply a form of artistic expression, but was also central to all of classical culture. The achievement of excellence in the depiction of the human body reflected the Greek search for excellence of the individual, *arête*.<sup>17</sup> Further, the search for *arête* was reflective of the relationship between humanity and the gods as expressed through temple architecture. Vitruvius wrote, "without symmetry and proportion there can be no principles in the design of any temple."<sup>18</sup> As a Roman architect, he compared the human body to temples in book three of his ten volume set of books on architecture. The principles that governed the representation of the human form were applied to the architectural form. The expression of weight, symmetry, and proportion could be translated into perfection in both temple architecture and the human body. And as the highest form of nature, the human body was essentially a naturally created temple reliant on symmetry and proportion. Symmetry, being necessary for the perfect representation of man, was required of buildings dedicated to the gods as well.

Therefore, since nature has designed the human body so that its members are duly proportioned to the frame as a whole, it appears that the ancients had good reason for their rule, that in perfect buildings the different members must be in exact symmetrical relations to the whole general scheme.<sup>19</sup>

From the human body, the classicals derived their system of measurement, using finger, palm, foot, and cubit.<sup>20</sup> Above all, symmetry and its relationship to the nude, as depicted in Leonardo's *Vitruvian Man*, represented an attempt at the rationalization of reality.<sup>21</sup> The nude represented the harmonious balance of forces. All was dedicated toward the pursuit of a union between the reason represented by the mind and passion represented by the body.

The Middle Ages, though western in origin and seen by themselves as the inheritors of the Classical empire, eliminated the use of the nude art form and in doing so lost the technique of portraying it correctly. The Christian culture and its moral objections of the medieval period are usually held responsible

for this decline. However, the art form had experienced a decreased interest a century before Christianity became an official religion of the Roman Empire.<sup>22</sup> The cause for this decline may only be conjectured for the medieval population was certainly exposed to the nudes of classical Greece through the sculpture and pottery from antiquity. The few representations of the nude in the Middle Ages were limited to the depiction of naked sinners.<sup>23</sup> (Figure 3 and 4.) The Gothic association between the exposed body and sin resulted in the misrepresentation of the classical perfected human form—torsos are elongated and faces are rendered grotesque. “It [the body] ceased to be the mirror of divine perfection and became an object of humiliation and shame... [and] eradicated the image of bodily beauty.”<sup>24</sup>

The transition in the perception of the artist from the Middle Ages to the Italian Renaissance has been cited as a possible reason for the decline of the nude in the medieval period and its revival in Renaissance Italy. The medieval artists are best described as skilled craftsmen.<sup>25</sup> “While esteemed higher than ploughmen, the medieval artists were low paid and low in rank.”<sup>26</sup> As in the classical age, medieval artists rarely received popular or monetary recognition for their individual works unless they were connected with a culturally attentive and affluent ruler or court. To further degrade the position of the artist in the medieval age was the perception that painting and sculpture were mechanical arts.<sup>27</sup> The position of the artist could not change until the skill used in their craft was elevated from the mechanical to the intellectual realm. The message or subject matter of art in the medieval age was considered superior to the style it might be depicted in. A disjunction existed between the artist, his style, and the artwork he produced.

Thus, as important an innovation of the Renaissance and essential to the revival of the classical proportioned nude as described by Vitruvius was the growing distinction of the artist, especially the painter, as a profession requiring intelligence and reason. Leonardo da Vinci was vital to this transition of the artist from craftsmen to scientist and gentleman, partly for his revival of anatomically correct figures and for his writings on his profession.<sup>28</sup> In his treatise on painting, Leonardo worked to establish painting as a skill dependent on scientific knowledge. Leonardo found the perception of painting as a mechanical art to limit the voice and power of the artwork.<sup>29</sup> Kenneth Clark in his *The Nude: A Study in Ideal Form* wrote, “art is justified, as man is justified, by the faculty of forming ideas; and the nude makes its first appearance in art theory at the very moment when painter begins to claim that their art is an intellectual, not a mechanical activity.”<sup>30</sup> The nude became a response to the intellectual freedom that the Renaissance painter was allowed to embrace.

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Further, the rise of the Italian Renaissance art guilds or workshops encouraged the perpetuation of knowledge of human anatomy and movement.<sup>31</sup> Through the rise of art guilds, the classically proportioned nude was revived from its altered medieval cousin. In his *Della Pittura*, Alberti illustrates the necessity of anatomical study to an artist. "In painting the nude," he [said], "begin with the bones, then add the muscles and then cover the body with flesh in such a way as to leave the position of the muscles visible."<sup>32</sup> The knowledge of human anatomy was employed by Renaissance artists to create energy within their works.<sup>33</sup> Being able to ideally execute the male form on paper was paramount to a certificate of achievement in Renaissance Italy. Alberti's layering technique was transferred in the work of Raphael, Michelangelo, and especially Leonardo da Vinci to preliminary drawings in which all characters were first composed in the nude to ensure that the configuration of forms work together as the artist intended.<sup>34</sup> The revival of the measured man in the Italian Renaissance was the direct result of its association with the classical age and the growing recognition of the artist as a trained intellectual.

The revival of classical philosophy, specifically humanism and Neo-Platonism, produced a new vision of man and man's depiction in art. As a product of the fifteenth century environment, Leonardo's *Vitruvian Man* was infused with both humanistic and Neo-Platonic ideals and it was through the expression of each that the drawing derived its singular innovation. Humanism of the Italian Renaissance derived its foundations from the revival of classical studies, termed *studia humanitatis*.<sup>35</sup> This movement was at the heart of the Renaissance revitalization of classicism. Humanism in medieval and Italian Renaissance culture existed in a multi-dimensional state. This dual faceted approach is defined by Richard W. Southern as literary humanism and scientific humanism.<sup>36</sup> (Though Southern's exploration of humanism was in the context of the twelfth century cultural movement its definition is of value here.) Literary and scientific humanism are presented as separate entities, yet in the *Vitruvian Man* they are unified through the creation of the artwork.

Literary humanism, the more recognizable of the two forms, was predicated on the revival of the antique Greek and Roman texts. The earliest philosophers of the Renaissance, specifically Petrarch, recognized the period from which humanity had just emerged as a "dark age" where classical traditions were rejected. It became the goal of the Renaissance to re-establish the prestige of literary, philosophical, and artistic antiquities. Essential to the restoration of the classics was the need for "all [scholars] to be able to read and interpret the works of ancient literature which had now been recovered."<sup>37</sup> Leonardo quite literally returned to the classical canon for both the inspiration and execution of his

anatomical drawings, specifically the *Vitruvian Man*. Having taught himself Latin in 1494, education in the classical treatises of Vitruvius may be directly linked to the development of the drawing of the nude inscribed in a square and circle.<sup>38</sup> Exposure to such text reflects the total proliferation of the *studia humanitatis* in the educational studies of Italian Renaissance scholars. Echoes of the *Vitruvian Man's* classical heritage are present in its realistic and idealistic execution. Perfection, proportionally and physically, was dependent to the depiction of man in the classical form.

Idealism and realism vital to the classical corpus were also a characteristic employed by scientific humanism in its depiction in the *Vitruvian Man*. Scientific humanism focused on the development of human dignity as an expression of God's supremacy. This aspect of Renaissance humanism developed from the union of classical study on the perfection of man and medieval Christian culture and was influential in the expansion of individualism. Italian Renaissance individualism like its Greek root, *arête*, encouraged excellence in the individual as the way to elevate humanity as a whole. Man, the individual as opposed to a communal component, triumphed in the Italian Renaissance as a new identity of self. The emphasis on man and his innate dignity was transferred through Renaissance philosophy to the literary and artistic movements of the period. The *studia humanitatis* encouraged the enhancement of the individual student's intellectual abilities and "[contributed] to the education of a desirable human being, and hence [were] of vital concern for man as man."<sup>39</sup> The concept of Renaissance education transferring the excellence of the individual was then transformed into the development of the dignity of man. In the arts, this idea was expressed through the proliferation of the reproduction of the human form—as the portrait, self-portrait, and the classically measured nude. "The representation of the human figure... [illustrated]...a specific cultural movement centered on what Jakob Burckhardt in 1860 called the 'rise of the individual' and the 'discovery of man.'"<sup>40</sup> Leonardo's *Vitruvian Man* expressed geometrically the growing concern for the perfection of man through humanistic and idealistic approaches. Inscribed in a circle and square, the human form became perfect. Scientific humanism that asserted the centrality of man and the human soul in the order of creation was expressed through the Creator's centrally planned structure of the human body.<sup>41</sup>

The humanistic representation of the perfection of the human body as a form of the central creation of God revealed the link between humanism and Neo-Platonism in the drawing of a measured man by Leonardo da Vinci. "An offshoot of the humanistic movement" in both the classical literary and scientific sense, the perfection of the human soul became central to Neo-Platonic

Philosophy.<sup>42</sup>

This [the soul] is the greatest of all miracles in nature. All other things beneath God are always one single being, but the soul is all things together... Therefore it may be rightly called the center of nature, the middle term of all things, the series of the world, the face of all, the bond and juncture of the universe.<sup>43</sup>

Neo-Platonism suggested that the form of perfection as achieved in the drawing of the *Vitruvian Man* reflected the perfection of the individual's soul and intellect. Humanity's redemption appeared in the ideal form of a man and was ultimately perfected by the creation of the Messiah in human form.<sup>44</sup> Leonardo's sketch of the *Vitruvian Man* may reflect the artist's pursuit of perfection in himself and his work. Faultlessness in the creation of man symbolized perfection in God the Creator, thus precision in a measured drawing may have been attributed to the perfection of the artist. *The Vitruvian Man* represented a culmination of Renaissance ideals, especially humanism and Neo-Platonism, and resulted in the transmission of these ideals into the Italian Renaissance artistic corpus.

The rebirth of the classically modeled nude into the body of artistic tradition represents the advancement of the classical culture that marked the Italian Renaissance as a period set apart from the medieval age. The convergence of Renaissance neoclassical thought and philosophy existed in Leonardo da Vinci's *Vitruvian Man*. *The Vitruvian Man* united Roman architectural principles with Greek humanism expressed in *arête* and Platonic philosophy. These ideals perpetuated by the *Vitruvian Man* have come to exemplify the Italian Renaissance. The idea of a well-rounded Renaissance man evolved from the perfected depiction of the male form in art and individual dignity was its ultimate creation. Man, as expressed in Leonardo's Vitruvian inspired drawing, became the measure of all things.



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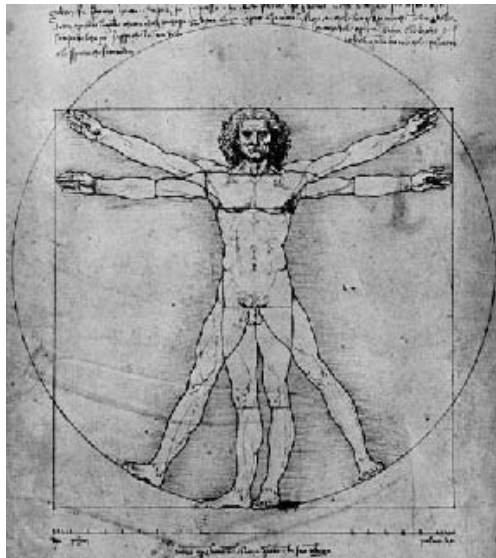


Figure 1. *Vitruvian Man*.

Drawing by Leonardo da Vinci, Courtesy of ArtThrob  
<<http://www.artthrob.co.za/99june/listings2.htm>>.

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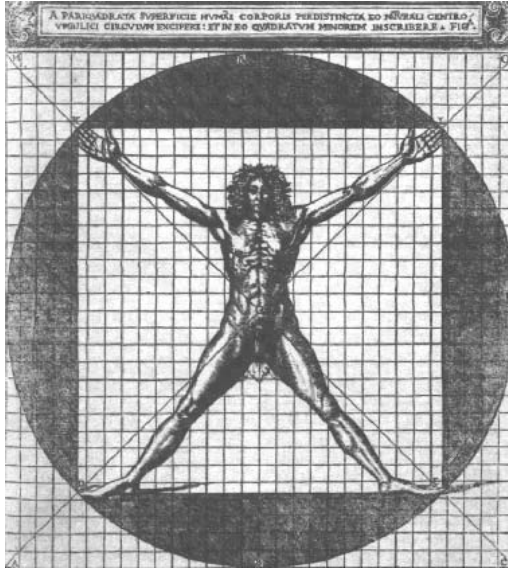


Figure 2. *Vitruvian Man*.

Drawing by Cesariano, reprinted from Clark, Kenneth. *The Nude: A Study in Ideal Form*. Garden City, New York: Doubleday Anchor Books, 1956, 38.



Figure 3. *Last Judgment on West Façade of Orvieto Cathedral*.

Relief sculpture, artist unknown, reprinted from *Gothic Sculpture*. Ed. Harald Bush and Bernd Lohse. New York: The Macmillan Company, 1963, Plate 140.



Figure 4. *Expulsion from Paradise of Lincoln Cathedral.*

Relief sculpture, artist unknown, reprinted from *Gothic Sculpture*. Ed. Harald Bush and Bernd Lohse. New York: The Macmillan Company, 1963, Plate 124.

### Notes

- <sup>1</sup> Panofsky, Erwin. "Renaissance and Renascences in Western Art" in *The Twelfth Century Renaissance*. Ed. C. Warren Hollister. New York: John Wiley and Sons, Inc., 1969, 33.
- <sup>2</sup> Haskins, Charles Homer. *The Renaissance of the Twelfth Century*. Cambridge, Massachusetts: Harvard University Press, 1927, v.
- <sup>3</sup> Rubin, Patricia. "What Men Saw: Vasari's Life of Leonardo da Vinci and the Image of the Renaissance Artist." *Art History* 13.1 (March 1990): 36.
- <sup>4</sup> Vasari, Giorgio. *Lives of the Most Eminent Painters, Sculptors and Architects*. Translated by Gaston. London: Macmillan and Co., 1915, 89.
- <sup>5</sup> Rubin, 40.
- <sup>6</sup> Clark, Kenneth. *Leonardo da Vinci: An Account of His Development as an Artist*. Cambridge: Cambridge University Press, 1952, 58.
- <sup>7</sup> Clayton, Martin. *Leonardo da Vinci: A Singular Vision*. New York: Abbeville Press Publishers, 1996, 9.
- <sup>8</sup> Ibid, 11.
- <sup>9</sup> Clark, *Leonardo da Vinci: An Account of His Development as an Artist*, 76.
- <sup>10</sup> *Leonardo on Painting: An anthology of writings by Leonardo da Vinci with a selection of documents relating to his career as an artist*. Ed. Martin Kemp. Translated by Martin Kemp and

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Margaret Walker. New Haven: Yale University Press, 1989, 120.

<sup>11</sup> Vinci, Leonardo da. *Vitruvian Man*.

<sup>12</sup> Clark, Kenneth. *The Nude: A Study in Ideal Form*. Garden City, New York: Doubleday Anchor Books, 1956, 36

<sup>13</sup> Ibid, 38.

<sup>14</sup> Panofsky, 27.

<sup>15</sup> Clark, *The Nude: A Study in Ideal Form*, 23.

<sup>16</sup> Ibid, 25.

<sup>17</sup> Mettraux, Guy P.R. *Sculptors and Physicians in Fifth-Century Greece: A Preliminary Study*. London: McGill-Queen's University Press, 1995, 70.

<sup>18</sup> *Vitruvius: Ten Books on Architecture*. Edited by Ingrid D. Rowland, Thomas Noble, et al. New York: Cambridge University Press, 1999, 72.

<sup>19</sup> Ibid, 73.

<sup>20</sup> Ibid, 73.

<sup>21</sup> Elsen, Albert E. *Purposes of Art: An Introduction to the History and Appreciation of Art*. New York: Holt, Rinehart, and Winston, 1981, 65.

<sup>22</sup> Clark, *The Nude: A Study in Ideal Form*, 32.

<sup>23</sup> Ibid, 400.

<sup>24</sup> Ibid, 402-403.

<sup>25</sup> Ibid, 450.

<sup>26</sup> Elsen, 6.

<sup>27</sup> Clark, *The Nude: A Study in Ideal Form*, 450.

<sup>28</sup> Adams, Laurie Schneider. *Key Monuments of the Italian Renaissance*. Boulder, Colorado: Westview Press, 2000, 119.

<sup>29</sup> *Leonardo on Painting*, 46.

<sup>30</sup> Clark, *The Nude: A Study in Ideal Form*, 450.

<sup>31</sup> Elsen, 7.

<sup>32</sup> Clark, *The Nude: A Study in Ideal Form*, 452.

<sup>33</sup> Ibid, 453.

<sup>34</sup> Ibid, 454.

<sup>35</sup> Kristeller, Paul Oskar. *Renaissance Thought: The Classical, Scholastic, and Humanist Strains*. New York: Harper & Brothers, 1961, 19.

<sup>36</sup> Southern, R.W. *Medieval Humanism*. New York: Harper and Row Publishers, 1970, 29-30.

<sup>37</sup> Mandrou, Robert. *From Humanism to Science 1480 to 1700*. Middlesex, England: Penguin Books, 1978, 42.

<sup>38</sup> Clark, *Leonardo da Vinci: An Account of His Development as an Artist*, 57.

<sup>39</sup> Kristeller, *Renaissance Thought: The Classical, Scholastic, and Humanist Strains*, 124-125.

<sup>40</sup> Campbell, Stephen J. "Human Body in Renaissance Art." *Encyclopedia of the Renaissance*, Vol. 3. Ed. Paul F. Grendler. New York: Charles Scribner's Sons, 1999, 204.

<sup>41</sup> Kristeller, *Renaissance Thought: The Classical, Scholastic, and Humanist Strains*, 128-129

<sup>42</sup> Kristeller, *Renaissance* 126