

A Study on Leonardo Da Vinci's Renaissance and the Influence on His Way of Painting

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Abstract: In the fourteenth century, the era of Medieval governance came to an end. The exploration of ancient Roman and Greek literature and art inspired artists to replicate those glories. By no means a mere reproduction, this advanced the Renaissance by deepening the artists' awareness of the world and their all-encompassing humanistic appreciation of the leading personalities of the day. Among the most influential Renaissance leaders was Leonardo di ser Piero da Vinci. The High Renaissance's Italian polymath Leonardo was an architect, sculptor, theorist, scientist, engineer, draftsman, and painter. Along with his recognition as a famous painter, he also made his name due to his manuscripts, where he made notes and drawings on various subjects, such as paleontology, painting, cartography, botany, astronomy, and anatomy. Leonardo is normally considered as an intellectual individual, who personified the humanist ideal of the Renaissance, and his collective pieces have inspired artists of the later generations. This study analyses Leonardo di ser Piero da Vinci and his influence on his way of painting.

Keywords: Renaissance, Leonardo Da Vinci, western art

1. Introduction

During the Renaissance, the art market was booming like never before, particularly in Florence, Italy. One of the causes was the fact that rulers and aristocrats financially supported the Renaissance by ordering art. During that period, artists contributed to the advancement of European art by mingling and interacting with the highly developed human mind, culture, art, and even science (as was not yet said). The subsequent development and promotion of printing technology enabled the wide and quick dissemination of ideas by artists and academics, which swept throughout Europe and eventually became an important cultural movement.

Leonardo is sometimes cited as the Renaissance's founder and one of the greatest painters in art history. Rather than possessing less than 25 words and various lost arts regarded as significant pieces, including a variety of unfinished pieces, he created few powerful paintings in the western work. His famous piece and world-recognised painting is the magnum opus, the Mona Lisa. The Vitruvian Man is one of the cultural icons and the Last Supper is the most recreated religious work in history. In 2017, Salvator Mundi, designed wholly or partially by Leonardo da Vinci, which was auctioned for \$450.3 million, by making a world record of being the most expensive artwork.

The splendor of the Renaissance is unrepeatable. There were countless geniuses born at that time, and the leap of human thinking at that time was unparalleled. This makes people hope to explore the

ways and thinking of learning and creation that can help contemporary human beings by excavating the lives and works of leading figures at that time - Leonardo da Vinci.

This article will use the method of literature analysis to find out the influence of important turning points in Leonardo da Vinci's life on him and his subsequent creation methods. Combined with the research on Leonardo da Vinci's works, people will find out his influence on the field of Western painting and modern society. Under the motivations above, this article will also explore the legendary life of Leonardo da Vinci for the purpose of exploring the formation of all-round talents.

2. Biography

On 15th April 1452, at roughly 3 a.m. in Renaissance time, Leonardo da Vinci, suitably called Leonardo di ser Piero da Vinci, was born in the Tuscan hill town of Vinci [1].

At the age of 14, Da Vinci travelled to Florence for learning the art of painting from the renowned sculptor and all-around artist Andrea Verrocchio, under his father's arrangement to work as a studio boy. At the age of 17, Leonardo accepted an apprenticeship and spent the next seven years learning. Lorenzo di Credi, Botticelli, Perugino, and Ghirlandaio are among other renowned painters who either apprenticed at the school or were connected to it. In addition to learning a variety of technical skills, such as woodwork, mechanical engineering, leatherwork, plaster casting, and metalworking, Leonardo also received theoretical instructions. He also developed his artistic abilities in drawing, painting, sculpture, and modelling.

Extraordinarily, though, in his 30-year career, he rarely gives finished sculpture or painting to his clients. He would spend a lot of time planning and revising his paintings to reach perfection, and the majority of them seemed to live with him until his death.

Leonardo was expected to complete diverse tasks. He was more than a painter. There is an official court record that lists him as one of the four major ducal engineers “Leonardo Da Vinci Engineer and Painter”. Later, Leonardo joined Cesare Borgia’s staff as a Military executive consultant. His research on military equipment was not published, just as most of his manuscripts.

Leonardo contributed a lot of his time and effort to studying and documenting everything that drew his attention. Over the course of 30 years, he dissected no less than a dozen cadavers according to his notes (though later scholars have researched his manuscripts of anatomical drawings, he may have only carefully researched the corpse of a middle-aged man). Scholars are still examining his anatomical writings. The spine's shape and the condition of a fetus in the womb were originally described and illustrated by Leonardo. Leonardo’s deconstructed floorplans illustrated astonishing detail, three-dimensionality, and accuracy with the corpse that was blurred and decayed and the anatomical environment fully harsh.

Everything people can determine Leonardo, from his research on his employment to the manuscripts he left behind including an astonishing range of knowledge, demonstrates that he was an omnipotent genius. Throughout the Renaissance, there seemed to be one of several omnipotent geniuses like him, who blended science and art. It is not hard to imagine that this may have something related to their concept of learning.

3. Artwork of Leonardo

3.1. The Last Supper

The painting “The Last Supper”, which Leonardo completed in 1495, commissioned for the refectory of the Convent of Santa Maria Della Grazie in Milan, France, was completed in 1495. This provides the last meal Jesus shared with his followers before dying, and Jesus stated, "One of you will betray me," Composer Matteo Bandello, who perceived Leonardo at work, wrote that sometimes, from dawn

until dusk he would paint without taking a break for eating, then painting for three or four days consecutively, and Leonardo was offered to paint for a while.

The convent's prior, who could not understand this, harassed him until Leonardo urged Ludovico to step in. Vasari's account of Leonardo, concerned by Leonardo's ability to portray the traitor Judas and Christ, warns the duke that he might be encouraged for considering the patriarchate. Although hailed as a great piece of characterization and design, the painting declined so quickly that in 100 years, one viewer explained it as "completely ruined." Leonardo had used tempera over a large gesso floor, rather than a reliable fresco technique, resulting in surfaces that read formed and peeled off. Despite this, the painting continues to be one of the most replicas that have been made in a variety of media.

3.2. Battle of Anghiari

The "Battle of Anghiari" was one of Leonardo's paintings for the Salone del Cinquecento (500 Hall of Fame) at the Palazzo Vecchio in Florence in 1505. Leonardo formed a dynamic arrangement showing the battle of Anghiari in 1440, with four men on ferocious horses fighting over battle lines. Michelangelo was assigned to paint the Battle of Cascina on the opposite wall.

3.3. Mona Lisa

From the 16th century, "Mona Lisa" or "La Gioconda" tiny portrait is one of Leonardo's paintings. No doubt, it is a famous artwork around the world today. Its fame lies particularly in the elusive smile on women's faces, and its mysterious nature may be because of the subtle shading of the mouth and the eyes' corners, therefore, the exact smile nature cannot be assessed.

3.4. Virgin and Children

"Virgin and Children," created with Saint Anne, the arrangement reuses the figure's theme in the landscape that Wasserman calls 'breathtakingly beautiful', and imitates Saint Jerome at an angled Angle. This painting is unique because it features two people that are overlaid and are situated obliquely. Mary sat on the lap of her mother, Saint Anne. In order to prevent the Christ child from roughhousing with a lamb in preparation for his impending sacrifice, she leans forward. The painting was reproduced several times, affecting Correggio, Pontormo, Andrea del Sarto and Raphael, and Michelangelo. Venetian artists Tintoretto and Veronese, mainly, adopted this creative trend.

4. Influence

4.1. Influence on Western Painting

Throughout the Middle Ages, painters would bluntly transfer the animals and plants from the reference album to their paintings when needed in their scene. Da Vinci, one of the most significant figures in the development of Naturalism, thought it was crucial to draw and study creatures in their natural habitats. Leonardo's method of painting has gradually formed the mainstream of Western painting, which is to learn the essence of the object first, comprehend the principle and logic of the object, and then form.

Leonardo da Vinci thought that it was important to explore a wide range of subjects since we can only fully represent all phenomena if we have a thorough comprehension of nature. He believed that painters who were good at only one subject or "could paint only one thing" was unworthy of praise. In "A treatise of painting", Leonardo da Vinci stated, "A painter should be like a mirror to truly reflect everything in front of the mirror. If you want to paint people, you must be like a living person. If you

want to paint white clouds, you must like white clouds floating in the real sky. Not only that but also use the eyes of the mind to absorb what's in front of you and find the meaning in it."

Thus, in Da Vinci's art, everything from the main body of the characters to the adjacent plants and trees, along with the distant mountains and the sky, are all laid out in the paintings; it is also due to the grasp of principles of nature, even the things that are imagined and considered will be irrational. Logical and realistic. The portrait depicts everything from the appearance to the heart, reflecting Leonardo da Vinci's conception of creation, which also took into account appearance and significance. As with nature, Leonardo spends a lot of time on human expression. The reason why Da Vinci's portraits are vivid is that he formed a comprehensive observation and research on psychology and human image. The characters' subtle psychological activity can be observed and represented through their expressions, postures, and movements. In the painting "The Last Supper", Leonardo depicts tumult when Jesus publicly revealed the traitor, as well as the individual reaction of each believer. The previous painters could not showcase such complex scenes and the diverse mental activities of the disciples. It was only when Leonardo perceived other people in real life and got diverse character images that he could create characters with multiple personalities in his paintings.

Thus, Da Vinci's pursuit of truth is an inclusive realism to the surface from the deep, from the spirit to the material. Although Leonardo da Vinci himself did not possess an outstanding disciple to get his art, immeasurable painters have been inspired by him, since the height of the Renaissance, and have sustained and upheld orthodox Western painting art for hundreds of years [2].

4.2. Influence on Modern Society

Most of the creations and ideas that have become ingrained in modern culture and become a part of daily life may be traced back to a particular role from many years ago [3]. Like numerous other renowned past figures, Leonardo's achievements were not fully recognised for many years. On the other hand, all over his life, Leonardo made numerous advances in engineering, mathematics, and anatomy that caused a significant and positive influence on modern society [4].

Anatomy, which is essentially the study of the human body, was of da Vinci's most successful endeavors. Leonardo started his study in the anatomy of the human body under the apprenticeship of Verrocchio, who demanded that his students develop a deep knowledge of the subject [5]. As a successful painter, da Vinci was allowed to dissect corpses in the hospital, in trend with the humanism that was gradually opening up at the time. Around thirty human corpses were dissected by Leonardo da Vinci during his lifetime to learn more about their anatomy and function. Leonardo da Vinci created more than 240 paintings for anatomy-related notes, and more than 13,000 words of functional speculation and insights [6]. By doing so, he learned how the legs and arms functioned and that the bicep muscle is in charge of the elbow's bending and upward rotation of the hand's palm. Da Vinci also made casts of the human heart and brain so that exact measurements and shapes could be taken. Joseph Kellard, the author of Leonardo, stated in an essay that "While Leonardo da Vinci was refining the Mona Lisa, he was also involved in dissecting human cadavers in a hospital's morgue. [7]" He was particularly interested in the anatomy of the lips' muscles. He was working on Mona Lisa's smile, being one of the well-known features, at the same time that he realized the upper lip was more than merely wrinkled. Da Vinci drew several human mouths, including one that was gently smiling, on a page in one of his thick notebooks that were packed with everything on art and flying to his sketches of horses and a perpetual motion device from his theoretical essays. Even the notorious Mona Lisa, one of history's most well-known paintings, was influenced by Leonardo da Vinci's studies of anatomy. As a result, Da Vinci's anatomical investigations have had a significant impact on current procedures and knowledge.

Mathematical studies are another subject of study where Da Vinci made a contribution to society. Being a qualified painter, many Leonard's mathematical achievements were useful for his work, such

as, in 1509, da Vinci and another Italian mathematician, Luca Pacioli, wrote a book, named *De Divina Proportione*. Such a book concentrated on artistic representations of geometric and mathematical principles. In an article by Arthur V. Johnson, author of *Leonardo de Vinci*, he states that “Da Vinci discovered a proof of the Pythagorean Theorem, dissected various geometric figures, and illustrated a book about geometry and art.” A friend of Leonardo once remarked that the artist's "mathematical explorations hindered him from concentrating on painting to the point where he could no longer tolerate his brushes" at that particular time in his life. In order for future painters to create their work in an even more precise and perfect manner, Leonardo da Vinci played a key part in laying the groundwork for the foundations connecting arithmetic and geometry to art [8].

4.3. Influence on Engineering

Da Vinci's fascination with birds led to the invention of the flying machine. The original concept for an airplane can be found in this work of research, known as the "Codex on the Flight of Birds," which dates back four centuries before the Wright brothers [9]. No doubt, Da Vinci's vision of the aircraft also surpassed the levels of that era. He believed that there was a thing with two wings that could fly through the air. Despite the seeming simplicity of the concept, Da Vinci takes a lot of time to research how birds are able to fly. Richardson claim that Da Vinci explained the manuscript E's details that reflected how birds can fly in the crosswind [10]. Moreover, he highlighted a piece description by Da Vinci “Birds always fly low when the course of the wind is contrasted to their path and this helps us to learn how the wind is more powerful at a height than low down” in this note. Such basic research and idea were critical as all subsequent concepts regarding flight and space obtained from this basic idea. On the International Space Station, as Italian astronaut Luca Parmitano stated, "Renaissance geniuses dreamed of human flight by studying the flight of birds, we can draw a line with the research that led us into space and gave us hope for further destinations. [11]"

5. Conclusion

Da Vinci dedicated his entire life to inferring nature with reason, linking aesthetics with reality, and forming miracles with science. Later generations all consider the various works of art he left behind to be classics. His painting's artistic characteristics and ideological trends led to the Renaissance and pressed the Renaissance to its peak. With the reform of art formed under the movement of humanism, Leonardo da Vinci and other artists have continuously enhanced the status of art through genius. Da Vinci's omnipotence has created new ideas and consciousness in all mathematical and physical science fields and even encouraged the growth of science, technology, and military action. Through the understanding and inspiration of the Renaissance and Da Vinci's ideas, artists and even other fields have considered Da Vinci as an example, whether at that time or in the present. It is important to keep growing and learning.

References

- [1] Kemp, Martin (2011). *Leonardo* (Revised ed.). Oxford, England: Oxford University Press. ISBN 978-0-19-280644-4.
- [2] Tyler C. (2021). *Sources of Inspiration in the Early Life of Leonardo da Vinci*. *Journal of Research in Philosophy and History*, 4(3)
- [3] Edubirdie. Retrieved, (2022). “Many Influences of Leonardo da Vinci on Today's Society. ” September 12, 2022, from <https://edubirdie.com/examples/many-influences-of-leonardo-da-vinci-on-todays-society/>
- [4] Catani M. and Mazzarello P. (2019). *Grey Matter Leonardo da Vinci: a genius driven to distraction*. *NLC*, 142(6), doi: 10.1093/brain/awz131
- [5] Davinci, Leonardo (2011). *The Notebooks of Leonardo Da Vinci*. Lulu. p. 736. ISBN 978-1-105-31016-4.
- [6] Alastair Sooke, *Daily Telegraph*, 28 July 2013, "Leonardo da Vinci: Anatomy of an artist", accessed 29 July 2013.

- [7] Joseph Kellardhttps, Leonardo da vinci be walter isaacson <http://theobjectivestandard.com/2019/05/leonardo-da-vinci-by-walter-isaacson/>
- [8] Veltman (2008). *Leonardo da Vinci: A Review*. MIT Press, (41)4.
- [9] Gan, V. (2013). *Flight of fancy*. *Smithsonian*, 44(5), 84. Retrieved from <https://link-gale-com.ledproxy2.uwindsor.ca/apps/doc/A344212148/AONE?u=wind05901&sid=AONE&xid=b2887c51>
- [10] Richardson, P. (2017). *Da Vinci's observations of soaring birds*. *Physics Today*, 70(11), 78–79. <https://doi.org/10.1063/PT.3.3773>
- [11] *From da Vinci to voyager*. (2014). *Aviation History*, 24(3), 12. Retrieved from <https://link-gale-com.ledproxy2.uwindsor.ca/apps/doc/A349720054/CPI?u=wind05901&sid=CPI&xid=8839b653>.