

Beauty in the Form of Quantitative Criteria in Da Vinci's Last Supper Painting with the Approach of Umberto Eco's Theories

Abstract

Indisputably, beauty is one of the fundamental elements of art in various societies. This issue has instigated researchers in various periods to attempt to analyze the criteria of beauty in works of art in various ways. In Europe, the Renaissance can be considered as one of the brightest eras of art and exquisiteness. Painting was one of the most chief arts and Leonardo da Vinci was one of the most significant painters of this period. The Last Supper of Christ is one of the most significant events in Christianity. Many artists throughout history have addressed the issue, one of the most imperative of which is Leonardo da Vinci's Last Supper mural. The prominence of this work is such that it has been analyzed and studied from diverse aspects. In *Medieval Art and Beauty*, Umberto Eco discusses the formation of art and its broad angles. The formation of Renaissance art owes much to medieval tradition and art. On the other hand, the theories and ideas of Umberto Eco in the twentieth century, which is mainly an explanation of beauty, show a new perspective on the intellectual infrastructure of Renaissance artists, which is especially evident in the theory of Da Vinci art. The present study has investigated this issue in a descriptive and analytical manner based on library sources. In the present study, quantitative criteria in Da Vinci Art Theory include the use of symmetry, proportionality, perspective, and applied principles of mathematics in field of art. The results indicate that Umberto Eco's aesthetic theories underlie the formation of Renaissance theories and art, especially in the formation of Da Vinci's works, a case study of which is The Last Supper.

Research aims:

١. To quantitatively observe an aesthetic review in Leonardo da Vinci's Last Supper;
٢. To explain the infrastructures of the formation of Renaissance art and its reflection in Da Vinci's Last Supper with the approach of Umberto Eco's theories.

Research questions:

1. What are the quantitative criteria such as dexterity and coordination in the formation of Leonardo da Vinci's Last Supper?

2. How does Umberto Eco's analytical discussions show the quantitative infrastructure in Leonardo da Vinci's Last Supper?

Keywords: Beauty, Quantitative Criteria, Last Supper, Leonardo da Vinci, Umberto Eco.

Introduction

The importance of the Last Supper painting as an analytical study has always been considered. The painting of the Last Supper by Leonardo da Vinci During experienced many fluctuations. Da Vinci painted one of the most influential works of art in history by painting The Last Supper in 1495 as the painting is full of symbolic references. In the early Renaissance, The Last Supper by Andrea del Castano (1445) is another example. In the Last Supper painting by Leonardo, he attempts to simplify the architecture and focus more on the subject of the work. It is worth mentioning that before the Renaissance, the ancient Greeks applied perspective in their works; but then again they were not able to display it on a flat screen. An example of the use of perspective in the 14th century is Hoffmann, in which in his artwork, the dimension and perspective of lines are misused. The aesthetics of coordination have always, over centuries, experienced different and complex forms. During the Renaissance, mathematical studies of theoretical and scientific perspectives reached its peak and the theory of visual arts was a new discipline that was not yet fully understood; also, the authors and artists of this age were exploring unknown lands. Thus, it is likely that the first codified treatise was Renaissance Theory of Art on Painting by Leon Batista Alberti, and later other artists developed the path of science and art based on the knowledge of perspective, mathematics, and of course Alberti's approach. After Da Vinci, many artists, including Raphael and Michelangelo, used golden proportions to enhance the quality and physicality of their paintings. In general, the rediscovery of the golden ratio during the Renaissance allowed artists to continue to advance their goals more broadly through mathematics. In the artistic path, too, the artist's view was taken from a mathematical point of view; as for until then, the artist saw beauty in painting in creating proportion and symmetry and reviving the science of landscapes and mirrors. Leonardo believed in a truth that Panofsky called a symbol of the fidelity of Renaissance

art theory, and Umberto Eco perceived it as a truth of a combination of theory and practice. Da Vinci believed that action should always be based on solid theories. In some cases, he even considers theory to be higher than action and teaches artists to learn science first and then to do something that is the product of that knowledge. Da Vinci points out in his works that if the viewer understands the reasons for natural processes, he no longer requires experience to understand them. The Last Supper painting is significant in that Da Vinci attempts to express a spiritual effect by creating mathematical concepts. He narrates a work based on quantitative criteria so that the viewer becomes more and more fascinated by the story of Christ. On the other hand, Umberto Eco, in his book *Medieval Aesthetics*, expresses art that differentiates the formation of Renaissance art.

In examining the background of the research subject, topics such as the study of innovations, scattered engineering inventions, and the artistic creations of Leonardo da Vinci have been addressed. Varamini (۲۰۱۲) in "Study of the life and works of Leonardo da Vinci" acknowledges the learning of Da Vinci knowledge that has overshadowed all aspects of his life, especially in art. In another study, Akbari (۲۰۰۷) entitled "Study of the subject of light and shadow in the treatise of Da Vinci's treatise" points out that the qualitative components of Da Vinci's works such as the subject of light and shadow that have a great impact on creating his unique style. In the present study, he explains the infrastructures that led to the formation of the Renaissance art and, consequently, to the works of Da Vinci. Much research has been done on the analysis of the Last Supper painting; however, few have specifically dealt with the formation of quantitative criteria based on the views of Umberto Eco. In this paper, the painting of the Last Supper has been studied based on its quantifiable characteristics.

The present article is descriptive-analytical and technical in nature. The data collection method is library research and data collection tool are a notes taken from books, articles and dissertations. The method of analysis The analysis of the findings in this study have been qualitative, and the criterion of analysis is based on reasoning and inference. For this purpose, the findings are referred to in the form of text to a number of images that are indicative of evidence. Information collection is evaluated and their unknowns are discovered. They are then interpreted and diagnosed with the help of reasoning, which is concluded logically and practically.

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