The Great Exemplary of the Italian Renaissance - Leonardo Da Vinci

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ANNOTATION

This article is dedicated to the scientific heritage of Leonardo da Vinci, the great representative of the Italian Renaissance. Also, in the article, the scientific heritage of Leonardo da Vinci is analyzed comparatively and logically through the analysis of literature.

KEYWORDS: Renaissance, seigneur, statue of David, French viceroy, notary, laws of mechanics, gravity of the Earth, parachute, underwater suit, patronage.

The role of Leonardo da Vinci in the development of Italian Renaissance culture and world art of the 14th-15th centuries is incomparable. For centuries, the spiritual legacy left by Leonardo da Vinci has been surprising generations. Leonardo da Vinci (1452-1519) was born in Tuscany in the family of Pueri da Vinci, who had the title of “seigneur” and was engaged in the work of a notary. This article discusses the spiritual and scientific heritage of Leonardo da Vinci.

The great Italian painter and sculptor Leonardo da Vinci only needed the work “Mona Liza” to surprise the world. However, his phenomenal ability to understand the world opened the way to immortal discoveries in the field of technology. It's been more than 500 years since Leonardo da Vinci passed away, but humanity is still benefiting from the changes he discovered [1].

During Leonardo da Vinci's lifetime, only one of his discoveries was used. This discovery is considered a “lightning bolt for a pistol”. Especially at the end of the 16th century, the above-mentioned discovery was widely used. The military also used this convenient discovery in the 19th century. Another invention of Leonardo da Vinci is the project of pumping air into pipes. This discovery led to the use of furnaces for heating and ventilation purposes [2]. Leonardo da Vinci created a diver’s suit designed to stay under water for a long time and easily rise to the surface. According to his plan, the diver moved easily and comfortably with the help of a suit filled with air in the chest and a tube.

His discovery also created a helicopter project, which is considered the “father” of modern helicopters. The radius of the wings of the helicopters was 4.8 meters, it was covered with a metal frame and a wing. The helicopter’s wings revolved around its axis and was driven by people. “There is no doubt that a helicopter with fast wings will fly high” [3], wrote Leonardo. One of the pictures inherited from Leonardo shows the image of a car. In these pictures, the crossbow mechanism was shown to supply energy to the devices.
integrated in the steering wheel. Leonardo da Vinci envisioned a self-driving car that would have a fourth wheel controller controlled by a steering wheel [4].

Leonardo da Vinci also put forward the idea of creating a pedestrian bridge. Leonardo da Vinci justified the fact that this bridge is made of stone on the basis of pillars in the narrow places of the sea. This bridge was supposed to cross the Golden Shah Bay in Istanbul during the reign of Bayezid II, the ruler of the Ottoman Empire. However, Bayezid II, who was known as an incompetent ruler in the history of Turkey, refused Leonardo da Vinci’s offer [5].

In 2001, such a bridge was built in As, Norway, and it was 8 meters higher than the car bridge. Leonardo da Vinci also designed the parachute. And one of the testers jumped unharmed from a height of three thousand meters with his parachute [6].

Leonardo da Vinci makes discoveries related to swimming lifebuoys, feathered gloves that speed up swimming. With these discoveries, Leonardo da Vinci shows that he knew well the laws of mechanics and gravity of the Earth [7]. He also put forward ideas such as digging canals and trenches using excavators and cranes. In 2002, tests of Leonardo da Vinci’s hang gliders were carried out in Great Britain. The world record for hang gliding was set by Yudi Liden. Yudi Liden raised his hang glider to a height of 10 meters and stayed in the air for 17 minutes. This day alone was enough to show that this flying machine really works [8]. Leonardo da Vinci was very careful and observed the events of nature seriously. He studied the laws of nature by observing the rise and fall of sea water and the flight of birds in the sky in different positions. He believed that science should help people and make their work easier. He hoped that in the future scientific discoveries would be the saviors of mankind. Based on the plans and projects of Leonardo da Vinci, a canal was built to supply the city of Milan with drinking water. At the same time, dozens of bridges were built. In addition, Leonardo da Vinci had a notebook filled with drawings of parachutes and helicopters, underwater suits.

Leonardo da Vinci, who is unique in painting, expresses the human form in a meaningful way. Leonardo da Vinci had no equal when it came to portraying human facial expressions, sad and happy, showing inner experiences and emotions through a half-smile. In addition to his most famous work, “Mona Lisa”, Leonardo da Vinci created a series of paintings such as “Madonna Binua” (1478), “Madonna on the Rock” (1483-1494), “Secret Nights” (1495-1497), “Battle of Ankara” (1503-1506), “John Christitel” (1513-1517), “The Flood” (1514-1516) [9]. His student F. Melsi collected projects about his unique paintings and notebooks with seven thousand pages. He collected them and created the book “Treatise on Color Image”, which is famous in Europe. One of the most famous paintings of Leonardo da Vinci is the painting “Battle of Ankara”. This painting shows the image of cavalry and soldiers who participated in the city of Ankara in 1440. The famous sculptor of that time, Michelangelo, although he was his rival, used Leonardo’s style to create the statue of David. [10]. Leonardo was honored for his services by King Louis XII and Charles Adam. Conflicts in his family had an impact on the rise of Leonardo da Vinci's creativity. Leonardo da Vinci’s father died in 1507. As a result of this, there was a conflict with his brothers on the issue of inheritance.

Leonardo gets his father’s inheritance with the help of his uncle. He also spends a part of his inheritance for the advancement of his students. Leonardo da Vinci gives part of his house to his student Gian Francesco Rustini. His last picture was painted in 1508 and was named “Anna Maria with Jesus”. His last statue was created in 1511. After that, there was some difficulty in Leonardo da Vinci’s life. He used the protection and patronage of French viceroys. However, after the expulsion of the French viceroys from Milan, he was forced to seek refuge with Pope Leo X.
Leonardo da Vinci was a physically strong man, and he was also unmatched in swordsmanship. In his work, he was distinguished by his compassion for his students and the fact that he always followed his students. Such qualities of Leonardo da Vinci were not liked by his contemporaries like Michelangelo. Leonardo da Vinci’s great power and potential was amazing. From him, we inherited incomparable ideas and amazing drawings. The fact that the scientific and spiritual heritage of Leonardo da Vinci is still being studied at the present time does not require proof.

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