

Modern Technical Variables and Their Impact on Fresco painting (Experimental descriptive research)

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Summary

The researcher observed both a lack of interest and avoidance of practice regarding the use of the technique of Fresco in both a modern and traditional context.

The researcher questioned the benefit of using the variations plastic art in the Fresco art by using new substances from modern construction material

The researcher then sought to examine the extent to which new materials are used to produce murals, specifically in fresco art, and how artists may avoid the ill-harm associated with the use of old materials and rather replace them with newer, safer and easier to obtain materials.

The objectives of the study:

One of the aims of this study is to become acquainted with the art of fresco, from both a technical and historical perspective, and search for potential modern art materials and treatments that can be used to aid in the enrichment of fresco paintings.

The researcher aims to utilise the findings from such research to present a modern/contemporary vision of Fresco Art derived from the old Fresco style. The researcher aims to do so by using the newfound technologies, treatments and materials in a modern way to display such a new vision.

Additionally, Fresco paintings are traditionally difficult to transport and are extremely fragile. The researcher in this study therefore aims to aid in the utilisation of a different form of canvas, specifically that of small ceramic tiles, that the Fresco technique may be effectively used on whilst being easy to transport and unlikely to succumb to breakage.

The significance/ importance of the study:

*The importance of this study lies in its attempt to explore the possibility of implementing Fresco art in a newfound manner by using new technologies and materials to make it both easier and safer for a student of the Fine Arts, as well as researchers in a similar field of art, to create Fresco paintings. Utilising materials that are easier to handle, both time and cost-effective and efficient allow for the students and researchers to recreate the old Fresco art without concerning themselves with the disadvantages of the old Fresco art technique.

*Additionally, some of the difficulties associated with the use of the old Fresco method and the harm inflicted onto the artist by using the old method of Fresco will be explored.

*The researcher will also aim to aid in the elucidation of the relationship between modern mural art and modern technological evolution

*as well as emphasize the different types of Fresco art and the technical advancements of the Fresco technique that have occurred throughout time.

The Study's Objective

This study aims to explore how to utilize modern materials to enhance the technology associated with the creation of both old and new Fresco art (Wet and Dry).

Research methodology:

The study implements the descriptive experimental approach in studying the works of Fresco art.

Study sample:

This study was performed on third- and fourth-year Fine Art Students from 2014 to 2018. A sample of 14 art works from the paintings of the third-year students and 12 from the paintings of the fourth-year students were chosen. This study was conducted during the academic year from 2014-2018 within the Department of Painting in the Faculty of Fine Arts. (First semester for the fourth grade students and second semester for Third grade student in the Fresco Course available at the faculty)

Study Research:

This study looks to explore the technical and historical development of Fresco Art , and the use of various new materials such as latex and stucco paste, which are modern and ready for quick use. White glue in certain proportions can also be used to aid in the development of an innovative mortar so it can be painted on using peroxide and water colours. Other materials were also used from the natural environment such as sand, gypsum and water. These materials were mixed in the experiments with certain percentages of soft and dry Fresco.

Search terms:

Wall Murals in Fresco - modern technical variables - modern building materials - experimental descriptive approach - modern techniques and methods for the implementation of the Soft and Dry Fresco.

Types of Fresco:

There are three main types of Fresco technology:

1- Buon fresco or true fresco

The real or wet clay (BUON) means painting on the surface of a wall covered with wet mortar before it dries.

The painter begins working on the surface with a specific brush as soon as the mortar is spread on the wall and smoothed. This is one of the most common types of Fresco. It uses pigments mixed with water without a medium (bonding agent) on a thin layer of wet mortar. The colour is absorbed in the wall inside the mortar layer and interacts with the mortar to become an integral part of it.

Fresco painting is one of the most difficult types of paintings in terms of restrictions imposed on the artist. The colour range used is limited and the time available for the painter to complete his work is linked to how long it takes the mortar to dry. The artist is forced to divide their work space to allow for the painting to be completed in the necessary stages, all of which are in accordance with the stages prepared in the initial design.

The most important characteristics of the Fresco style is its inexpensive nature, the availability of raw materials, and how the paintings are able to resist the changes of climate throughout the ages.

The surface of Fresco artwork is calm, because light does not reflect on it as no glossy materials are used. The viewer can therefore look at the work of art from all angles without exposure to reflections which allows for the minimisation of feelings of anxiety and discomfort. The frequent appearance of cracks in the artworks is not considered a defect in Fresco art pieces but rather an affirmation of the paintings value and its relation to architecture building it was painted on.

2- Secco fresco-or-Dry fresco

The dry fresco or the Secco Fresco is painted on dry plaster and therefore requires a bonding method (for example, egg-glue-oil), as in the famous fresco known as the "Last Supper" by Leonardo da Vinci, where false lime colours were used.

In the case of lime coloring, lime water is used to wet the dry mortar and then a bit of fine sand is added to the mixture. This mixture is viscous in texture when it is spread onto the surface of the mortar. The selected colors are then added to the mixture to achieve the color profile that will be used in the artwork. This process should be completed fast and with high skill. As for the dry fresco

This is one of the treatments for colouring on dry plaster and begins with the moistening of the plaster with casein, which is used in the preparation of hides to facilitate the process of colouring, the colours of which are usually semi-transparent.

Among the most prominent contemporary artists who have distinguished themselves in the Dry Fresco is the American artist: Steve Bogdanoff

3-Mezzo fresco

This Fresco uses a semi-dry surface. In this method, the mortar is semi-dry, so the colour only penetrates slightly into the plaster. By the year 1600, this method had replaced the wet plaster panel in murals and ceilings. What makes this style significant is that the artist can draw for a long period of time as there is no rush, therefore allowing the artist to draw on large areas.

Paintings that represent the landscape use Mezzo Fresco because it takes the artist a long time to complete the work due to the attention to detail associated in landscape art and the artist does not have to be concerned that the mortar will crack.

Many of the late Baroque artists preferred this style, such as the artist Michelangelo

As we know that the word "Fresco" in Italian means fresh and in the wall paintings it means wet or soft and it expresses the mortar and the word (Secco) means dry in Italian, hence the strangeness of the term (Fresco Secco) because the words are contrary.

However, because the word (Fresco) is used more in relation to wall paintings, it is used regardless of the method of implementation to describe all wall paintings.

The word "dry" is therefore added to the word "Fresco" so it becomes Dry Fresco and it means that the paintings are implemented on Dry walls and ceilings, which needs a medium: to that is the opposite if wet, and these types are (Distemper-Tempera-casein wax)

Research results:

1- Technological and chemical advancements in the present age have had a great role in the development of new materials for the artist.

- 2 - The modern works of art in the field of wall paintings are now more inclined towards experimentation and innovation and rejecting the tradition of the old techniques
3. Mural Paintings are closely linked to technological and scientific developments.
- 4 - The researcher has developed some techniques to be used in art paintings in the wet Fresco Methods and others using the dry Fresco Method using modern and new materials.
- 5 - The researcher believes that the experiment, which is based on the integration of modern and old technologies with the use of new materials, will contribute to new trends in wall painting.
- 6- The research allowed the art students to learn about the technical methods in dealing with and using ready-made materials in the art of Fresco.
- 7 - Discovering new possibilities and dimensions through which the artist can express, as the Material allows the artist to move in different directions when they sense the materials capabilities.
- 8 -The different properties of the material gave the artist flexibility to achieve new ideas.
- 9 - Help the art student to mix traditional and new materials (that are a result of modern technology)
- 10 - Save time and effort, as well as the development of creative and artistic performance of the artist.

Recommendations:

- 1- The researcher recommends finding alternative solutions for the implementation of the Fresco through the modern technologies and the search for new materials to reveal the most important features and characteristics, which increases the art works strength and influence.
- 2 - The artist should take full advantage of the different and various materials in murals, both traditional and modern
- 3 - Finding alternative solutions to implement the Fresco method by using modern paints or pastes that help the students to reach their goal easily.
- 4-Researching the modern materials currently used to reveal its important features and characteristics, which can assist in increasing the force and impact of the art work. The contemporary development has led to a change in the ways and means of performance where the materials and artistic expression depend on each other in the construction of the art work.
- 5-The researcher recommends monitoring and recording all new and contemporary art works that are related to Fresco in churches, houses and buildings in Egypt and preserve what remains of them and try to restore them due to their archaeological and artistic value.
- 6-Encouraging artists, whether students or hobbyists, by setting up workshops
- 7- Utilizing modern Fresco art work to be of benefit in historical buildings or museums.