





TOWARDS SUSTAINABILITY IN MURAL ART

نحو الاستدامة في الفن الجداري

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ABSTRACT

Sustainability is a term that has gained currency in recent times though its uses and applications have differed from one artistic medium to another in the field of arts. The current research targets several areas to identify and recommend contemporary mural artists to take the development of the various environmental issues and support means to employ them in mural works that serve the idea of sustainability as a global trend. It must also take into account the compatibility and appropriateness of these mural works in terms of form, design, and content and their connection to the architectural origin if any. (The first axis: the concept of sustainability and its objectives. The second axis: is sustainability and art. The third axis: sustainability and contemporary mural art. The fourth axis: an analytical study of some mural works where the visual axis coincides with the concept of sustainability)

KEYWORDS

stereoscopic mural; contemporaneity; environmental arts

الملخص

الاستدامة مصطلح أصبح بتداول في جميع مجالاتنا الحياتية بوجه عام، بينما استخداماته وتطبيقاته أصبحت تختلف من وسط فني إلى آخر، خاصة في مجال الفن التشكيلي. كما ارتبطت الاستدامة بمعابير وطرق تنفيذية ومفاهيم متطورة في ربطها في مجال الفنون الجدارية المعاصرة، ولما كانت تهتم به من حيث الجوانب البيئية وطرق حمايتها، لما تحققه من تنمية شاملة بأشكال متنوعة. وقد أتجه المعديد من الفنانين في العصر المعاصر نحو تنفيذ أعمالهم بطرق وأدوات مرتبطة ارتباطا وثيقاً بفكرة التنمية المجتمعية المستديمة في مجال الفنون التشكيلية بوجه عام وعلى الصعيد الآخر الفنون الجدارية بوجه خاص. حيث ساهم هذا التطور على إيجاد نهج شامل قائم على التكامل المعرفي المتمدين من حيث التنوع الإبداعي والفلسفي والجمالي في مجال الفنون الجدارية المعاصرة، وتكمن أهمية هذا البحث في يكون للفن الجدارية المعاصرة، وآثر ذلك على المجتمع المعاصر. وأيضاً إنشاء مفردات فنية ومعرفية من خلال الجوانب التي يمكن للفن المستدام

الكلمات المفتاحية

الجداريات المجسمة؛ المعاصرة؛ الفنون البيئية



1. INTRODUCTION

Sustainability is the study of how natural systems work, and the production of whatever the environment needs to maintain its balance. Throughout their ancient history, human civilizations have recognized how important it preserves a clean environment and the source of pollution in any form common to man. We believe that sustainability takes into account how nature can be protected from damage and destruction now and into the future. Sustainability is essentially an environmental concept in the sense of maintaining the continuity of life based on natural resources. in this sense, we can identify the point of interest and focus on natural resources and how they cope with the wall arts without compromising society and its surroundings. It also focuses on sustainable art or how sustainability affects the quality of mural works that are, is marked by a vision that serves society while preserving its environment. This is because art is part of society. There is an urgent need to build and establish a significant functional impact on it and its members. Sustainable arts are those that have lasting compatibility with the environment (socio-economic, physical, and cultural). Researchers have pointed out that the origins of sustainable art are related to conceptual art. It was based on the use of materials that have a detrimental effect on society or the environment, it also often takes a direction different from the quality of the art, the use and misuse of instruments and ores that carry a different and new artistic philosophy. This concept was accompanied by a new awareness of the global nature of environmental and social problems. So there is always a constant question from artist researchers, which is what the correlation between art and sustainability is? The main purpose of the arts is to make us reflect and react, so the artist must always be under the pressure of constant research into the ways and even the best of them and the means that inspire his creativity and creative thinking in and for society. We have seen that sustainability has implications for all aspects of human activity. On the other hand, the analysis of artworks that serve the idea of sustainability by artists and their practice of giving new thought to the figurative art movement, and how these works are evaluated by individuals or by selfreflection. The importance of this research point in reflecting the concept of sustainability through contemporary murals has allowed the artist to express creative insights from his practice in the context of the plastic arts. The artist can, with his philosophical vision that is different from reality and that is associated with creative imagination, change, and innovation, new ideas that serve society. Because the artist always makes a concerted effort to get to the new one. In doing so, he collaborates with life itself and gives himself a chance to be considered very seriously outside the traditional framework of the art world, where he presents visual shocks and the hidden burdens of knowledge. There is an urgent need for a significant functional relationship between the arts and the environment, especially in contemporary societies. Art has moulded itself into a more open, intellectual, and collaborative entity with traditional patterns reaction that can allow for amazing and promising perspectives and outcomes in the service of future autonomous artistic societies. It also can engage mind, body, and deep knowledge fiction across disciplines in its branches, and provide artistic models and works that serve the idea of sustainability.

1.1 Research Problem:

- > searching for the means and methodologies whereby mural art can evolve as a template for sustainable art.
- Researching the effectiveness of international mural art in concretizing designs that conceive of sustainability.

1.2 Research Objectives:

The research is specifically significant as it addresses a global concern: the earth, its environment and the search for a harmonious interface. The research attempts to concretize this interaction thereby creating a bonding between community and its surroundings. The impact will be holistic and macrocosmic.

1.3 Research Hypotheses:

- Sustainability in art in general and at the local and global levels is a source of inspiration for the artist to create a functional artwork that serves the issues of contemporary society
- Mural arts are among the arts that influence societies because of the amazing functions they provide. Therefore, these mural arts serve sustainability because they have an effective role in different societal cultures.

1.4 Research Methodology:

The research follows the analytical approach through the Clarification of the terms of the research:

- The concept of sustainability and its roots in the arts.
- Mural art provides a framework for the concept of sustainability.
- Analysis of contemporary global mural works models that serve the concept of sustainability.
- Benefiting from this study to create contemporary mural works within the framework of sustainability in Egypt.

2. SUSTAINABILITY INCLUSIVENESS CONCEPTS

The subject of sustainability, as well as its impact on local governments, merits further investigation, inquiry, appreciation, and analysis. The concepts of sustainability are always being revisited, revised, and examined. The term "sustainability" is frequently used to characterize an organization's social, economic, environmental, and governance challenges. Sustainability is viewed from the perspective of its practicality, and it is sometimes misrepresented as an additional responsibility and cost to society. In this context, many local governments claim to employ sustainability to improve their operational efficiency and address the economic, environmental, and societal consequences of their actions. (Alibašić, 2018)

Sustainability maybe defined and providing for human necessity without hampering the viability of future generation. This involves economic and resource consciousness that extends into nature. But the concept of sustainability spills over and beyond caring for the environment. It means social intrusiveness and sharing of resources for communitarian development. Incorporating the concept of sustainability into the plastic arts process encourages environmentally friendly design and the use of natural materials. The practical mechanisms that sustainability has added to contemporary arts and how it has contributed to advancing complementary principles and meeting the challenges of modern artists' methods and tools are generally regarded as a contemporary and global approach. The research employs descriptive and analytical approaches to clarify sustainability as contemporary wall art and the evolution it has brought about. The current research paper also uses a case study of the work of artists who have worked with environmentally friendly materials apply the results of the analytical methodology. There is no single definition or explanation for the

concept of sustainability. Instead, there are numerous definitions and perspectives on what it means to be sustainable. Naturally, the subject is complex and broad, but the incoherence is widespread. It also includes those who present their actions in the matter, such as companies that publish a yearly sustainability report. They rarely provide a precise definition of sustainability. (Fredriksson Marie, Ytterfors Minna). Roberstone believe that interaleted sustainability is complex concept that is wideranguing and underrelated template that takes into its ambit human culture and all aspects of the biosphere that extands into the future. This has culminated in the evolution of wide vocubulary that evolves extensive scientific and intellactual aspects. (Roberstone, 2017)

2.1 Sustainable in Art:

What's the function that an environmentalist technique can provide to artwork, and the way essential can that ensuing artwork, be to nature? of their now and then competing or compared concepts, the connection between artwork and nature has been little studied in its ancient continuity, and but there may be a dense area of inventive practices regarding nature in addition to associated with environmental problems. (Nathalie Bland, Barbara L.Benish). The concept of sustainability and art, especially contemporary murals and their use in the service of the environment protects the environment from danger and gives it beauty. The materials and raw materials used by the artists and their moral and material implications, as sustainable art is an art that is produced considering the broader impact of work and its reception in its relationship to the environment. *Fig 1*

Explores the social impact of art even as it expands to comprehend social shortcoming wider horizons of human expectation. It is redefined as a solution to social shortcoming which is skeptically criticized by a host of artist. (David Magggs, John Robinson, 2020)

Through this research, the researcher assumes that mural painting is seen as an art that can serve the idea of sustainability since its essence is based on the use of all kinds of materials in the manufacture of various new forms and the emergence of a new consciousness of the global ecological and social problems. If the fundamental premise of all arts, regardless of their physical structure, subject matter, or nature, is to make societies think and interact, then presenting the ideas of sustainability for mural painting is a logical step for institutions whose role is to capture, define and show the culture of the time. *Fig 2*

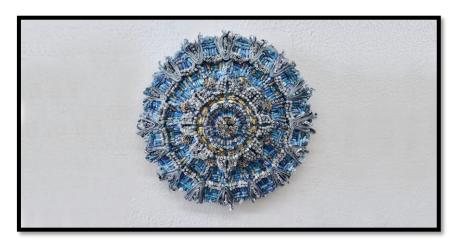


Figure 1, sustainable art, shredded papers by Jaynie Gillman Crimmins, 2009)







(Figure 2, with or Without Us" from the Sea Wall initiative by Ernesto Maranje, 2017)

(Figure 3, Dandelion, Choi Jeong Hwa, Korea, 2018.)

Kagan defines Sustainability as a cultural phenomenon when culture is understood as a value system and a set of signifiers that frame social identities and dispositions to act, believing that culture is a collective memory of a multitude of knowledge, cultures, together with individual minds, they are that to Ecosystem of ideas and mental images. (Kagan). The property of art was painted within the artist's sustainability of resistance through their art to everything that harms the environment, as a result of what environmental art enjoys, or as we tend to seek advice from in the 5 analysis paper, is that ability that evokes the US to alter our social awareness and proper our behaviors, because it urges us to create real change in the environment. Our surroundings to market environmental sustainability in conserving the world. Artists have increased their interest in the subject in a trial to unfold awareness of the necessity to preserve the planet and notice solutions to the issues that threaten it. Fig 3

Choi Jeong Hwa's uses recycled materials in his sculptures and installation. They give the impression of the dialectical relationship between production and consumption. He considers beauty and ugliness as constants, while plastic emerges as an essential mixture of rubber and oil. Choi works with recycled and materials that refuse to degenerate.

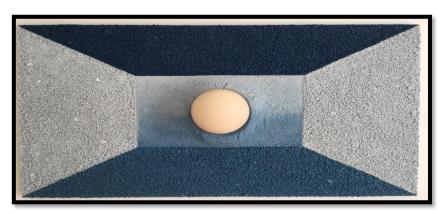
Refuses to degenerate even as they are combined into shapes and images that are unforeseen. This fantastic art attracts the viewers with the hint of image. He has continued to use glass, steel and rubbish to create his masterpieces reality that extends into the dynamic of nature and culture. (Christopher Crouch)

The public speaks approximately about the sustainability of the planet locations the plastic artist in the experience, as his efforts and inventive achievements are a guide of this speech, the artist produces via his artwork a visible discourse that isn't a concern to the classy judgment of the recipient, but alternatively to the couple of connotations that he carries, as is the case in conceptual artwork in popular and environmental artwork in particular his inventive paintings and production. *Fig 4* the work Song Dong's concretize impermanence and transience. He uses common placed things as wooden windows, locks to redefine sustainability.





(Figure 4, Song Dong, Same Bed Different Dreams No. 3, 2018)



(Figure 5 Ab Ovo" Latin: "From the Beginning, the Origin, the Egg". 2013 by Bettina Werner)

The intersection of sustainability and art is the intersection of heart and mind. It is the synthesis of all that is essential, survival, connection with the natural world, beauty, truth, and love. Art came before language; it is the most integral part of our humanity and repeatedly demonstrates our perspectives on humanity's place in the world. Science alone is not enough to move the souls and minds of many people. The earth is complex with multiple layers. There is no direct approach to fully including the entire expanse of the world, understanding the depth of the planet, and counteracting the ecological and spiritual issues we face in the world today. We will need creativity fun and cultural progress. This is the artwork. (Caldwell). Art has an awesome vicinity inside the records of humanity, as it's miles a form of sincere translation of the artist's feelings, ambitions, ideas, and aesthetic and utilitarian orientations, and it's miles one of the maximum critical methods to report and file human civilization. The creativeness of plastic artists. The plastic artist is continually eager to maintain tempo with renewal to transport inside the scope of development and intellectual, cultural, and social improvement that prevails in society. Fig 5 For Bettina Werner, believes that "salt" is often an excellent creative medium. Not solely thanks to its long history however additionally as a result it represents wisdom and insight.



Recently, environmental art has become more closely intertwined with the political, cultural, and economic dimensions of environmental upheaval. Art helps dissidence and social change. The Global South has numerous artists critical of these issues, some voicing their concerns through a return to traditional and ecological materials for the construction of tapestries, sculptures, and installations. It has been hypothesized that valuing the aesthetic values of nature promotes environmental ethics and correlates with a sustainable lifestyle. (Richardson). Art has played a very important developmental role throughout the ages and historical stages. While all countries are looking for ways of sustainability on the economic and political levels, and they are pursuing medium and long-term strategies to achieve this, a contemporary artistic trend has emerged that aspires to contribute to achieving sustainable development goals through arts. Being a mirror that reflects the social and cultural reality of the people. Fig 6 here the artist not only uses law-impact materials but indeed real aim objects that would otherwise be wasted. The diversity of artists' reactions and creative processes is something that has always been captured, after an industrial or technological boom, material culture often changes to glorify man-made products that are viable and profitable to manufacture. However, there is eventually resistance to this and a resurgence of craft-intensive decorative arts.



(Figure 6 El Anatsui, Earth's Skin, Aluminum and copper wire, 2019)

2.2 Material and Performance Potential in the Concept of Sustainable Mural Painting

Art in itself is "development," and a wheel that pushes societies forward if its topics come into contact with social needs by presenting developmental messages and addressing vital issues that touch social and human needs. Sustainable art or sustainable design is in line with these key principles above when the artists select their materials for paintings, sculptures, features, or designing an eco-friendly home. When painting, many artists use all kinds of mediums: they can include wood, stone, paint (watercolors), or even fabric for textures, all sustainable materials. Media means the material with which the artist works.

The use of interior materials when selecting interior materials and products based on their life cycle processes, as well as the need to select materials for sustainable qualities, is the key to sustainable interiors' success. Many ideas outline property materials that are supported by the values of energy consumption, waste emissions from producing processes, abundance, resource renewal, durability, material permanence, and economic implications. It's outlined as materials that have a comparatively sensible impact on societies and also the environment, in addition,



they're utilized to construct products, and supply services, still as improve the environment, resembling structures. Each year, over 3 billion heaps of raw materials are consumed by development operations around the world, accounting for the fourth part of total resource consumption. The goal of sustainable interior design is to rationalize the utilization of materials in an associate degree ingenious method that permits the preservation of natural resources while not inflicting environmental degradation. (Ahmed). Recycling - is a technology that proposes reusing old or discarded things, to create new products, using creativity and respect for the environment. For the artist, this is one of the most important points: the continuous surrender of solid waste through art and sustainability. *Fig* 7 Create a magical world of reflections, lights, and colors through something whose value ceased to exist from the moment it was called "garbage": this is how Brazilian plastic artist *Debora Muszkat* does it. Through his hands and those of his students, the glass discarded in the environment is transformed into incredible objects and installations, in a process where art and sustainability are inseparable.



(Figure 7, Glass installation, Debora Muszkat Institute, São Paulo, 2014)

Muralism belongs to the fields of fine arts and is an art term with a long history and diverse aesthetic manifestations, wall painting with diverse purposes that can be documentary, symbolic, or documentary and purely aesthetic and various references. Muralism is different in its relationship to architecture. The spatial dimension of property can be modified into changes in colors, themes and design. This, murals may be considered as mediation with space. Byzantine mosaic representation made the best use of form that was organic to architecture. While the renaissance painter played with the scene of space, the aroque artist's dissolved into nothingness. The murals also impact public domain. The space issues to comment on social, political or religious issues and elicit a response. (N.K.Ahuja)

Mural painting involves encaustic painting, tempera, fresco, ceramic, oil paint and liquid silicate and heated porcelain now. They have been used through the decades. The paints were ground and mixed into resin for application, often egg yolk or albumen diluted in water was used for tempera technique surfaces. It differed from country to country and with time has also seen a change in the materials.



Mural painting has constantly evolved over the years, evolving until it incorporates the use of modern materials and imagery. The murals influence attitude of the people who walk past them. All understand painting and therefore aesthetically enhance the placed areas. It is a great source of tourism that can positively impact the economy. (N.K.Ahuja) *Fig 8* This type of painting also speaks of brilliant displays of high-class creative impulses and masterly skills. Fired murals are first made with the help of the earth and then heated. The duration of fired squares is not the same as other types of squares and they can be used for both traversing and wall climbing.

The nature of the material and the associated methods of interpretation determine the structure of the composition in the mural The greater the designer's knowledge of the possibilities of the material and the associated methods of interpretation, the more imaginative ideas this leads to and his ability to create creatively. It involves your tools and the use of ideas and items that serve the artwork.

Analysis of various painting reveals the creative template, the alternate materials and vision of the artist. This has become very significant in the 20th century even as artists adopt specific colors in their representation. (Philippe Walter, Laurence de Viguerie.)



(Figure 8, tile mural features the artwork of Dan Morris and contains images of the Sun, 2015)

2.3 Recycling in contemporary murals

The use of modern technology as raw material and tool in the field of mural painting and the investment of these different plastic mediums in the implementation process concerning heritage data, so that the art reflects it's aesthetic, cultural and belonging role in society comes to a deeper conception of contemporary mural painting, helping to enrich the analysis of mural painting in tune with the 20^{th} century. And since the development of wall art is an inevitable need to convey the philosophy of the times and keep up with the tremendous scientific advances in the technology of materials and tools .

Artists occupy a socio-cultural space that is definitely linked to the environment concern of the decay. Man exploits nature and the waste harms the environs. The artist explores and recycles this excess to create an environmental conscious society. Manufacturing paint based on recycling is one of the answers to the problem. Artworks and artists, like their creators, inherently have close ties to the community and environment in which they produce their artworks. Awareness of the importance of taking care of the environment by addressing the existing contextual issues in the environment is one of the roles an artist can play. In this context, artists create artworks to raise public awareness of protecting the environment from imminent destruction. Artists and society must create synergies to create an environment that can provide a comfortable, safe and clean society. (Nanang Yulianto, Ning Yuliastuti, Edy Tri Sulistyo) *Fig 9* here the artist uses rubbish



from the streets to create impressive animal sculptures to warn people about pollution and all sorts of endangered species. It was from street art that he developed his practice and evolved into what is now considered "trash art". His installations "Big Trash Animals", scattered in public or museum gaps around the world, address the need for socio-ecological sustainability. In the streets of his hometown, 's series of works "Provitive" and "Train Tracks" interact with fabrics and street furniture and present a new critical view of society, its actors, and determining factors.



(Figure 9, mixed media (trash), Bordalo II, 2017)



(Figure 10 La Nouvelle Liberté artwork by Joseph-Francis Sumégné, 1996)

This century has seen several important advances in the use of advanced innovation. The crude innovations captured the intriguing thoughts of contemporary artisans and connected them to a variety of imaginary influences, including unused measurements on works of art that reflect the character of the 21st century. Since the aim here is to create a contemporary mural while preserving social subjectivity, the inference of craftsmanship in our society is that of craftsmanship. It must be borne in mind that ingenuity and the mental underpinnings of the environment make a difference in deciding how to secure his aesthetic identity from impersonation. Environments contain aesthetic, social, and creative personalities, and mural depictions inspire interest in works of craftsmanship that are deeply rooted in society. It's about affiliation Recycling has several purposes and reasons, in addition to its contributions, which include reducing the burden on the ecosystem, achieving economic returns by reducing the need for raw materials, and saving the energy needed to produce raw materials. Among them, artistic trends, many artists have embraced the idea of recycling to make youthful, new and updated content and concepts. (HALLOUL)

Contemporary artists use recycling as a way to create artwork that represents their community through pieces of abandoned history. Symbolic themes primarily created Mozambican art and became powerful symbols of this developing country. Understanding recycling related activities are critical to determining how artists obtain used items. Recycling is generally understood as the disposal of waste. The United Nations Department of Environmental Statistics (2011) defines recycling as: "waste (, trash, garbage or waste) that is not a primary good (produced for the market) and the generator itself of the which is no longer necessary for production, processing or consumption, and wants to get rid of these items". (Schwartzott) *Fig 10* the large metal construct is very realistic and recognizable but refrains from identifying the material melded together.

3. CONCLUSIONS

The researcher was able to reach several results in light of achieving the research objectives and hypotheses, and some of the most important of them are:



- **A.** The practice and experimentation through working with sustainable materials to produce contemporary murals or sculptures added direct expertise to contemporary wall painters.
- **B.** Contemporary mural artists in the field of stereoscopic formation and mural painting were keen to achieve the principles of sustainability in their artwork, which reflected the impact of contemporary environmental systems.
- **C.** Contemporary artists strive to achieve permanence and sustainability in their artworks.
- **D.** Benefiting from the study of properties and composition to recycle materials as a contemporary technique that helps the artist to develop solutions and plastic and expressive formulations that serve sustainable art.
- **E.** Finding multi-methods entrances and dealing with unused materials in the work of sculptural wall models.
- **F.** The value of the material after formulating it in a formative way in employing sustainable artistic thought.
- **G.** Developing the value of creativity and innovation of the mural artist through the use of the remnants of consumables that are difficult to use.
- **H.** Recycle the discarded pieces to achieve aesthetic values and to have a connection between them.
- **I.** Transforming environmental data into sustainable works of art.
- **J.** The compatibility of the associative elements and the materials accompanying the environment makes an expressive story from a variety of materials and gives it a plastic meaning.
- **K.** The artist's adaptation to materials and his familiarity with their characteristics express his artistic idea. L. Achieving the unity of the relationship between form and content in contemporary mural works concretizes environmental sustainability.

4. IMPORTANT RECOMMENDATIONS:

- First, the interest in strengthening the mural that serves sustainable thought because it represents the spirit of the creative process because it connects all cultures
- Focusing on the field of experimentation with regard to recyclable materials, because this is what gives the contemporary artist the freedom to create sustainable wall arts that have a unique and new artistic character that affects contemporary societies in all its branches.
- Emphasis on taking the local character in proportion to the environment in the implementation of contemporary murals in terms of materials and themes that serve sustainable art.

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