

## THE USE OF TECHNOLOGY IN CONTEMPORARY ART

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### ABSTRACT

Along with the resurgence of murals in architecture, this study will look at the formal and aesthetic elements of contemporary mural painting in popular culture. Modern muralists also use cutting-edge techniques and technology. Two samples from the western population are required for this study, along with a qualitative content analysis methodology. The study covers a variety of contemporary mural painting techniques, such as ceramic, figurative, and sculptural murals. Building walls and ceilings may be adorned with mural art, a kind of painting and design. Several equipment and materials may be used for painting murals in a number of methods. The viewpoint focuses on conventional technology, sometimes referred to as outmoded technology or technology from the previous century's industrial period. In the case of the visual arts, such as typewriter art, where they have previously shown aesthetic and cultural potential, they are no longer practiced. Visual artists have access to a huge post-industrial collection of plans, drawings, and easily accessible artifacts.

**Keywords:** Augmented Reality, Contemporary Architecture, Mural Painting, Wall Art.

### INTRODUCTION

The incorporation of technology has completely changed how artists produce, interact with, and express themselves in the realm of modern art. With the quick development of digital tools, artists are using technology as a medium, expanding their creative potential and altering the landscape of art. Technology has created new opportunities for creative experimentation and interactive experiences, from digital art and virtual reality to 3D printing and data visualization. Contemporary artists now have more opportunities to explore with shapes, colors, movement, and interaction because to the usage of technology. By employing software, tablets, and other digital tools to create amazing visual compositions, artists may explore new spheres of expression. The boundaries between the physical and digital worlds may be dissolved by artists using virtual reality and augmented reality technology. With the use of algorithms and computer programs, artists may create dynamic, changing works of art that change over time or in response to input. The development of 3D printing has transformed the production of three-dimensional art pieces by allowing creators to translate their computer models into real sculptures and buildings. The internet and social media have evolved into powerful dissemination mechanisms for creative works, interact with audiences, and discover new artistic mediums. Internet art and social media art are forms of visual expression developed by artists expressly for the online environment, where they explore issues like digital identity, culture, and the societal effects of technology.

As artists use live things, genetic materials, and biotechnological processes to produce thought-provoking artworks, bio art combines the fields of art, biology, and biotechnology. This multidisciplinary approach prompts inquiries about morality, the natural world, and our interaction with technology. Additionally, data visualization art has arisen as a way to turn complicated data sets into understandable and aesthetically pleasing representations. Data is a medium that artists utilize to convey tales, trends, and patterns that throw light on social, political, and environmental concerns. The landscape of art has changed as a result of the use of technology into modern art, which has expanded creative expression options and challenged conventional ideas of what constitutes art. The wide range of techniques and materials available to artists today enable them to produce fascinating and interactive experiences that invite audiences to investigate, consider, and reflect on the always shifting interaction between art, technology, and society.

### LITERATURE REVIEW

**Samdanis, Marios. (2016).** The current era of rapid technological, social, and cultural change may be traced back to the third Industrial Revolution, the birth of modern information and communication technologies (ICT). Information technologies drive the digital economy and speed up the production,

distribution, and consumption of goods and services in the modern world. The creative sector has not been immune to the disruptive effects of technology. The proliferation of innovative business models and the simplification of international commercial operations made possible by advances in information and communication technology have stimulated demand in the art market. In an effort to stand out from the crowd and attract new visitors, museums are increasingly turning to digital technologies for displaying, promoting, and preserving their collections. As the value of cultural branding rises, artists in the modern digital era employ social media and experimental new mediums to create works that push the limits of both contemporary art and museum collections.

**Mihai Ionut, Rusen. (2019).** The ever-widening gap between younger student generations and art education institutions, which has resulted in the lowest levels ever of enrollment pupils in Romania's current artistic education, may simply be a modern problem that technology may help solve. Current digital technologies, such as 3D scanning and printing, augmented reality, graphic and concept design on digital support, unconventional materials, online and social media documentation, smart phones, etc., should be implemented and adapted to a competitive art education system in correlation with realities in the labor market, in our opinion. The second viewpoint focuses on conventional technologies, or those from the industrial era of the previous century that have been imaginatively dubbed as expired technologies. The visual arts, including Typewriter Art, have been around longer, and its aesthetic and cultural potential has been recognized. The whole post-industrial archive, which includes accessible relics from the era as well as plans and drawings, may be considered an object of study for visual arts. In a highly specialized field that depends heavily on abilities and skills whose traditional development is now prohibitively expensive due to limited time, money, and a global labor market that has adapted its requirements to contemporary creativity, artistic research methods allow us to democratize access to creativity, originality, and experimental knowledge.

**Codreanu, Florina. (2015).** After WWII, a lengthy period of separation, the fields of art and technology finally began to compete and inspire one other. From that point on, a merger leading to the former's replacement by the latter was inevitable. What this means is that the revolution of sociopolitical infusion into the field of art has reached its zenith, with video and digital art serving as the pinnacle of critical engagement in their means of expression as much scientific and technological progress as never before. The focus of this article is less on historical analysis and more on a discussion of the shifting role that technology has played in contemporary art from the perspective of both the artist and the audience. To further emphasize the shift from a shared cultural aesthetic to a more personal one, the emphasis is placed on the multidisciplinary and cross-disciplinary experimentation at the heart of contemporary art.

**Lopes, Fernando. (2017).** Based on a research regarding cultural sectors and their responses to media saturation, this essay was written. From there, a discussion of media, technology, and modern art is offered, focusing in particular on how the body affects how art is expressed. The purpose of this research is to prove that modern forms of communication and knowledge have played a significant role in shaping contemporary norms of morality and ethics. It also provides commentary on contemporary creative activities by highlighting examples that challenge the belief that the art market and the media have a monopoly on truth. This fundamental social and cultural shift in the Western world is made possible by the development of technology, which promotes the commercialization of culture, served as the inspiration for this article's production. A short exploration of cultural diversity and identities in the teleinformatics age is presented as a conclusion.

**Leonard, Nicholas. (2019).** The common artistic mediums and methods that are taught in art classes and that help students make art are outlined in this chapter. Three different categories—two-dimensional, three-dimensional, and new media—are used to classify the creative mediums that are being examined. Although the first two types of media could be seen as conventional ones, it's crucial to remember that modern artists actively utilize and investigate these mediums to open up new avenues for creative growth. Technology advancements that provide new tools for artists to employ in the creation of artworks have an impact on new media.

#### **CONCEPT CONTEMPORARY MURAL PAINTING**

In order to personalize our discussion of the topic of mural painting, we will first define what a mural is. This is necessary since the terms "mural painting" and "hanging paintings" are sometimes used interchangeably. The mural is described as "a work of art directly related to the wall or ceiling,

whether through direct drawing, sculpture, installation of tiles and ceramic pieces, or multiple materials and different media" in this case. powerfully in the universally understood language of art. Additionally described by Abdel Aziz et al in 2022 Another definition of mural painting is that it is "one of the branches of painting and design that is concerned with the decoration of buildings' walls and ceilings." Mural painting varies from other types of painting because of its natural relationship to architecture. Its design and color choices have the power to alter how the building's unique proportions are seen, allowing it to merge with the community. inclusion in architecture.

#### **TECHNIQUES AND MATERIALS USED IN CONTEMPORARY MURAL PAINTING**

Regarding the tools and supplies needed, there are several wall painting techniques. Oil paints, frisbees, mosaics, ceramics, and enamels are some examples of art forms that have carried aesthetic and expressive qualities for many centuries while maintaining their brightness and beauty. Additionally, he employed new modern materials for painting murals, such as: "Contemporary fresco emerged in America in 1996 in Los Angeles, where he substituted lime, sand, and water with colored cement, oxides, and glass inserts, as well as method and technique. Progress Plaster and latex paste are examples of new materials that were employed in commerce with contemporary development.

#### **FACTORS AFFECTING THE DESIGN AND IMPLEMENTATION OF CONTEMPORARY MURALS**

Many European cities, American cities, as well as many Italian villages have exterior walls decorated with frescoes since the early 1960s. The shortcomings of low-quality items and materials, such as their inability to survive harsh climatic conditions, went unnoticed by artists. Frescoes began to show indications of degradation after being exposed to the elements for decades, including the severe breakdown of binders, chalk, fractures, and discoloration of paint layers. There are a number of aspects that influence modern mural painting, including design, setting, lighting, media, and subject matter. Environmental conditions, the building's architectural style and mural artwork, and the building's purpose.

#### **ART AND TECHNOLOGY MEET IN AUGMENTED REALITY MURALS**

When projected onto solid and hard surfaces, two-dimensional pictures and murals provide a wealth of information about shape and substance, ushering in a period of "aesthetic modernity" marked by a rejection of classical aesthetics. The nature, organization, and significance of creative creativity were all impacted by the dramatic uptick in scientific activity that characterized the 20th century. Therefore, scientists started associating themselves with creative types. In addition, because of art's place in and influence on modern society, artists have incorporated all available technological knowledge into their artistic murals throughout the history of the visual arts. As a result of this shift, and the accompanying technical advancement in multimedia of different materials and techniques, murals emerged as a prominent form of expression in postmodern art.

Works like Marcos Lernr's digital mural from 2007 in Munich, Germany, show the influence of a wide range of postmodern aesthetic styles, including interactive art. The luminous mural was made using digital tools. Similarly, in the digital environment, the design concept emerges, typically from ideas presented through dynamic practical means; the relationship between tactical computer manipulation and the development of the digital form can be explored in mural art; and the ability to select materials, components, and structures for the digital form is especially important in light of the current state of the art and the limitations of traditional manufacturing processes. The design vocabulary for murals is chosen based on how well it complements the subject matter and significance of the location, and the approaches to using Because it is part of the overall design rather than a separate element, its language shifts in meaning depending on its context in the composition.

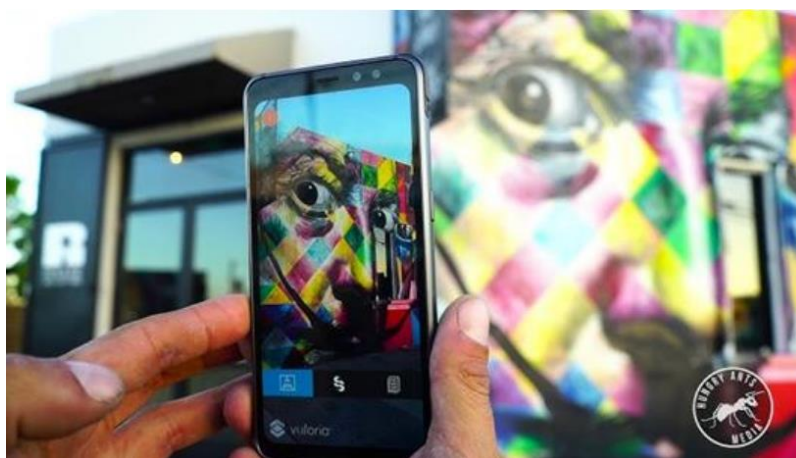
A new category of technical application known as "Augmented Reality" has only lately arisen as a consequence of digital advancement; this category blends actuality with digital data and visuals; During this stage of its evolution, the artwork could be seen in one of two ways: with the naked eye as normal, or using "augmented reality" programs developed by the artist in tandem with a software firm. The art of mural painting was affected by the recent surge in technology. The human eye interprets a mural as a series of horizontal bands of color, but technology has long sought to reconstruct the original vision. To achieve this, the receiver must install a specialized software created by the artist in conjunction with a company in order for any accompanying visual or aural effects to work. The mural begins recording as soon as the receiver activates the camera.

The mural now transitions from 2D to 3D realism as a result of these effects, serving as a forerunner to an intriguing technical experience. Nabil in 2022; Soliman in 2019. It is important to recognize that there are many precedents for such murals, including examples that fuse color with cutting-edge technological applications, reality and fantasy, and reality and fantasy; this effectively generates a style of art that dismantles the structural barriers that label street art as a criminal act and conveys the legitimacy of the street to the general public. The developers of these programs are hoping that their efforts may aid in the production of a groundbreaking piece of art. As seen in Figure (1), many murals were implemented using Augmented Reality (AR) technology and in partnership with the "Digital Artist" in the Walls Wynwood-Basel Art complex in Miami, Florida, USA, demonstrating the influence of plastic art on applications and technology.



**Figure 1: Wynwood Walls, Art Basel, Miami, Florida, 2012.**

As part of a project dubbed Augmented Reality, South Florida-based artist Lewis Vale has painted murals all throughout Miami. Viewers may examine a 3D replica of his artwork and experience augmented reality with the Muse app. Murals can be viewed in their traditional form as a collection of colors and lines on the wall, or in a new way by using digital technology and one of the specialized applications provided by the artist in collaboration with a specialized sound effects company, as shown in Figure (2). It's possible to think of a mural as just a bunch of paint and lines on the wall, but modern technology has made it possible to get back this original picture. The mural's two-dimensionality is transformed into three-dimensionality and heightened realism when the spectator downloads one of the unique programs the artist provides in partnership with a company to give visual or auditory effects for the work.



**Figure 2: Eduardo Kobra's Art Salvador Dali mural in Miami, Florida.**

**Research in the Arts as it Relates to Modern Art Education.**

Universities of contemporary art still have little experience with artistic research. The ultimate objective is to bridge the gap between scientific inquiry and creative endeavors at universities everywhere. We investigate the hypothesis that technology, via the implementation, development, and mixing of many new technologies within the framework of contemporary visual arts and culture, may eventually narrow this gap. By definition, artistic research is multidisciplinary, engaging in cross-sections, changing how people see cultural phenomena, and establishing a modern university discipline with a practice-based and practice-driven operating model for contemporary culture.

### **Research Strategies in the Visual Arts as Practiced Today.**

This collection of materials, which includes drawings, pictures, films, audiotapes, texts, study diaries, and other artifacts, serves as a public record of the phenomena that is accessible to anybody doing research on the subjects. As insiders, we are familiar with the end product, the technique of transposition, the artist's history, and the underlying notions, allowing us to explore, research, create, and suggest alternate perspectives, explanations, and opinions concerning the issues studied. Whether it's old-school analogue, forward-thinking postmodern, or state-of-the-art digital and current, behind every piece of art, every idea, every concept, and every setting lie the technology of thing. Research methodologies such as case studies, media analysis, practice-based research, and art practice as research, and creative research are all examples of direct methods of artistic research; they rely on existing written and visual documentation of artworks, creators, ideas, and contexts to draw conclusions. This research tries to clarify how the fundamental force behind the progress of art education at the start of this century might be artistic transposition technologies arising from classical, postmodern, and current technological applications.

### **The Typewriter Art.**

The typewriter is the perfect representation in modern creative education of the virtues of a historic technology that has been entirely replaced but still has a lot to offer in terms of current art, including artistic exploration. In an extreme ideological setting, the typewriter art is also a sign for freedom of speech, which is fascinating given the object's past ideological standing, particularly behind the Iron Curtain. The truth is that the typewriter was considered a hazardous ideological item since it might be used as a weapon and disseminate unfettered personal views, despite the reality that it is important for every growing country. As a consequence, forensic type analysis treats all of its characteristics, especially the letters and other indicators, as if they were fingerprints. Therefore, the typewriter, like a handgun, had to be registered with the Police/People's Militia during the communist period. A forensic ballistics test, for example, may require that a typewriter's whole character set be preserved on a document page for later analysis.

### **The Voodoo Artifacts**

The renowned Arbogast collection of voodoo artifacts (ArtStack, n.d.) inspired the inclusion of this subject in the article since it deviates significantly from what one would anticipate from a private collection of this kind, even one that has been institutionalized as a museum. Objects in the Arbogast collection are contemporary and well-made; they were amassed over the course of three decades in areas where voodoo is still practiced, or they are modern liturgical implements. The presentation catalog's scientific presentation and absolute authenticity of the collection makes it a possible milestone in the interdisciplinary area that includes anthropology, art, and multiculturalism. Even if the majority of them comprise modern premade elements like metal objects, glass bottles, threads, textile remnants, etc., it seems that voodoo artifacts are not technology devices. But the manufacturing process, which overlaps or is even associated with religious ritual, transforms into and may be seen as a highly spiritualized technology of transposition—a type of technological combination of religion, anthropology, psychology, and spirituality. In this approach, the apparent formal comparisons between modern and contemporary sculpture and the artworks of Joseph Beuys, art brut, and outsider art are completely supported.

### **The state of experimentation in contemporary visual arts' use of traditional technology. Synthesis of the Postmodern, Cultural Context, and Present-Day Perception**

In the context of modern visual arts, technology can be seen from at least two different angles: foremost, cutting-edge transposition tools that have been lifted wholesale from media or science, and second, traditional industrial technologies, which have long since been replaced but were extensively studied during the 19th and 20th centuries. All of these technologies, together with all of their

supporting materials (blueprints, patents, images, videos, artifacts, etc.), have previously been cataloged and examined in specific archives and collections. As a result, they serve as an ongoing cultural resource for all forms of modern art, particularly those that cross academic boundaries.

This book, co-published by the National Archives of London and the respected Thames & Hudson publishing business, is a shining illustration of the triumph of postmodern cultural vision over dated technology. The book is a creative tome that draws on historic pictures of the sign from the international trading system that birthed the contemporary world. What interests readers about this book is the technical brilliance of a structure that has been used as a narrative and symbolic landmark in the public imagination and in works of art from the 19th and 20th centuries. All the cutting-edge technology of the day is here, from etched plans to optical building schemes of lights and lenses.

## CONCLUSION

Murals in the modern age come in a wide variety of styles, including figurative, sculptural, and ceramic murals. One of the fields of painting and design that is focused with enhancing the walls and ceilings of buildings is modern mural art. The materials and methods used to create murals also vary widely because to the great diversity of architectural styles. As a result, it is simpler to see how technology and art are intertwined and how much an artist may alter a process. We can see that the murals created by the artist, which helped to highlight this connection, and the viewer's understanding of the various works both benefited from the use of augmented reality. Mural painting now has new potential as a result. More than 20 years have passed since the movement began to reform, adapt, and develop art education toward the institutional culture of universities, at least in the European area. The main argument, however, is for adapting practical skill teaching and learning to modern realities by utilizing the strategies and case studies discussed above in this article.

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