

The Exploration of Interdisciplinary Art Practice: Where Artists Blur the Lines Between Science and Art

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Abstract

This research paper explores interdisciplinary art practice, focusing on how artists find new avenues for experimentation and technique by bridging the gap between science and art. By examining new ideas that enhance creative impulses, this paper investigates recent advancements in the artistic field. Through historical analysis and contemporary examples, it delves into the changing landscapes and challenges of artistic freedom. Ultimately, by integrating intellectual exploration with scientific principles, artists establish an entirely new perspective on creativity. The core focus of this paper is to highlight this powerful amalgamation of art and technology.

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1. Introduction

Art has a role to provide a state of freedom. Modern art has paralysed and revived the contemporary art. Interdisciplinary art is a new phase of art which covers all the stages of art from prehistory to modern art. But the question is that how the interdisciplinary art merges art and science together? How does it integrate diverse range of elements together?

The research methodology for this paper is qualitative in nature. It is based on the interpretations of the artworks and aesthetic qualities. The observation and analysis of data related to interdisciplinary art is the main target of the paper. It helps to distinguish the qualities of the multidisciplinary art. It is wholly based on the qualitative aspects, because it is associated with multiple perspectives of artistic expressions. The dynamic study of interdisciplinary art is a combination of music, painting, sculpture, drama, literature, technology and many. Interdisciplinary art is very complex in nature as there are so many elements into it. It is a blend of techniques and creativity. Qualitative research is the great way to know the interpretations of intricate patterns of interdisciplinary art. There are some points which help to define as to, why qualitative research is appropriate for this topic?

It helps to understand the creativity of the artworks. The exploration of interdisciplinary art is based on the observation of the art itself. It is a platform which helps to know about the language of interdisciplinary artists. This is the study about the themes and mediums which are used by artists. Numbers of experiments and innovative practices are linked with this unique form of art. The flexible nature of qualitative research tends to explore the interdisciplinary art. This is an inquiry which reflects the importance of interdisciplinary art in this contemporary world. The data is collected through the articles, books and some of the photographs from recent exhibitions. In this process the data is gathered in form of the documents and images analysis. The catalogues and analysis of artworks also plays a crucial for the purpose of data collection.

Qualitative research is a best way to explore and understand the topic. It is all about the subjective experiences which are linked with perceptions and visual interpretations. The content analysis and observation of the data helps to capture the artistic expressions of interdisciplinary art. As visual arts deals with the aesthetic flavour of emotions and expressions, the qualitative research leads to conclusion. This investigation reveals new trends of art which is multidisciplinary. This paper includes the case studies of the famous artists whose art is the product of science and art both. The information about intersection of art and science is also gathered from documentaries and

online talks. It is good and convenient to access online sources for the collection of the data. With the combination of these methods and sources I am able to form a wide perspective of interdisciplinary art.

2. Study Area

“The most beautiful thing we can experience is the mysterious. It is the source of all true art and science” by Albert Einstein

To create imaginative and mesmerizing experiences artists look forward to the interdisciplinary art. As the above quote said, mystery exists between science and art. So artists blend their thoughts with the texture of science and art. This area of study is the interdisciplinary form of art which blends multiple mediums in synchronization. These days artists fuse together art and technology to create something different. The vibrancy of mediums in the art world makes it more innovative and mysterious. Wide range of art forms are performing art, digital, music, dance, poetry, literature etc. It all depends on the structure of individual idea. Different creative fields are associated with it such as music, technology, literature, visual arts etc. Diverse perspectives of creative fields joined together, forms a branch of interdisciplinary art.

The biggest role of interdisciplinary art is to break the challenges in terms of traditional art. Various perspectives in art, are opening up new platforms and opportunities for artists. The exploration of interdisciplinary art encourages the artists in a dynamic way. There is an encouragement and freedom in the interpretation of expressions and spectrum of creativity interconnects artistic perspectives together. Interdisciplinary art is an arrangement of intricate themes and innovative ideas. The biggest achievement of interdisciplinary art is, the artistic exploration and old techniques of art transformed into new expression of art (Wilson 45). Art vocabulary changes its trends in this modern world and goes through various transitional phases and adapts in accordance with modern artistic practices (Malina 112). Every Artist wants to develop his own individual and unique style. Various conventional artists left their legacy in the form of themes, mediums, colours and sustainability.

Leonardo da Vinci once said To develop a complete mind: Study the science of art; Study the art of science. Learn how to see. Realize that everything connects to everything else.

From this quote it is sure that science and art are the two aspects of the same coin. Leonardo himself, was a great artist as well as scientist. The most significant role of

interdisciplinary art is the exploration and emergence of the new disciplines from different directions. The old traditional ways of art transformed itself into the modern visual reality of creativity (Wands 24). In so many ways, artists try to create an impact and connect with the viewers, only to create an everlasting imprint and profound experiences in their minds. It enhances their role in society as an innovator. Colours and technology, when fused together breaks the old practices and already established systems of art and gives it more refined and recreated touch, without offending and changing its core aspects. Traditional art forms are not dying but artists are letting them to merge with other forms of art. This gives new dimension to technology and art. When traditional art is challenged with this new approach of art everything revives and refines. This art form sheds light on the science fields such as physics, biology, chemistry etc. Artists blend them into artistic expressions. The curious nature of artist helps them to explore more, think more and create more. Interdisciplinary art brings new possibilities for the artists where science and art intermingles together.

The history of interdisciplinary is broad and vast. It is a reflection of science and art together. In ancient times the use of science and art were done through collaborative efforts and participation. Egypt is famous for its pyramids. The structure of the pyramids was designed with an understanding of science and art together. The architecture of ancient civilizations, whether it is Indus Valley Civilization or Egyptian civilization, is a perfect example of fusion of science and art together. When photography came into existence in nineteenth century, it was a new revolution in the world of science and art (Benjamin 212).

New possibilities emerged in the realm of science and art. The invention of camera brought a new perspective and opportunity for artists to give them a new artistic experience to cherish. This creates a good link between science and art. Photography is a good example of technology and artistic expressions mixed together. Later on, artists adopted this technology as a medium to enhance their creativity. They try to blur the lines between art and science. It is through new approach of art, which is called as interdisciplinary art in which Artists, scientists, engineers collaborates to form variety of ideas, creations, artistic intentions and expressions (Snow 18). They push the boundaries of art and technology and take it further. Interdisciplinary art makes a way for the artists to explore more and this freedom allows artists to merge their artistic expressions with the science. Both disciplines are complimentary to each other and one is nothing without other. In contemporary art world, there is no separation possible between science and art. Some of the examples of interdisciplinary art are: Digital art, Video

installations, conceptual art, and performing art etc.

Digital art operates on technology accompanied with digital drawings, illustrations, videos and mix media (Paul 53). It is a part of one of the contemporary art movements and Artists express them through experimental mediums of AI. The spectrum of digital art is boundless and limitless. In this way digital art opens a new direction for the artists. Video installation is very common art practice these days. It is the mixture of technology and installation (Rush 14). Audiences are also the part of the art installations. The main element for this art form is space, Art Galleries and museums provide surroundings to execute the plan. One of the finest examples of interdisciplinary artist in India is Nalini Malani. She narrates the stories from mythologies and nationalism through her installations. Jitish Kallat, Subodh Gupta, Sudarshan Shetty, Shilpa Gupta, Bharti Kher, Anita Dube, Pushpamala etc. these are all interdisciplinary artists of India. They use new ideas with science and art together. Every work of the artists defines new artistic expressions and gives it a different meaning. Multidimensional installations of contemporary artists act as a catalyst for the encouragement of interdisciplinary art.

3. Discussion

The interdisciplinary art practice is widespread all over the world. It depends on the vision of the artists how much they want to explore. In this 21st century, contemporary art is very common in most of the exhibitions and the museums. India art fair is a major example of the contemporary art and the multimedia art. Science and art are the basic ingredients of the art these days. Exploration of the mediums and then executing with artistic approach is the unique version of art. There is no limitation in the mediums in the market. Indian artists are exploring their thoughts with their unique philosophies in a balanced manner. One of the Indian artist who I mentioned above is Nalini Malani.

3.1 Nalini Malani

Her works are based on the exploration of science and art. Multidimensional installations in the museums are displayed in so many famous museums and galleries. Her approach is unique and makes her work different from other (Meskimmon 74). One of her work, Mother India: Transaction in the construction of pain is a video installation. She got inspired from one of the essay about the pain of women. She tried to depict the women as a metaphor. It is a fifteen min. long video which involves viewers as a part of work. She displayed the women body in her work which translates the words of women. This is

about the war between the body and mind. The violence which was done during partition of India Pakistan and 2002 Gujarat riots is visible through so many elements of the video installation (Rajadhyaksha 58). The whole video is divided into the fragments of the sounds. There are the echoes of sounds which cannot easily predict. Nalini got inspired from the essay by Veena Das who is a renowned anthropologist. Nalinis technique is defined in the form of reverse painting combined with video, sounds and motion pictures. Multiple layers of texts and images are the part of her works. Every element brings a collective story of the past and present. The images moves the walls and creates ambience of multifaceted experience. Her work is the visual interpretation of science and art together.

3.2 Jitish Kallat

Jitish Kallats work Antumbra also gives a glimpse of the interdisciplinary art. It was displayed in India Art Fair 2024. This is a video installation which is revolves around science and art. This is an innovative and mesmerizing installation which depicts the life of South Africas first black president, Nelson Mandela. Video, sounds, lights, motion pictures creates a virtual reality. Stories and calculations done by Nelson Mandela during prison depicted in numerical figures (Kallat and Careri 102). Artist tried to depict his complex life and struggles through the video installation. Multiple pages of calendars with the circle of night and day presented by him in a digital form.

In this way new techniques and technologies change the scenario of the art world and assisted artists with new tools and opportunities, provided by science and technology. There is an expansion of ideas with the help of technology. The impression of science and art pushes the creative expressions of the artists. They utilize scientific principles and innovative processes to bring newness in art. The era of interdisciplinary art is the biggest challenge to the traditional art forms. Artists experiments with the new ideas. The contribution of interdisciplinary art can be seen in a broader sense. It includes astronomy, botany, microbiology, mathematics, physics and many more. This is the advancement and accomplishment of science and art together.

4. Conclusion

The idea of this paper sheds light on the interdisciplinary art and its two main aspects, art and science. It covers a connection and conclusion between science and art. This research paper frames an idea and emphasizes that, interdisciplinary art is important for the creative developers

of the society. Through the studies of some artworks I have come to a realization that the mixture of science and art brings a major transformation and impacts the world around us. This is a revolution brought up by scientific developments happened and artistic languages adopted. Interdisciplinary art enhances and refines the critical thinking of the artists and makes them more curious and connected to nature and universe. It makes them question the hidden perspectives of science and art. The void between art and science has been abridged with the existence of interdisciplinary art and the gap has been removed. It serves as a highlighted ingredient in the art vocabulary. Science and art provides a wider perspective and dimension for the artists to enable them understand things better with clarity and creativity. This paper underlines the key features and significance of knowledge, creativity and technology. Interdisciplinary art paves a path for artists to give them a sense of ultimate creative freedom and gives them potential and ability to create something that has never been created before.

Authorship contribution

Malti Sharma: Conducted the visual and contextual analysis of the mural; conceptualized the structure of the paper; prepared the full draft; reviewed art-historical sources; and ensured adherence to academic and formatting guidelines.

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Conflict of interest

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Similarity Index

I hereby confirm that there is less than 10% Plagiarism was achieved in this case study.

Data availability statement

All information used in the study is derived from publicly available art-historical literature and direct observations.

Declaration

The author declares that this paper is an original work and has not been published or submitted elsewhere. All external sources have been properly cited.

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