

Research on Influence of Digital Media Works on Painting Work

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Abstract. Thanks to the technological revolution, mankind has entered the interactive era. Under the trend of digitalisation, the application of AI robots, meta-universe, ChatGPT, NFT, VR, virtual space and other technologies in creation, the combination of traditional painting and digital media technology not only changes the form of expression of the paintings themselves, but also guides the artist's way of thinking and semantic output in the act of creation, making the artist's The way of expression, media materials, creative stance and the state of the viewer have all undergone significant changes. What many artworks nowadays pursue is not the effect of the picture in the general sense, but the programme and process of the formation of the work. From this point of view, the aesthetic experience focuses on the process of contact between the viewer and the artwork, and the viewer's participation becomes more and more important in reflecting the value of the artwork. With the help of case studies, this article develops from three major points, namely, creative thinking, creative process and expression of works, to analyse the qualities of contemporary digital media art creation, focusing on the role of cultural aesthetics and way of thinking for artists and audiences. Finally, through the self-analysis and summary of the author's works combined with digital media technology.

Keywords: Digital Media; Drawing; Participatory; Interactive.

1. Introduction

With the widespread popularity of digital media technology, guess the art from the postmodern to come, after the baptism of digital media art means that human art has begun to go to the "Post human science and technology. nowadays, digital media technology under the application software can not only be used to optimise daily life viewing experience, but also for the Art creators are provided with new forms of creative expression, with an endless variety of media, and with the intervention of a large number of new materials and ideas, making art and science intertwine to add a new face to us. We can't ignore the influence of digital media art and technology on artists when we explore the way of the current painting creation process. Whether it is the observation, experience, accumulation of life to the discovery of beauty, it influences the development of the aesthetic mood from different perspectives.

In this environment, what is the current phenomenon of "painting", the traditional medium of expression? Today's digital era breaks the status of space and time, and presents the qualities of virtual, regeneration, connectivity and popularisation. When traditional painting collides with digital technology, what interesting phenomena will happen to the artworks? How will the creative style, content and aesthetics of paintings change? How to understand this new way of viewing from the perspective of the times? Starting from the perspective of new era disciplines and analysing the latest creative achievements from an interdisciplinary point of view, it helps us to grasp the essence and significance of this artistic phenomenon more comprehensively, translate the phenomenon to form a more three-dimensional and deeper understanding, and to a certain extent, supplement the status and significance of the influence of contemporary digital media art on paintings, and at the same time, open up the horizon of the discipline, and explore the aesthetic concepts and aesthetics under the combination of art and science and technology in the present day. At the same time, it expands the horizon of the discipline and explores the contemporary aesthetic concepts and aesthetics under the combination of art and technology in a timely manner, so as to provide reference for future research and artistic creation in related disciplines.

2. Digital Media Arts and Technology

2.1 The concept of digital media art

The concept of "media" evolved from the Latin word "medium", which translates into Chinese as medium. In layman's terms, a medium is simply a tool by which information is transmitted from a source to an audience. It can also be understood as the way in which information is transmitted from the source to the recipient, such as the Internet. In the ancient times, "the rule of the rope" has appeared in the way of information recording, with the emergence of the written word media can record and transmit information more rich and diverse, the form is also more complex, for the space and time state of the limitations are becoming smaller and smaller. With the expansion of the function of communication media, the expression of art works can be enriched, the media has not only played a role in the carrier, more often than not, it becomes a technical means to influence the new style of art creation.

In contemporary times, digital media art is not a single existence, but covers multiple disciplines, including network technology, communication technology, digital audio processing technology and media interaction and so on. If a work of art wants to be disseminated, the broken information must first be recombined, and the text, image and audio must be processed through computer technology and communication technology, so that a work of art can be appreciated and enter people's view, which is a kind of application technology with both operation and practice.

2.2 Characteristics of digital media art

Interactivity determines that it is not only a carrier, but also a means of feeling, and the viewer is able to feel it through audio, visual, touch, smell and other means, which can provide the viewer and the artist with a variety of superior rights of autonomy and a sense of control. The viewers of digital media art works will participate in the creation of art, and also directly affect the final effect of the art works, the interactivity of output and input, which is incomparable to traditional painting.

Computers are often used as a means of creation and display. Unlike traditional easel painting, the use of tools plays a crucial role in the creation of digital media art. As mentioned in the previous section, digital media art covers a number of disciplines, such as video games and music, which cannot be disseminated without the use of electronic digital media, as well as film and video and digital images, which cannot be separated from computers.

The expression of digital media art is fundamentally "multimedia" and "hypermedia". For example, the tools and effects of easel painting (including but not limited to Chinese ink painting, oil painting, woodcutting, printmaking, etc.) can be imitated through digital painting. The artist can even browse or modify the existing painting process according to the "record". It combines traditional painting and photographic post-processing forms of expression, expanding the human imagination and creating "virtual worlds".

Digital media art is an emerging art that is constantly expanding its audience. Not only does it allow for a wide variety of subjects to be expressed, but it also offers a wide range of exhibition space and utilises a comprehensive range of technological tools, unlike the more limited ones.

2.3 Value embodiment of digital media art

The marriage of art and digital media technologies has given to artworks the qualities of intertemporal, inclusive and shared communication, which is characteristic of a democratised dialogue. Within this, multimedia information such as audio and film are transformed into digital resources of a public nature.

Digital media technology as a virtual technology in the network, its existence makes a lot of impossible things become possible, the artist can use it to put their own mind wild ideas, or temporarily in real life can not be completed the whimsical ideas in the network world can be presented.

Digital media technology can combine text, graphics, audio, etc. to create multi-element and comprehensive digital art works. The use of digital media technology can break the monotonous pattern of art works, produce a variety of forms of transformation, and at the same time closer to the current state of life, thus strengthening the interaction between art and the audience, forming a new form of expression.

3. Specific ways of using digital media technology in contemporary painting creation

Nowadays, there are various forms of art creation, as the main body of creation, the artist embodies all kinds of complex emotions and feelings into the art works and expresses them through the language of art, so the audience can have a very different view of the psychological reaction of the work, as well as the different expressive contents and creative concepts make the work have multi-layered connotations.

3.1 Intervention of digital media technology in the creative thinking of painting

The connection function and interactivity in new media technology enhance the interactive thinking of works. In the traditional easel painting process, the creative thinking stage focuses only on the output and the carrier of expression. Artists can overcome the barriers of space and time in the creative process by borrowing new media technology to enhance the effect of interactive communication.

Taking "Random Walker. Random Walker (Figure 1), artist Liu sings created this work as an interactive installation of two-way screens. The viewer is confronted with a set of two-way screens in the space, and when they are on one side of the installation, a portrait of the viewer on the other side will appear on the screen, and vice versa. In this way, different viewing subjects coincidentally come together, a process that is akin to the reflection that occurs when one encounters a stranger while looking at oneself, and a small probability of interpersonal encounters that result in a heartfelt smile. Digital media art as a virtual and coded state also shows a unique interactive reflection, this interactive technical means of intervention also makes the passive experience of the individual deepened into an active performer, on the one hand, it can be very good to enhance the interest of the audience, but also to a certain extent extends the meaning of the work of leisure. The artist's creative process is designed to incorporate digital programming to reflect the virtual interaction, designing interactive modes to make their works closer to the programme, deepening the connotation and language of the works, and obtaining joy and aesthetic pleasure in the process of "interactive behaviour".



Figure 1: Liu Sing, Random Rambler. Like a Shadow.

Taking as a reference the work of Alessandro Bavari (internationally renowned digital media artist, Italian), one can perceive in this work strange experiences that seem to be real or dreamlike, in his

integration of various video resources, merged and edited. They resemble a vision full of contradictions and tensions. It can be said that this is to a certain extent deepening and even transcending the traditional creative way of photography to capture and repeat the reality, on the other hand, it is integrating the life activities of human groups, including every kind of emotion, thinking, etc., into the simple pastel, so this kind of created virtual world is also the magical characteristics of digital media art.

3.2 Digital media technology guides and inspires the creative process of drawing and painting

Before the intervention of digital media technology in the process of painting creation, the traditional way of composition, can only rely on the manuscript, huge works of art composition time-consuming and labour-intensive. With digital media technology, the screen-to-point creation method can help artists to improve efficiency and accuracy when drawing large works, and the convenience of PS drawing software can help artists to make different choices of images in advance, as well as adding some effects that are beyond the reality of change.

David Hockney, for example, is the 'godfather of British art', recognised by the media as 'one of the world's most popular living painters', has produced some of the most iconic and distinctive images of the last fifty years and, in close collaboration with Martin Gayford, has analysed in philosophical terms the deeper questions of how images have been produced and created throughout history. In close collaboration with Martin Gayford (art critic), he analyses in a philosophical perspective the deeper questions of how images have been produced and created throughout history. The products of modern electronic technology, such as fax machines and laser photocopiers, computers and even the newest Apple devices, are used extensively and actively in his work. His first paintings with an iPad (Figure 11), after which he exclaimed, "If Van Gogh had had an iPad, he would have liked it too", show that the influence of digital media technology on the artist's creative process is very important.



Figure 2: David Hockney, iPad board drawing

3.3 Forms of expression of paintings under digital media technology

Under the digital media technology, any medium can become the carrier of works anytime and anywhere. Compared with traditional art, digital media art will be relatively full expression of the artist's thoughts, and the form of creation is more rich and convenient, and can intuitively show the meaning of their works.

It enriches the art form and broadens the forms of expression. In digital media art, collage and combination are the main forms of expression, and the creation form of replacing the expression of emotional symbols or artistic concepts through the direct appropriation of media (ready-made products) in works can be traced back to the earliest times to the emotional symbols of Picasso and Braque as well as the appropriation of ready-made products of the Dadaists, and was later gradually formed through the practice of Pop artists. For example, Robert Rauschenberg's Symbols (Figure 3) selected representative images of the time, such as JFK, Martin Luther King, Vietnam soldiers, astronauts who landed on the moon, and so on.

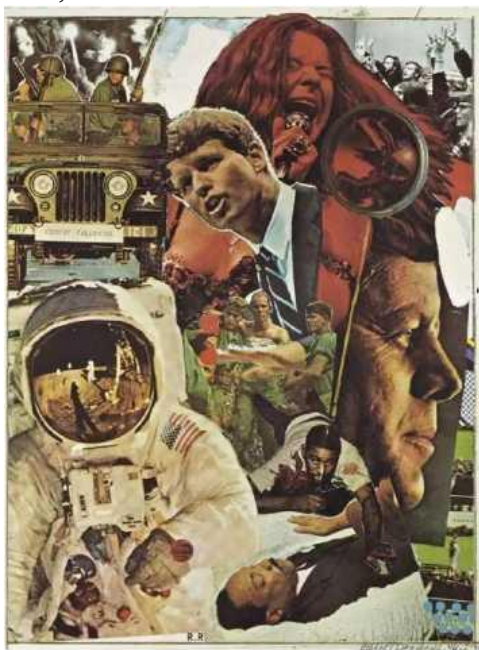


Figure 3: From Artron.com [http://www . artron. Net](http://www.artron.net).

Traditional art has revealed certain limitations in modern society, for example, art works that need to express unreal space cannot be realised, but with digital media technology, it can be easily realised with the use of science and technology. In film art, the relationship between reality and illusion, or space and time, can be realised through computer programming. Digital media breaks the limited forms of expression in the past, and the movement of modern technology combines illusory space, characters and real events, creating an experience for the audience that is different from that which is experienced only by the viewer.

Increase the efficiency of art creation. Art creation requires a long process of thinking and practice, such as Andy Warhol, who has advocated fashionable and popular print art, needs digital media technology to shorten the work cycle, as well as shorten the manpower, greatly reducing the cost and time.

Increasing the interactivity of art communication. In the past, art appreciation can only go to museums, art galleries, or a small number of books to obtain, very limited, digital media technology to break this barrier, "interactive" forms of artistic expression so that the viewer and the artwork direct communication, experience. Through digital technology to achieve virtual display of two-way communication, accelerate the progress of modern art dissemination.

Open up the boundaries of art. Digital media technology effectively combines the conceptual form to be conveyed with electronic information technology, Internet technology, multimedia technology, etc., that is to say, it improves the aesthetic experience of art and also promotes the integration of art and technology. The application of digital media technology breaks the boundaries between different art disciplines, and this cross-border art form combines the advantages of various art forms, creating a diversified new art form to meet people's spiritual needs in modern society.

4. Marks of the times created by digital media and art together

Art in the digital age has broken the limitations of space and time in its dissemination, and people are able to watch online exhibitions anytime and anywhere, which improves their aesthetic ability. The role of the viewer occupies an important role in contemporary artworks, and at the same time becomes a part of the artworks.

The current technological progress also promotes the development of art materials, from the traditional cloth, wood panels, Dibond, acrylic, digital boards, and even a virtual picture, from the existence of the material to the stage of evolution. The emergence of these materials is an irreplaceable sign of the times for both art creation and aesthetics. The advancement of media and the improvement of aesthetics simultaneously break through the limitations of people's concept of space and time for art.

4.1 Diversity of painting viewing

The form of a painting affects the way it is viewed, and the way it is viewed reflects the outlook of society. While traditional art works are mainly read visually, art works under digital media technology allow people to immerse themselves in and experience art works in all aspects.

Ouyang Youquan writes in his book *The Post-Aesthetic Paradigm of Network Art*: "The artworks created by the Internet are such a kind of visual consumer product of virtual reality. Network art is like a kind of artistic bioengineering, which disassembles all real objects into fragmented codes, then uses digital technology to combine these codes into virtual objects on the surface, and then replaces the reality of the objects with real codes, and replaces the aesthetic symbols made by combining and collaging them with the aesthetics of art itself."

In addition, not to mention a kind of VR art, the French artist Anna (Anna), with mixed reality art to explore more ways of art, the use of VR technology to paint, the viewer also walked into the virtual picture, changed only from a single angle to appreciate, increase the real sense of the picture. Marshmallow Laser Feast (MLF), a London based experimental design team, created the virtual reality project *Animal Perspectives* through VR technology, stepping out of the human-centred vision and into the perspectives and sensory worlds of mosquitoes, dragonflies, frogs, and owls, using scientific facts as the backdrop to the environmental images scanned by drones and optical radar imaging in the field.

With the 360-degree VR device, the viewer can observe the environment, photosynthesis of plants, and the movement of animals, combined with the haptic experience of the wearable device, and feel the forest in the eyes of the animals.

4.2 Expansion of painting media

The formation of excellent paintings can not be separated from the establishment of the material form, the traditional way of painting, such as painting tools need to rely on tools with traceability and dyeing, etc., digital technology advances in a large number of drawing apps, procreate, programming programmes, sensory pens, in one way or another alternative to the traditional drawings of the disadvantages of the tools, which also affects the way the artist creates the display, such as the AnimVR, the people can be created at will in the software layer, arbitrary arrangement of any composition, etc. can be virtual display through the VR, the operation is simple and full of fun, like some software also supports multiple artists to create at the same time.

From the change of painting tools to the virtual presentation, a variety of materials can help the artist to choose more suitable tools to paint works, a variety of forms to break through the monotony of materials and forms in the traditional painting, the progress of science and technology for the artist to open up the limitations of the added many changes.

4.3 Freedom of the paintings

In the current art environment, the interpretation of art is blurred and everything in life is considered art. In the early 21st century, Cai Guo-Qiang used fireworks for his paintings and performances, and the artist and his team made use of technological means to calculate the power, colour and shape of the fireworks in advance to create works of art with traces of fireworks.

Such as NFT art works, secondary market paintings are mainly in kind to auction, when the emergence of NFT also break the milestone of physical works trading. In recent times in the live broadcast platform, live will be the original physical works of art to burn, only to retain the electronic works to become the only works, this way of operation, demonstrated the physical works into "non-homogenised tokens (NFT)" virtual assets.

5. Impact of digital media technologies on authors

Analysing the influence of digital media technology on my creation, it started from my personal interest in photography, as a kind of self-expression to express my favourite objects and landscapes, and even became a part of my own creation. However, the traditional image creation process from framing, composition, shutter to printing is not enough to further deepen the expression of my personal concepts. On the one hand, the purely two-dimensional flat space sacrifices the ability to create installations or other artefacts, and on the other hand, the two-dimensional flat space is not enough for me.

The interactive nature of art in three-dimensional space is, to a certain extent, a unidirectional interpretation. On the other hand, the content covered by the plane discourse is relatively limited and fixed, and the viewers' and creators' cognition and aesthetic thinking about the works can easily stay on the surface semantic meaning of the images themselves, which closes or narrows the expression of the authors' creative concepts.

Based on this deep thinking, I began to experiment with re-creation on photographs, not realising at the time that I had already been influenced by digital media technology, and not knowing what kind of art era I was in, let alone the fascination of the digital age.

Human study" (Figure 4) is also one of the works seen, can not be ignored is that the work is very intuitive to see the phenomenon of art works in the environment of artificial intelligence, the artificial intelligence at the same time surprised to think about the current environment is surrounded by what? These digital technologies, such as Meitu, procreate, vr, virtual reproduction, etc. are indispensable in life and a technological phenomenon that promotes social and cultural progress. And these things are also affecting my lifestyle, thinking, concepts and so on all the time. When a large number of science and technology technologies enter the life under the digital era, the word painting has a new definition at present, breaking through the traditional materials, breaking the concept of time and space, so that the works can really interact with people, breaking the boundaries of materials.



Figure 4: Both photographs were taken by the author at the Mori Art Museum, Tokyo, Japan.

The inspiration for the creation of "Home" comes from a child's handwriting, in which messy lines, uneven sized gaps, occasionally a few wooden people are arranged in the painting, a light bulb as big as a house, crooked staircases, and some large horizontal lines cut the picture horizontally and horizontally, which gives a sense of extrusion, but in the crowded lines or rooms, the distance between people is shortened, and the warm rhythm of the crowdedness is experienced. This kind of original painting brings the healing power to the author and others, which is also the embodiment of artistic value. The childish graphics do not have the traces of many years of artistic training and shaping, but are closer to a pure natural state of art itself, and also reflect the emotional expression of the output of humanistic care in art.

The author has been sensitive to scholars who study original paintings and children's paintings since university. Part of the reason has to do with my own growing up experience, traditional art education has instilled in me the concept of "like", when I was guided by my teachers to learn about the history of art, to touch modern art, and to update my world view of "beauty", I realised that real art will grow with each other, will promote the change of my values and world view, and will slowly move towards the "human". I realised that real art can grow with each other, and promote the change of my own values and worldview, and slowly progress towards "human being".

5.2 Expression of ideas for the creation of the work "Home"

(Figure 5), firstly, based on the original paintings, analysing and grasping the characteristics of the images in the works, extracting the most warm and purely artistic images created by the children, reorganising the compositions of the images from different sources and authors, retaining the detailed images of the house, furniture and other details of the paintings, and interspersing these detailed images with the larger compositions to create a warm and loving home re-created by the children.

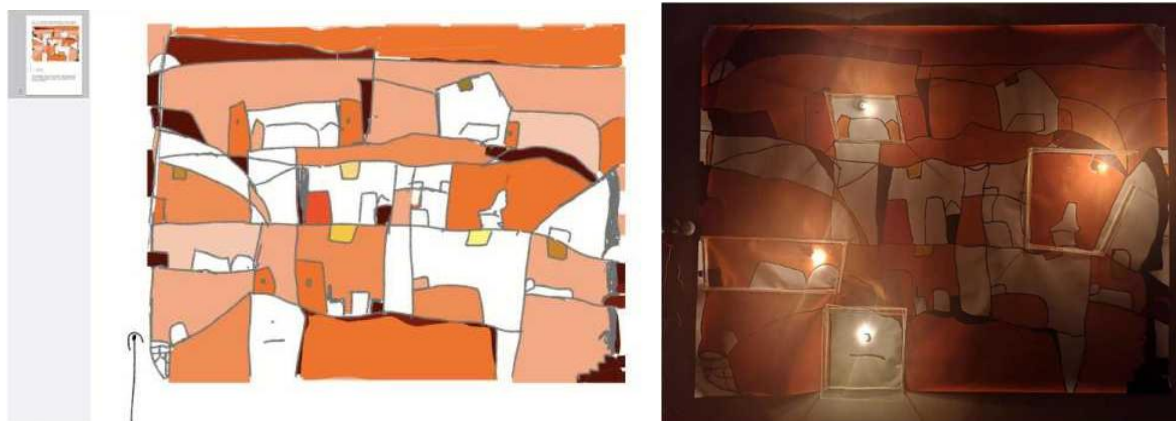


Figure 5: Small draft of the artwork drawn on the author's iPad in April 2020.

Choosing the same material as Canberra, hard poplar board as the substrate, the image uses large colour blocks to fill each space, and black lines to divide each extracted image from the original painting, undulating lines to break the strong sense of division of the straight line, and using different thicknesses of the brush strokes to shape the relationship between the whole and the part of the integration of the staggered.

The warm tones of the red series are predominantly used, with acrylics and oils overlaid to create a saturated sense of colour and texture. Thick and thin lines, staggered houses and scaled-up images of other original paintings, together with different levels of red and orange and black, white and grey, support the overall picture. And furthermore, the image is further refined, leaving out the display of the figure in the picture.

On the basis of the overall picture, a number of warm-coloured lights connected to sensors are installed, which can automatically light up or flicker according to the sensing of the viewer's distance from the picture, visually strengthening the warm-coloured spatial atmosphere, and also proactively connecting and sensing with the viewer in the act of viewing itself, leaving the viewer with the first perspective and the first on-site experience to realise the effect of the maximum degree of visual and psychological interactive sensing, which makes the viewing of such works no longer a single plane

language expression, but also a three-dimensional and multi-dimensional creative emotional output. This makes the viewing of such works no longer a single plane language expression, but a three-dimensional multi-dimensional creative emotion output. Afterwards, in addition to the basic planar colour, the three-dimensional transparent shell on the surface of the work and the layout of the paste is to break the two-dimensional space in the plane of, the prominent acrylic box shape and the pure image of the house in the picture, making the picture pattern more three-dimensional through the juxtaposition of the medium to show out (Figure 6), and stimulate the viewer's associations of "home"

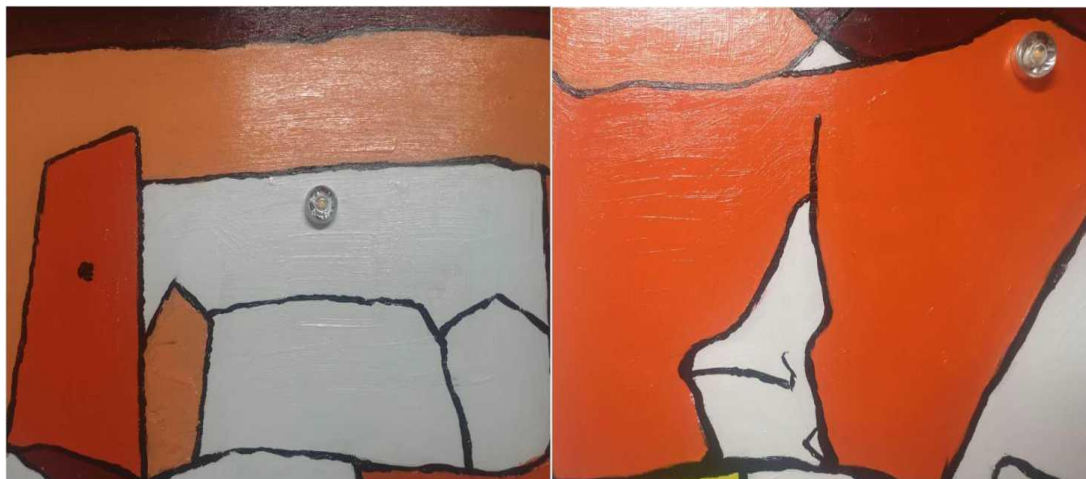


Figure 6: Part of the work, taken in June 2021.

As mentioned above, the interactive sensor device increases the interactivity of the artwork while bringing the viewer into a new aesthetic experience, and I also hope that through this way I can realise cross-media and cross-age communication with the children's houses, and through my humble efforts I hope that after that, art education can be a happy and free shore of strength.

Thinking about relevant topics is generated in the contexts and visual sensations constructed by native painting images and multimedia interactive installations.

Through this creation also found some problems in the combination of digital media art and painting, and also saw the shortcomings in the creation process. Firstly: when technology and art are combined, the idea of artistic expression is easy to be attracted by the novel effect of technology, easy to change for the sake of technological effect, and overly rely on multimedia media while neglecting the artistic form of the work itself. Secondly, we should deepen the research on aesthetic thought and art philosophy, and incorporate a deeper understanding of the content of expression into the methodological guidance and works, so that the works are not only visual but also metaphysical.

The conceptual level will be deepened, and the humanistic concern of art itself will be better reflected through the combined application of digital media and traditional painting.

6. Conclusions

The theme of this paper is "The Influence of Digital Media Art on the Creative Process of Painting", and the whole paper is in five chapters, describing the author's analysis and use of the creation of paintings in the digital age. The central words of this paper are "digital media", "painting", "participation" and "interactivity". It analyses the impact of digital media technology on the creative process of painting, taking into account domestic and international programmes and stylistic changes. Some artists and their work programmes and backgrounds are listed, and their creative concepts and work forms and styles are analysed and verified. Finally, it also combines the author's creative situation to truly implement the current technology and art of the times.

Nowadays, the most important thing for art development is to inherit and learn from the traditional art forms on the basis of combining with the new means of creation, just stay in the primary media stage of paintbrush and paper, it is impossible to satisfy the urgent pursuit of art of the "new new

man" in the digital age, and art can't really enter into the public. Of course, no matter how the medium of art changes, the essence of art needs to be preserved and inherited. At the same time, we also need to dialectically absorb the culture of the times and deepen our understanding of aesthetic thought, so that we can deeply appreciate the charm of art and lead the new development of art. The development of digital painting is still in the primary stage, it still has a huge living space, digital technology gives it an incomparable hardware superiority, and only rooted in the vast and rich cultural soil of traditional painting art, digital painting can get a more solid and heavy foundation. At the same time, we also look forward to the digital era, digital painting can bring us a deeper sensory baptism and visual shock.

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