Retraction

Retraction: Research on oil painting creation mode based on multimedia technology in big data Era (J. Phys.: Conf. Ser. 1852 022006)

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The authors of the article have been given opportunity to present evidence that they were the original and genuine creators of the work, however at the time of publication of this notice, IOP Publishing has not received any response. IOP Publishing has analysed the article and agrees there are enough indicators to cause serious doubts over the legitimacy of the work and agree this article should be retracted. The authors are encouraged to contact IOP Publishing Limited if they have any comments on this retraction.

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Research on oil painting creation mode based on multimedia technology in big data Era

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Abstract. With the continuous development of social economy, people's living standards have been significantly improved. Under the impact of the information age, it has caused an indelible impact on the industry. In today's era, with the continuous promotion of the development of the field, the art industry also has a lot of innovation and improvement. Due to the continuous expansion and simplicity of multimedia technology, we have a better experience of the visual effect experience of daily life, and promote the development of the art industry. In today's information society, data-based situation, now the painting creation is also welcome to its brand-new side, it is moving towards the direction of diversified development and constantly forward exploration. The diversified forms shown in the era of big data have turned the visual art of painting into a kind of data symbolization, which meets the requirements of the development of multimedia in today's society and has an impact on today's social painting art to a certain extent. In the era background of today's big data society, it also has some significant impact on the thoughts of many artists, and then has an impact on the social art development.

Keywords: Big data; multimedia technology; oil painting creation; big data environment

1. Introduction

The emergence of multimedia technology has promoted the innovation and development of art, and the consciousness has also been expressed in a diversified form. At the same time, it also broadens the expression forms of art, such as concept art and multimedia technology under the influence of multimedia. The intervention of media materials under the multimedia technology not only enhances the performance ability of visual art, but also opens up a new path for the creation of visual art [2]. As a kind of visual art, oil painting will experience unprecedented challenges under the influence of the new era of society, so it is necessary to explore in its diversified direction [3]. As a result, multimedia technology has been widely used in oil painting creation.

The introduction of oil painting has a very long history in China. With the passage of time and
continuous development, modern oil painting art has already played an important role in the art field in recent years. After a hundred years of development, oil painting techniques gradually tend to mature under the development of China, and gradually get rid of the shackles of western culture, developed its unique form of expression [6]. Especially in the late 1970s, on the basis of absorbing western creative experience, oil painting also absorbed the charm of Chinese local elements, thus developing a unique style with Chinese characteristics [7]. Although for China's art level, oil painting is undoubtedly imported, but in the process of its follow-up development, it is obvious that it is slowly getting rid of the influence of western culture. In the form based on oil painting techniques, combined with the unique artistic style of contemporary China, oil painting has created a new style in our oil painting field [8].

In today’s era, people's lifestyle has become more convenient and concise, and information acquisition is more rapid and accurate. At the same time, people have higher and higher requirements on the spiritual level, and painting art is regarded as a kind of conscious art. The expression of independent personality is also a kind of emotional self exhaustion [9]. The creation of painting art is often seen as a spiritual level of demand, and the works created can often reflect the creator's flying rational thinking and logical concept [10]. From another point of view, the images created under the multimedia technology let us reproduce the artistic appearance in the process of oil painting creation. It fully shows the new development direction and aesthetic view of oil painting, and further improves the artistic appeal of painting itself to people.

2. Method

2.1 logistic regression algorithm
Logistic regression becomes a linear classifier, and its function expression is as follows:

\[ h_\theta(x) = g(\theta^T x) = \frac{1}{1 + e^{-z}} \]  

(1)

Where

\[ g(z) = \frac{1}{1 + e^{-z}} \]  

(2)

The derivative form is as follows:

\[ g'(z) = \frac{d}{dz} \frac{1}{1 + e^{-z}} = \frac{1}{(1 + e^{-z})^2} (e^{-z}) \]  

\[ = \frac{1}{(1 + e^{-z})^2} \left(1 - \frac{1}{(1 + e^{-z})}\right) \]  

\[ = (x)(1 - g(z)) \]  

(3)

The posterior probability of logistic regression sample is expressed as follows:
\[ p(y \mid x; \theta) = (h_{\theta}(x))^y (1 - h_{\theta}(x))^{1-y} \]  

The posterior probability of the whole sample is expressed as follows:

\[
L(\theta) = p(\hat{y} \mid X; \theta) \\
= \prod_{i=1}^{m} p(y^{(i)} \mid x^{(i)}; \theta) \\
= \prod_{i=1}^{m} (h_{\theta}(x^{(i)}))^y (1 - h_{\theta}(x^{(i)}))^{1-y}
\]

2.2 using multimedia technology to enrich oil painting creation methods

The most important part of picture multimedia technology is post production. In today's era, with the innovation and Prospect of multimedia technology, post production has become a major step in daily oil painting creation. As we all know, oil painting itself is regarded as a part of visual art. Under the influence of multimedia era, oil painting art is moving towards a new level. Post production is to beautify and improve the raw materials (images) with our advanced computer technology, and then give them their own unique ideas to make the image works more valuable. Today, the oil painting industry is just like the image processing technology in the later stage of more perfect processing operation, making it more valuable. After selecting materials and creating traditional oil paintings, the first thing to do is to conceive and sketch. In the process of drawing, it is inevitable that there will be some inevitable "errors", so the final result will certainly have a certain gap with the creator's expected effect, so we need to constantly modify and redraw. With the help of multi-media technology, oil painters can draw what they want on the computer and modify them without repainting. This not only saves paper, but also is easy to operate.

2.3 integration of multimedia art concept

As an art level, oil painting needs to constantly change self-concept under the influence of social impact and people's different views. Wang Lin once said: "art is always a human problem, and the contemporaneity of art is the contemporaneity of human beings". The appearance of oil painting itself is a collection of all the advantages of the public, and everyone's inconsistent artistic concept will have an impact on the appearance and results of the final painting works. Under the influence of multi-media technology, oil painting creation has changed from single to multi-media. Personal technical concept will have different effects and achievements on oil painting creation. Multimedia technology is not a single rigid intervention, but under the influence of the times to give oil painting creation more space for development. In the future development, oil painting creation should focus on the final popularity of oil painting products. The knowledge modification of media art is just like adding new vitality to oil painting creation and promoting it to find its own new development direction. The invisible existence of concept affects people's thinking, and it is logical and irrational. It is also the most important element in the process of artistic creation. Under the influence of multi-media technology, the process of oil painting creation is reappeared, which shows the new oil painting quality and evaluation level, and enhances the charm of oil painting.

3. Experiment

3.1 investigation objects

This paper takes the oil painting creation skills in the visual image era as the research category, and re mentions the necessity of oil painting creation. As far as the current situation of oil painting creation in domestic colleges and universities is concerned, this necessity will first be reflected in the re
estimation of the value of oil painting creation skills, and even more basic performance of the recognition of oil painting creation skills. Through detailed data support and analysis of examples, this paper emphasizes the living conditions of painting creation skills in contemporary times and the necessity of reemphasizing the existence of painting creation. Looking at the traditional hand-painted skills which have been neglected for a long time in the era of visual image culture, we should pay attention to its humanity again. As the future scientist Nesbitt said, "the response of its compensation effect" interacts with the scientific and technological rationality in the visual image age.

3.2 Experimental research design

The research methods used in this paper include: 1

(1) Field study method: collect the pictures of representative contemporary art exhibitions and track the oil painting creation scene of Academy of fine arts.

(2) Image analysis method: combined with the image data of Fengliao, and taking the recent domestic oil painting graduation creation exhibition "Luo Zhongli scholarship" and "graduate contemporary art creation scholarship" as examples, data collection and tabulation are carried out, and detailed data support is provided for the argument of this paper by data analysis.

(3) Literature research method: there are a lot of information resources available in some websites and databases. Through the collection, transmission and arrangement of relevant information, the ability and efficiency of this paper can be improved. From the perspective of art, combining theory with practice, this paper analyzes and expounds the history and value of hand-painted skills of oil painting combined with the interdisciplinary research methods of iconology, pedagogy, art anthropology, art culture, communication, etc., from which the research context is sorted out and the basic viewpoint of research is established.

4. Results

4.1 Investigation and analysis of experimental data

It is undeniable that oil painting is an important part of art, while the circulation of art belongs to the category of market economy. Therefore, although oil painting and market belong to different categories, market economy combines them organically. After the reform and opening up, with the continuous development of China's economy, social productivity and comprehensive national strength are also changing with each passing day, the Chinese art market has ushered in unprecedented glory. As an art category, oil painting also began to enter the market and developed rapidly under the stimulation of market economy.

4.2 Test data investigation results

Table 1. Luo Zhongli scholarship

| Time of creation | Total number of people | Number of people (state, oil, plate, carving) | percentage | Number of people (photography, imaging, new media materials) | percentage |
|------------------|------------------------|---------------------------------------------|------------|--------------------------------------------------------------|------------|
| 2012-2015        | 35                     | 35                                          | 100%       | 0                                                            | 0%         |
| 2012-2018        | 124                    | 93                                          | 75%        | 24                                                           | 19%        |
| 2018-2020        | 79                     | 45                                          | 56%        | 31                                                           | 39%        |
Table 2. Scholarship for contemporary painting creation of Postgraduates

| Time of creation | Total number of people | Number of people (state, oil, plate, carving) | percentage | Number of people (photography, imaging, new media materials) | percentage |
|------------------|------------------------|---------------------------------------------|-----------|----------------------------------------------------|-----------|
| 2012-2015        | 16                     | 9                                           | 56%       | 11                                                 | 68%       |
| 2015-2018        | 15                     | 7                                           | 46%       | 10                                                 | 66%       |
| 2018-2020        | 17                     | 11                                          | 64%       | 12                                                 | 70%       |

From Figure 1, we can see that the "Luo Zhongli scholarship" award-winning and selected works have been systematically analyzed, showing the current development of oil painting in contemporary times and the art development trend of the Academy of Fine Arts in recent years. The applicants of "Luo Zhongli scholarship" are graduates from art colleges of various universities in China. Therefore, taking this exhibition as an example to provide data support for the research object of this paper is representative. According to the existing data, during the period of 2012-2015, 35 people won the prize in the "Luo Zhongli scholarship", and their creation contents were oil painting works of art; from 2015 to 2018, 124 people were selected in the exhibition, of which 75% were hand-painted works, and 19% of the total number were artistic creation using new media material technology; from 2018 to 2020, there were 79 winners and selected authors of the exhibition, Among them, the number of hand-painted works accounted for 56% of the total number of exhibition works, and 39% of the total number of art creation with the help of new media material technology. From the vertical point of view, it presents a significant trend of integration of photography, image and new media materials.

From Figure 2, we can see the number of people selected for the "graduate contemporary painting creation scholarship" and the details of the system data. This graduate painting creation is to reward outstanding young art students who have persistent pursuit of art career and are full of creative spirit, build a platform for them to display their talents, give birth to reserve new talents for the development of Chinese art, and promote contemporary art creation. Since 2012, the number of art works created by students is increasing year by year, the success rate of the shortlisted is also increasing, and the trend of diversified art is more significant.
Figure 1. the general trend of oil painting creation skills digestion

Figure 2. comprehensive trend of oil painting creation materials
The above chart shows the trend of oil painting. From the two-dimensional plan of the coordinate up and down trend is obvious, oil painting creation skills show a declining trend year by year, photography, images, and new media materials and other art forms are increasing year by year. Fundamentally speaking, art, as a special ideology, is bound to be affected by social and economic development. There are not only differences and oppositions between science and technology and ideology, but also mutual transformation under certain conditions. From the objective point of view, any new scientific and technological knowledge in the application of today's real society, will have a certain relationship in different degrees of reality, art is no exception. The various aspects covered by art often play a guiding role in the application of science and technology; and the development achievements of science and technology, in turn, will play a role in strengthening or weakening art. The mutual penetration and transformation of science, technology and art shows that the application of technology and the development and performance of art are combined and cannot be neglected in the process of technology use.

To sum up, in the era of big data, rich painting resources are to broaden the vision of the creator. Oil painting photos are only some auxiliary means for artists' painting creation, and sometimes can help artists expand their thinking space,. However, the key to painting creation is to experience and experience in life. The process of experience is an important part of artistic creation. To determine its appeal and awareness of life, we should try our best to avoid relying too much on "second-hand" image resources, and we must deal with the relationship between public image resources and "first-hand" creative resources. Otherwise, relying entirely on the photos on the Internet for creation is just copying other people's images, and it is difficult to produce classic oil paintings with high level that can move viewers.

5. Conclusion
Contemporary oil painting creation is facing the opportunity of innovation and the trend of integration. The integration of Chinese traditional elements in oil painting is one of the key issues under the current development trend. In order to promote the future development of China's art field, we must think deeply about the integration of Chinese traditional elements in the process of contemporary oil painting creation. We should always bear in mind the importance of the technical and spiritual basis of painting for the smooth communication of artists' creative ideas. Painters should always abide by the professional integrity and honest quality of an artist and an art worker. Only in this way can we treat the relationship between multimedia images and painting dialectically, rationally handle and reasonably use them, and develop new vitality and richer creative experience from this ancient art, and constantly innovate and seek development.

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