DESIGN PREFERENCE ANALYSIS BASED ON THE PERCEPTION OF DIGITAL ARTWORK

Yijun Chen (Shanghai University of Engineering Science), International Economics and Trade II, Grade 3

Dainan Xu (Donghua University), Industrial Design 2001, Grade 3

Yijun Chen* (Shanghai University of Engineering Science), International Economics and Trade II, Grade 3

Yingfang Zhang (Shanghai University of Engineering Science), MA, Associate

Professor

Shanghai University of Engineering Science, Donghua University

Shanghai

Preface Since the emergence of Bitcoin and blockchain technology in 2009, its derivative, NFT, has also taken the world by storm. Based on the traceability and uniqueness of NFT itself, digital artworks have given physical artworks a wider scope for development. It also offers potential commercial opportunities and copyright protection of designs for people working in the field of art and design. However, there are differences in design preferences because of differences in national perceptions of digital artwork and various external factors. Understanding this preference can help in the development of digital artwork (NFT).

Literature Review In the Chinese academic field, research on the design of

digital artworks has now gradually begun. For example, Liwei Liu, in 'An Exploration of the Value of NFT in Reshaping Visual Communication Design', proposes that NFT can directly create commercial and artistic values for visual communication design works. Connecting all parties in the art and design industry connects to ensure its steady development. Tianyu Wang, in 'A Study on the Emotional Design Theory of NFT Digital Art', proposes that digital artworks will not be diluted in value by digitization itself so that the artistic value of NFT will develop towards use value and functional value in the future. And the functional and reflective emotions contained in the NFT design process can resonate with the holders and generate more design markets. It can clear that the Chinese academic field has already begun to research the development of different aspects of the future of digital artwork in the design domain.

Research Background and Methodology Digital artwork is one of the newest forms of expression in contemporary art, and NFT is a specific creation of digital artwork. It has received worldwide attention overseas because of its sudden and rapid appreciation in value. NFT has not developed in China at the moment due to our caution over its financial risks, and only some companies have dabbled in it. However, as our society's awareness of digital artwork increases in the future, the circulation of digital artwork in the market will become more widespread, bringing a positive trend for the overall art and design field.

Therefore, this paper will propose the concept of design preferences based on the current state of development of NFT digital artworks at home and abroad, as well as actual social awareness and study of existing literature, to explain the comprehensive preferences in design philosophy, design direction, design element selection, and other issues, so that can make suggestions for the future development of NFT digital artworks in China.

Current development of digital artwork In 2021, digital artwork appeared in the public eye due to a sudden surge in prices. The rapid development of digital artworks of art has been accompanied by many problems.

From an economic point of view, the high volume of transactions poses an extremely high financial risk. As a result, the US Treasury Department has published a study on money laundering and terrorist financing through art transactions. Europe has also put forward proposals for a regulated market for crypto-assets to confront and cover the emerging field of digital artwork that would not otherwise be covered in financial law. Moreover, the world has experienced an economic downturn in recent years due to factors such as the world economic epidemic, international relations, and economic cycles. Therefore, the explosive development of digital art has brought instability to the world economy. At present, all countries are accelerating the improvement of relevant laws, regulations, and policies. China's means of development in the field of digital artwork is still at a preliminary stage.

From a social perspective, it is difficult for the general public to understand the floating value of digital artworks. Due to the existence of different cultural backgrounds in different countries, different groups of people have very different perceptions of artwork. At the same time, NFT also suffers from inadequate copyright-related laws and differences in social awareness of copyright. On 20 April 2022, there

was a dispute in China over the infringement of the right of information network transmission of works in the field of NFT. The two parties argued whether there should be a duty to protect the intellectual property of NFT, which is not expressly provided for in the relevant law.

Current digital artwork design preferences At present, different NFT trading platforms are already available both domestically and internationally. Some of the more well-known and mature NFT trading platforms internationally include OpenSea, Nifty Gateway, and others. China also currently has NFT platforms such as Whale Quest and Phantom Core. The differences between different platforms are significant, and the specific types of NFT works, commission fees, miner fees, etc. are all completely different. There are also differences in the design preferences of different works on the same platform.

For example, the top-ranked value on OpenSea's NFT trading platform is the CryptoPunks series. The main reason for the success of this series is that the project started experimenting back in 2017. In addition to having its original artistic value, it has also contributed greatly to the overall dissemination of NFT digital artwork, creating a primacy effect in this sector. As a result, the CryptoPunks collection is designed with a preference for design for use, while giving its original author a backstory and psychological effect, thus effectively generating an emotional preference for design.

Second in value on OpenSea's NFT trading platform is the Bored Ape Yacht Club series, which capitalized on very strong star benefits and branding when it emerged in its early days. Famous stars such as Madonna, Eminem, and Justin Bieber

have all purchased BAYC pieces. The brand's preference for promotional design plus its own diverse portfolio of artistic designs has given the BAYC collection an extremely high commercial value.

Design preferences based on the perception of digital artwork in China This social research is based on an online questionnaire survey of a sample of people from all levels of society. The questionnaire consisted of 31 questions and was conducted using a combination of single and multiple choice. The questionnaire data were obtained from November 2022, of which 182 questionnaires were valid, and all graphical data in the subsequent section is based on the questionnaire data from this social survey.

Form 1
Popularly perceived areas of digital artworkability (Multiple Choice)

| Options | Subtotal | Proportion |
|-----------------------|----------|------------|
| Music | 129 | 70.88% |
| Movie | 116 | 63.74% |
| Picture | 90 | 49.45% |
| Painting | 123 | 67.58% |
| Game | 90 | 49.45% |
| Calligraphy | 89 | 48.9% |
| Sculpture | 79 | 43.41% |
| Ancient Poem | 47 | 25.88% |
| Others | 16 | 8.79% |
| Number of valid fills | 182 | |

As can be seen from the data in Form 1, Chinese society in general prefers that music, film, and painting are areas that can be turned into digital artworks. However, in terms of the definition of NFT itself, all options in Table 1 can be sold and presented as NFT. However, works of traditional Chinese culture (such as ancient poetry) are not considered to be able to be transformed into digital artworks. As a result, there

is a little public perception in China that traditional Chinese culture can be transformed into digital artworks. The reason for this may be more of an overseas cultural influence that limits the definition of digital artwork. However, in the design process, it is often necessary to take into account the country's own cultural background and traditional elements, which are more likely to resonate with the purchaser. As a result, the vast majority of our population is completely incomprehensible by the high prices of overseas NFTs. The excessive departure of overseas NFT from traditional Chinese design concepts, also makes it difficult for the Chinese public to understand its artistic value. Therefore, based on our public's perception of digital artworks, in future China needs to develop NFT digital artworks with traditional Chinese culture. The design should be in line with cultural preferences.

Form 2
The question of whether artworks should be priced (Single Choice)

| Options | Subtotal | Proportion |
|-----------------------|----------|------------|
| Should | 92 | 50.55% |
| Should not | 90 | 49.45% |
| Number of valid fills | 182 | |

The data in Form 2 shows that nearly half of those surveyed believe that the value of art should not be priced. It also proves that for our public the artwork is viewed more as an emotional function than a realistic one. While it is inevitable that artworks are priced concretely due to practical factors, the embodiment of inwardly leaning emotional elements is important in the design as an audience in the East Asian cultural sphere. For example, in Violet's Garden of Eternity 2018, Violet is learning how to love in a way that makes every audience member tug. Not only is it

the sadness of Violet's future learning of the Major's passing that is held, or the heartache of Violet not being able to understand love but still feeling sad because she is the same age. In a way that does not understand emotion, but implicitly expresses strong emotions. The emotional bias in the design process of digital artworks is therefore also very important, especially for the East Asian culture of China.

Form 3

Popularly accepted factors for judging digital artworks (Multiple Choice)

| Options | Subtotal | Proportion |
|-----------------------------------|----------|------------|
| Author of the work | 118 | 64.84% |
| Visibility of the work itself | 117 | 64.29% |
| Appearance or content of the work | 108 | 59.34% |
| Price fluctuations of the work | 54 | 29.67% |
| Price of the work | 84 | 46.15% |
| Potential for appreciation | 120 | 65.93% |
| Others | 7 | 3.85% |
| Number of valid fills | 182 | |

Form 3 shows how respondents judged NFT digital artworks, based on the author of the work, the popularity of the work itself, and the potential for appreciation of the work (all three factors exceed 60%). It can be seen that the concept of visibility is often more intuitively appealing to the public than artistry. Therefore, the inclusion of branding elements in the design process can also bring effective benefits. This is consistent both at home and abroad, where brand preference can directly contribute to its commercial value.

Conclusion and suggestions In conclusion, according to our current social perception and external environmental factors, the design of our NFT digital artwork has to find the right direction for development.

Cultural preference is currently the most important design direction for digital

artworks in China. Currently, our society remains optimistic about the possible impact of NFT. Improving the combination of digital artwork NFT and traditional culture, thus promoting domestic traditional cultural heritage and protection at the same time can also promote our traditional culture digital artwork brought overseas cultural export, to further improve national self-confidence. Moreover, emotional preference and brand preference are relatively important elements in the design of digital artworks at home and abroad. However, China needs to base its design on the emotional consensus and needs of our society in the actual design process and adopt an effective design preference for the target audience. This will advance the future development of digital artwork in China.

Список литературы:

- 1. Liu Liwei, Analysis on the Value of NFT Remodeling Visual Communication Design [J] Packaging Engineering, 2023,44 (02): 242-246+280
- 2. Wang Tianyu, Research on Emotional Design Theory of NFT digital art [D]. China Academy of Fine Arts, 2022
- 3. Huang Yuye, Pan Bin On the Legal Attribute of NFT Digital Collections Also Commenting on the First Case of NFT Digital Collections Copyright Dispute [J] Friends of the Editor, 2022, (09): 104-111
- 4. Yu Junyuan, The essence, rules, and legal risk response of NFT trading in digital works [J] Technology and Publishing, 2022, (10): 103-113
- 5. Yan Tianchi. Analysis of Cultural Bias in Contemporary Design Art [J]. Art Technology, 2015,28 (03): 204