Original Paper

Research on the Development of Shaanxi Red Culture under the

View of Metacosmos

Lei Zhang¹

¹ Xi'an Siyuan University, School of Marxism, Shaanxi, Xi'an, China

Received: June 29, 2023Accepted: September 23, 2023Online Published: October 08, 2023doi:10.22158/assc.v5n4p63URL: http://dx.doi.org/10.22158/assc.v5n4p63

Abstract

The year 2021 is known as the Year of the Metaverse. Culture entering the meta-universe is an inevitable trend of the times. Based on the meta-universe technology, the commercializability, concrete visualization, and unification of ubiquity and immersion of Shaanxi red culture are conducive to the enhancement of Shaanxi's local cultural discovery ability and cultural self-confidence. First, to understand the general situation of Shaanxi red culture in terms of spatial and temporal distribution, quantity, and characteristics of the era. Second, to analyze the inevitability of the meta-universe embedded in the development of Shaanxi red culture. Finally, analyze the path of the meta-universe embedded in the development of Shaanxi's red culture. Among them, the "inner cycle" mechanism includes the construction of meta-universe cultural communities within the province and the construction of meta-universe cultural communities within the country, and the "virtual-real cycle" mechanism includes the general situation of the meta-universe the general culture development, such as the number of spatial and temporal characteristics. The mechanism of "virtual-real cycle" includes the logical process of digital twinning, virtual-real integration, virtual originality and virtual reality.

Keywords

metacosmos, red culture

With the rapid progress of artificial intelligence technology and the emergence of digital people, human beings have started the first year of meta-universe. The Outline of the Fourteenth Five-Year Plan for National Economic and Social Development of the People's Republic of China and the Vision for 2035 includes "Accelerating Digitalization and Building a Digital China" as a separate chapter, which explicitly puts forward the need to "embrace the digital era, activate the potential of the data elements,

push forward the construction of a strong networked country, accelerate the construction of a digital economy, a digital society, and a digital society. Accelerate the construction of digital economy, digital society and digital government, and drive changes in the mode of production, lifestyle and governance with digital transformation as a whole".

1. The Current Situation of Shaanxi Red Culture Development

Shaanxi red cultural resources are mainly divided into two components, the first part is the surviving resources, and the second part is the spiritual resources. The so-called surviving resources, i.e., documents, cultural relics and revolutionary sites and memorial sites of revolutionary activities carried out by the people in Shaanxi Province during the revolutionary war era, which include developed and undeveloped, movable and immovable ones. Spiritual resources are the various spiritual connotations contained in the material cultural resources, including revolutionary spirit, revolutionary traditions and the political, economic, cultural, ideological, and institutional systems formed during the Revolutionary War period, etc., which belong to the intangible components of the red cultural resources. Shaanxi is rich in red cultural resources, with many fine products and high grade. Among the 12 key red tourism zones cultivated in the country, there are two involving Shaanxi Province, i.e., Shaanxi-Gansu-Ningxia Red Tourism Zone and Sichuan-Shaan-Chongqing Red Tourism Zone; among the 30 red tourism boutique lines developed in the country, there is one involving Shaanxi Province (Xi'an, Luochuan, Yan'an, Zicang, Suide line).

Shaanxi red cultural resources have obvious uniqueness and scarcity. For example, the red cultural resources of various revolutionary bases, such as the Northwest Revolutionary Base, the E-Yu-Shaanxi Revolutionary Base, and the Sichuan-Shaanxi Revolutionary Base, all have a deep imprint of the times. Among them, the red cultural resources pioneered during the Yan'an period are exceptionally unique and unrepeatable throughout the country. In addition, in the context of the construction of digital China, Yuan Universe has provided a new path for the development of Shaanxi's red culture by deeply embedding it in various industries through virtual and real integration of digital interactions. For example, online scenic observation, "cloud" history museum, digital culture and science and technology venues and so on let the real scene show in front of people in a new way. Therefore, the study of the development and innovative application of meta-universe embedded in Shaanxi red culture has important research value for the inheritance of Shaanxi red culture and the application of the concept of meta-universe.

2. The Inevitability of the Development of Metacosmos Embedded in Shaanxi Red Culture

2.1 The Concept and Connotation of Meta-Universe

Culture entering the meta-universe is an inevitable trend of social development. The display of culture will no longer rely on traditional physical objects, but will be carried out in the higher-order virtual space, and the creation, exhibition, appreciation, trading, and collection of culture will be completely

digitalized and deeply virtual. The space of meta-universe has the characteristics of diversification and strong integration, therefore, making full use of the spatial advantages of meta-universe, integrating human thinking consciousness, cultural beliefs and values, and then it will become a good platform to carry out spiritual civilization education activities. The core role of the metaverse is "virtual digital person", which can represent any person in reality. At the same time, the meta-universe is based on the material life of an individual and creates a relatively independent spiritual life field from reality. Therefore, from the perspective of "virtual digital person", the real person is an extension of the virtual world, which is more adaptable to the various experiences in the virtual space, and forms a one-to-one correspondence between the digital identity and the real identity. Based on the characteristics of virtual digital technology, linking it with the records of real human social, economic, cultural and other activities helps people construct virtual identity and meta-universe value system from social and cultural level.

2.2 Meta-Universe Promotes the Integration of Local Red Culture

So far, the concept of metacosmos is still in the stage of exploration and evolution. To build the ecological map of meta-universe, three major segments are needed: the underlying technical support, the front-end equipment platform and the scene content entrance, among which the scene content entrance has been closely watched and rapidly laid out by the cultural industry. For example, in 2021, Bojun Culture, a subsidiary of Shaanxi Tourism Group's science and technology sector, and Juntu.com's "Hi Yuan Universe" digital cultural and creative platform, which has blockchain as its underlying structure, is a good attempt to combine the real world with the virtual world for virtual excursion and exploration scenarios. With the arrival of the first year of the meta-universe, people's lives have changed a lot, and more and more real-world scenarios have been incorporated into the virtual world, which to a certain extent accelerates the development of the cultural industry, tourism, and agriculture, etc. Among them, the cultural industry and the meta-universe have become more and more important. Among them, the combination of cultural industry and meta-universe is counted as a kind of business model innovation. For example, the digitization of Shaanxi's non-legacy, the digitization of Qin, Han and Tang themes, the digitization of Qinling's landscape theme, and the digitization of Shaanxi's red theme. They all draw on the meta-universe technology system to a certain extent, especially blockchain, virtual reality, NFT and so on. Although meta-universe technology is still in a relatively initial stage of development and it faces many challenges, there is a huge space for meta-universe related industries to expand. Among them, the cultural and exposition industry, which is closely related to the development of Shaanxi's red cultural resources, should keep pace with the times, synchronize with the times, deeply promote the cross-border fusion of "culture + science and technology", promote the integration of resources, and let the development results of the cultural industry better realize the sharing of the whole people.

65

3. The Meta-Universe Embedded in the Path of Shaanxi Red Culture Development

3.1 The "Inner Cycle" Mechanism of Shaanxi Red Culture's Meta-Universe

The "internal cycle" mechanism includes the process of putting, using, feedback and strengthening of cultural resources. From the technical level, the experience of metacosmos has transitioned from the initial wearable experience to the advanced stage of connecting the human brain and the machine through the interface of cerebral telecommunication signals, which also signifies that the development of metacosmos technology is constantly moving towards humanization and maturity. From the cognitive level, with the change of human medium, the meta-universe technology will continue to expand the range of human body extension, change the way people perceive the world, and integrate the living and digitalization of history. In the development and use phase of spiritual civilization products, the meta-universe simulates multiple organs to recreate the original space of spiritual culture, and digital technology develops from virtual reality to brain-computer interfaces to create the experience of spiritual civilization. Through technological technology, digital twins and VR and other technologies are used to present realistic scenes of national life in different eras, simulate specific events or scenes of the common struggles of Chinese children in different eras, and combine real events with the virtual world in combination with specific regional cultures. For example, through the experience of "digital simulator", people can evoke the historical memory of local cultural history and cultural pride, and enhance people's homeland sentiment.

3.2 The "Inter-Cycle" Mechanism of Shaanxi Red Culture in the Meta-Universe

The mechanism of "inter-circulation" of meta-universe is to establish connections between spiritual and cultural products in different meta-universe worlds to realize the effect of interoperability. In the process of combining the meta-universe and red cultural resources, the limitations of time and space will be well solved by the meta-universe time and space, reflecting the time and space advantages of the meta-universe. With the help of artificial intelligence, digital twin and other digital technologies, we map the real scene into the specific scene of the meta-universe, and show the red cultural resources in a brand-new way by creating virtual communities, red history memorials, cultural figures, costumes and so on. The mode of "meta-universe + red cultural resources" is also conducive to enhancing national historical confidence and cultural confidence. On the one hand, there are a lot of valuable spirits in Shaanxi red culture, such as Yan'an spirit, Nanniwan spirit, Maban spirit, etc. If these valuable spiritual wealth can be spread and publicized with the help of meta-universe technology, the scope and effect of its dissemination and publicity can be maximized, which is conducive to the inheritance of our excellent culture. On the other hand, the experience and interaction of virtual meta-universe give the experiencer a sense of spiritual belonging and happiness, for which we should actively utilize the meta-universe space technology to develop more and better meta-universe red cultural products by combining with the red culture of the region to ensure that the development of meta-universe always follows the track of the correct values.

3.3 The "Virtual Cycle" Mechanism of Shaanxi's Red Culture in the Metaverse

Meta-universe "virtual cycle" mechanism through graphic modeling, virtual simulation technology in the virtual space according to the reality of red cultural resources to copy the cultural elements (historical figures, historical materials, scenes online, etc.). Combining the network virtual space and the digital twin world through physical principles, the Shaanxi red cultural resources are vividly simulated. We integrate the meta-universe digital twin with the virtual reality of red cultural products, the physical reality entity corresponds to the virtual original elements in the meta-universe unit, forming a relatively independent database with the ability to be perceived, edited and melted down, and adding the realistic scenes and scripted elements with the characteristics of the local culture into the meta-universe unit to become the meta-universe red cultural and spiritual products. People can deeply experience history and historical characters in an immersive way. The development of meta-universe technology is closely related to the development of Shaanxi's red cultural resources, and the cultural and bo industry should keep abreast of the times, keep pace with the development, deeply promote the cross-border fusion of "culture + science and technology", and realize the integration of resources, so as to make the achievements of the development of Shaanxi's red cultural resources better shared by all the people.

References

- Liu, G. Z. (2021). Research on Red Culture Communication in the Context of Popular Culture. *News lover*, 2021(06), 62-64.
- Zhang, A. J., & Zhou, Y. (2022). Meta-universe and the construction of virtual space community. *Administrative Forum*, 29(04), 21-28.
- ZHAO, X., QIAO, L. L., & YE, Y. (2022). A review of meta-universe research and application. *Journal* of Information Resources Management, 12(04), 12-23+45.