

Communicating Cultural Heritage Values of Helan Mountain Rock Paintings

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Abstract

Communicating Values of Cultural Heritage of Helan Mountain Rock Paintings becomes a crucial issue to maintain historical longevity and artistic appreciation. However, concerns remain regarding transmission and communication methods. The emergence of new media, facilitated by the Internet, has positively influenced the preservation and transmission of historical heritage and culture. It enables broader comprehension, inheritance, and promotion of traditional culture, expanding communication channels. While digitization introduces challenges, it also presents dissemination opportunities. This research focuses on cultural heritage, the value of cultural heritage, challenges and countermeasures for preservation and communication. Comprehensive research methodology is proposed, such as using new media, establishing digital archives, and implementing scientific monitoring. Recommendations are made about strategies to enhance dissemination include new media platforms, public education initiatives, and cultural products for economic impact. Future research should include the government providing guidance and support in the dissemination and preservation of Helan Mountain Rock Art, ensuring its integration into national cultural development strategies. Efforts should be made to improve the quality of communication subjects, including scholars, experts, artists, and inheritors, who can effectively convey the cultural significance and value of Helan Mountain Rock Art. Embrace the opportunities offered by new media platforms, such as the internet and mobile devices, to expand the dissemination space of Helan Mountain Rock Art and engage wider audiences. Dissemination, on the other hand, involves conveying the knowledge, stories, and value of the Helan Mountain Rock Paintings to a broader audience. Through various media and channels, including traditional and new media, dissemination introduces the distinctive features of the rock paintings to the public, capturing their interest

Keywords: Helan Mountain Rock Paintings, Cultural heritage, Protection and Communication, Digital archives, New Media

Introduction

Italian anthropologist Anati E.(1988) argued that "the surface of rocks was the first 'canvas' of humans. Cultural heritage encompasses the intangible cultural assets created by humans, representing their beliefs, customs, skills, and other cultural aspects, with inheritable and expressive qualities. It constitutes the cultural essence of a nation, a people, or a region, serving multifaceted purposes and holding significant meaning.

According to Zhanhe Y. (2009), the Helan Mountain rock art reflects their aesthetic perspectives, social customs, and life interests of that time. Rock art serves as a visual representation of human struggles for survival and acts as a carrier of historical culture. It provides

substantial and vivid data for the study of the history, culture, art, religion, and ethnic relationships of the minority groups in the Helan Mountain area.

Thus, cultural heritage of Helan Mountain rock not only represents a crucial aspect of ancient Chinese art but also serves as a precious resource that reflects ancient social history and culture. However, the general public's awareness and understanding of it remains limited. Consequently, it cannot fully realize its positive role in promoting local culture and economic development. With the advancements in new media technologies, dissemination methods are evolving. From the perspective of new media, it is essential to explore innovative ways to disseminate Helan Mountain rock art that align with the requirements of the modern era.

Research Objectives

- 1 To disseminate and communicate Helan rock art in the new media era.
- 2 To understand challenges in preserving and promoting Helan Mountain rock art in the context of new media.
- 3 To understand measures that can be taken to enhance the dissemination and preservation of Helan Mountain rock art in the new media era.

Definition of terms

Helan Mountain rock art: Refers to the collection of ancient rock paintings and engravings found in the Helan Mountain region in China, spanning a history of 16,000 years to the present day.

Cultural heritage: Refers to the tangible and intangible aspects of a society's history, traditions, and values, which are passed down from generation to generation.

Dissemination and communication: The act of spreading, sharing, and making information or cultural artifacts accessible to a wider audience.

New media era: Refers to the period characterized by the widespread use and impact of digital technologies and online platforms for communication, information sharing, and cultural dissemination.

Conceptual framework

Tabel 1. Conceptual framework

Helan Mountain rock art		
Dissemination in the New Media Era	Preservation and promotion.	The role in tourism development.
<ul style="list-style-type: none"> - Changes in dissemination methods and forms. - Challenges and opportunities for reaching a wider audience. - Impacts of digital technologies and online platforms. 	<ul style="list-style-type: none"> - Strategies for preserving cultural heritage in the new media era. - Balancing accessibility and conservation. - Engagement and education for the public. 	<ul style="list-style-type: none"> - Cultural tourism is a resource for spiritual inspiration and cultural experiences. - Economic benefits for local communities.

		- Enhancing tourism through effective dissemination and preservation measures.
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Literature Review

1 Cultural Heritage Dissemination in the Era of New Media With the rapid development of modern technology, the advent of the new media era has fundamentally transformed people's cultural lifestyle. An increasing number of individuals are now engaging in cultural exchange through the internet, and the protection and promotion of cultural heritage on new media platforms have gained significant attention. This article aims to provide an overview of several noteworthy research papers in this field.

The first research paper is "Exploring the Challenges and Opportunities for Safeguarding Minority Cultures in the New Media Era" by Cheng P.(2015). This paper primarily discusses the opportunities and challenges associated with disseminating cultural heritage in the new media era and offers targeted strategies and recommendations. As the new media era unfolds, traditional methods of information dissemination have been disrupted, granting people greater convenience in accessing information. However, amidst the abundance of information, it is crucial to recognize the impact of globalized information on Chinese traditional culture and its associated media. This period poses both challenges and opportunities for the protection and transmission of minority cultures. New media can be likened to a double-edged sword: while its convenient and efficient dissemination methods benefit vulnerable minority cultures, it is equally important to acknowledge the potential impact of foreign cultures on indigenous traditional practices.

The second research paper is "Opportunities and Challenges of Preserving Intangible Cultural Heritage in the New Media Environment: A Case Study of Jingxing Lahua" by Jia Xina (2018). This article analyzes the challenges and development opportunities faced by Jingxing Lahua in Henan Province, and it proposes potential solutions. The paper initially examines the advantages and disadvantages of network media and subsequently explores the technical and preservation issues relevant to the dissemination of cultural heritage. Building upon this analysis, the article highlights the existing obstacles and challenges concerning the dissemination of cultural heritage in the online environment, suggesting measures such as tapping into the younger market, expanding the temporal and spatial dimensions of dissemination, and enhancing visibility.

The third research paper is "Analysis of Factors Influencing the Engagement of WeChat Public Platforms in Intangible Cultural Heritage" by Zuming Q.(2018). Employing questionnaire design and descriptive statistical analysis with SPSS22.0, this study investigates the factors influencing user engagement on WeChat public platforms focused on intangible cultural heritage. Through reliability and validity tests, principal component analysis, and correlation analysis, the research sheds light on the strategies that WeChat public platform operators can employ to enhance user satisfaction and sustain users' attention, ultimately improving the effectiveness of platform operations.

Furthermore, there are several other notable articles, including "Research on the Dissemination and Development of Intangible Cultural Heritage from the Perspective of New Media: A Case Study of Liaoning Intangible Cultural Heritage" by Dan L.(2022), "Construction and Promotion Practices of WeChat Public Platforms for Intangible Cultural Heritage" by Mengya L.(2017), "Live Communication Strategy of Intangible Cultural Heritage Handicraft Brand IP

from the Perspective of Financial Media: A Case Study of Liling Underglaze Multicolor" by Chen Wang and Jing G.(2022), and "Digital Dissemination of Cultural Heritage in the Context of New Media Art" by Yang Xuan (2010). These articles explore the dissemination of cultural heritage in the new media era from various angles and provide valuable insights for addressing practical issues and advancing the protection and transmission of cultural heritage.

2 The Dissemination of Helan Mountain Rock Paintings As one of the representatives of Chinese ethnic minority cultures, Helan Mountain Rock Paintings possess a profound historical and artistic value and have attracted the attention of numerous researchers.

"Helan Mountain Rock Paintings, as a cultural heritage of China's ethnic minority, embody significant historical and artistic value, making them the focus of extensive research. Many studies have explored the dissemination methods, scope, and importance of Helan Mountain Rock Paintings. This article will provide an overview of several representative papers.

One notable research paper is "Analyzing the Symbolic Dissemination Value of Helan Mountain Rock Paintings" by Qian X.,et al (2014). The paper primarily delves into the historical and cultural significance of Helan Mountain Rock Paintings, as well as the symbolic aspects of fetishism, artistic characteristics of symbols, and the value of their dissemination. Through an analysis of Helan Mountain Rock Paintings, it becomes apparent that these cultural artifacts, as symbolic forms, possess immeasurable historical and cultural value. The symbolic characteristics of fetishism reflected in these rock paintings reveal the ancient human's reverence and adoration for nature and life, simultaneously reflecting their self-awareness and aesthetic consciousness. As a form of symbolic art, Helan Mountain Rock Paintings vividly portray the lives and cultures of ancient humans through expressive patterns and lines, displaying their aesthetic and artistic pursuits. Lastly, through the value derived from the dissemination of symbols, Helan Mountain Rock Paintings not only contribute to the preservation of ancient culture but also offer contemporary individuals a means to appreciate art and aesthetics, holding paramount cultural and historical significance.

Another noteworthy paper is "Research on the Mass Dissemination of Information on Helan Mountain Rock Paintings as Cultural Heritage" by Yanqing J. (2016). This paper addresses the issue of heritage preservation of rock paintings and emphasizes the necessity of mass dissemination to enhance public recognition of the value and significance associated with such heritage. The author recognizes that although the focus of research has been on statistical analysis and compilation of works, it has overlooked the fundamental issue of inheritance. The paper proposes solutions to rectify misconceptions present in the mass dissemination of cultural heritage information related to Helan Mountain Rock Paintings, highlighting the urgency and necessity of further research in this domain.

3 Helan Mountain Rock Paintings are among the significant cultural heritages in the Helan Mountain region, attracting extensive and in-depth research by numerous scholars. The research literature covers various aspects, including the geographic features of Helan Mountain, the cultural significance, artistic styles, conservation status, and management strategies related to Helan Mountain Rock Paintings. Based on the diverse content of these research papers, they can be classified into the following categories:

- History and Current Status. This category of literature primarily provides introductions and overviews of fundamental information about the history, current status, and distribution of Helan Mountain Rock Paintings. For instance, Xiangshi's L. (1987) "Helan Mountain Rock Paintings" serves as a systematic introduction to the research on Helan Mountain

Rock Paintings, aiming to deepen readers' understanding of them. The article describes and elaborates on various aspects, including the history and current status of the rock paintings, their types, content, styles, as well as their protection and utilization. The article particularly emphasizes the cultural connotations and aesthetic value manifested in the Helan Mountain Rock Paintings, while also proposing measures and suggestions for their conservation and development. Similarly, Zhengchang's X (2004) "Helan Mountain Rock Painting Culture" and other related literature primarily introduce the history and cultural background of Helan Mountain Rock Paintings, their artistic characteristics, and historical value. These works hold significant reference value for comprehending Chinese rock art culture and early human civilizations.

- Cultural Connotation and Aesthetic Value. This category of literature primarily delves into the cultural connotations, artistic characteristics, and aesthetic value expressed in Helan Mountain Rock Paintings. For instance, Zhanhe's Y.(2009) "The Modern Aesthetic and Practical Value of Helan Mountain Rock Paintings" explores the rock paintings from anthropological and artistic perspectives. It emphasizes how these paintings provide abundant information for studying the history, culture, art, religion, and ethnic relations of the minority groups in the Helan Mountain region. This article holds significant academic value and finds application in various fields, including history, ethnology, aesthetics, and painting.

- Another example is Qiong's Z.(2015) "The Significance of Helan Mountain Rock Painting Research for Art." This work highlights the importance of studying Helan Mountain Rock Paintings in the realm of art. It underscores how these paintings contribute to our understanding of artistic principles, techniques, and the evolution of ancient artistic expression. The article sheds light on the artistic significance of Helan Mountain Rock Paintings and their broader implications for the field of art.

- Protection and Management. This category of literature primarily analyzes and discusses the conservation status, issues, protective measures, and management strategies related to Helan Mountain Rock Paintings. For example, the research article by Xihong S.,et al (2015) titled "Research on the Archival Protection Model and Implementation Mechanism of Helan Mountain Rock Paintings" explores practical and feasible suggestions from the perspective of enhancing the vitality of rock painting culture. It analyzes rock painting classification, protection, and management, providing valuable insights for preservation efforts. Similarly, Cao Shuli's (2015) article, "The Imprint of Stone: Exploring Helan Mountain Rock Paintings," highlights the destruction and threats faced by Helan Mountain Rock Paintings, emphasizing the need for effective protective measures. The article emphasizes that it is humanity's responsibility and cannot be evaded.

- Techniques. Research literature on the technical methods of Helan Mountain rock paintings primarily focuses on studying and exploring the painting techniques, stylistic approaches, and artistic methods employed. For instance, Li Jian's (2016) article, "Considerations on the Artistic Stylistic Features of Ro

4 Rock Paintings in the Helan Mountain Region," and Ping's W.(2002) publication, "Exemplars of Ancient Stylistic Art: Helan Mountain Rock Paintings in Ningxia," investigate the stylistic artistic features of Helan Mountain rock paintings from the perspectives of aesthetics and art. These works aim to explore the representativeness and cultural value of Helan Mountain rock paintings within the northern rock painting system, as well as their connection to local folk art. They provide a foundation for further design research.

5 The Current Research Status of Conservation and Dissemination Abroad Rock art cultural heritage is a precious and irreplaceable treasure left behind in the long history of human civilization, possessing significant cultural, scientific, and artistic value. Scholars from around the world have been dedicated to exploring the dissemination and preservation of rock art cultural heritage. There is also a considerable body of research on rock art cultural heritage. The Rock Art Studies Bibliographic Database, RASBdb project, is a searchable bibliographic database of worldwide rock art literature, containing nearly 44,000 citations as of spring 2021. This database serves as a crucial reference for research in the field of rock art cultural heritage. "Rock Art Research in the Digital Era. Case Studies from the 20th International Rock Art Congress IFRAO 2018, Valcamonica (Italy)" (Carrero-Pazos, M., et al 2022) focuses on research conducted during the 20th International Rock Art Congress (IFRAO) held in Darfo Boario Terme, Valcamonica, Italy, from August 29 to September 2, 2018, regarding rock art in the digital age. The authors demonstrate how digital technology has benefited rock art research in various contexts, with the use of digital methods and 3D modeling significantly transforming the fields of rock art documentation and interpretation.

Through numerous case studies, the book illustrates how cutting-edge methods can be integrated into 3D modeling workflows and how results can be effectively managed and disseminated to the public. The book primarily introduces the use of digital technology in rock art research and provides practical case studies and workflows to assist researchers in related fields. "Beyond Shamanism: Landscape and Self-Expression in the Petroglyphs of Inner Mongolia and Ningxia" (Demattè, P., 2004) explores the historical and cultural significance of Helan Mountain rock art and its role in the ethnic and cultural history of northwest China. The article establishes connections between the symbols and inscriptions in rock art and local history and legends, presenting a comprehensive cultural landscape.

In summary, there is a substantial amount of foreign research on rock art cultural heritage, and the outcomes of these studies serve as valuable resources for scholarly exchange and reference, making significant contributions to our comprehensive understanding and preservation of rock art cultural heritage.

Research Methodology

Qualitative research.

1 The qualitative research component primarily relies on the method of literature analysis. By conducting an in-depth analysis of relevant literature, profound understanding and insights into the research topic can be obtained. Literature analysis is a commonly used approach that involves systematic collection, examination, and interpretation of relevant literature to understand the characteristics, perspectives, and trends associated with the phenomenon under study.

2 Literature analysis plays a crucial role in qualitative research. Firstly, by gathering literature related to the research topic, researchers gain access to a broad range of information and viewpoints. This literature can include academic journal articles, specialized books, reports, conference papers, as well as online resources. Through extensive literature collection, researchers can obtain diverse perspectives and research findings, thereby enhancing their comprehensive understanding of the research topic.

Literature analysis and interpretation. Upon completion of literature collection, the researcher will analyze and interpret the collected literature. By carefully reading and coding the content of the literature, the researcher can identify key themes, perspectives, and findings.

Furthermore, the researcher will compare and contrast the viewpoints and conclusions from different sources to identify common patterns and trends. Through in-depth analysis and interpretation of the literature, key issues and feasible solutions regarding the dissemination and preservation of Helan Mountain Rock Art can be revealed.

Quantitative Research

The quantitative research component in this study primarily utilizes questionnaire surveys, designing questions.

In quantitative research, questionnaire surveys are widely employed to collect opinions and perspectives from a large number of participants. Researchers design a series of questions to understand participants' views, attitudes, and behaviors related to the research topic. By utilizing the findings from qualitative research, researchers can tailor the questionnaire questions to better capture the core issues and variables in the research field. Population and Sample.

The study will include individuals from different age groups, income levels, educational backgrounds, and genders to ensure diversity in the population and sample. By encompassing a diverse population and sample, researchers can obtain more comprehensive and representative data to better understand the dissemination of Helan Mountain Rock Art and the information reception habits of modern individuals. A total of 207 questionnaires were distributed, and all 207 were successfully retrieved, resulting in a response rate of 100%. Out of the collected questionnaires, all 207 were deemed valid, leading to an effective response rate of 100%.

Questionnaire Design. The questionnaire for this survey will primarily focus on the current state of Helan Mountain Rock Art dissemination and the information reception habits of modern individuals. The questionnaire will include questions regarding the knowledge level, awareness, willingness to visit, and evaluations of related activities and promotional strategies concerning Helan Mountain Rock Art. Additionally, it will cover aspects such as modern individuals' social media usage habits, preferences in tourism, and attitudes towards digital media content. Through the design of the questionnaire, researchers will be able to collect rich data to analyze and interpret the current status of Helan Mountain Rock Art dissemination and the information reception habits of modern individuals.

Research results

The current state of the dissemination of Helan Mountain rock art faces a series of challenges and issues. Discussing these problems and proposing solutions without understanding the current situation would be speculative. To gain a better understanding of the dissemination of Helan Mountain rock art, it is essential to gather relevant information, delve into media coverage of the rock art, and explore data regarding news reports and publishing platforms. Conducting surveys can help gain insights into the information consumption habits of the public at present, which can be used as a basis for discussing the dissemination of Helan Mountain rock art.

Table 1 Data distribution of basic information

Variable	Options	Frequency	Percentage (%)
Gender	Male	112	54.11
	Female	95	45.89
Monthly Salary	2000-5000 RMB	73	35.27
	5000-7000 RMB	80	38.65

Variable	Options	Frequency	Percentage (%)
	7000-1000 RMB	16	7.73
	Above 10000 RMB	38	18.36
Age	20 years and below	26	12.56
	21-30 years	66	31.88
	31-40 years	77	37.20
	41-50 years	20	9.66
	51 years and above	18	8.70
	Total	207	100.0

Based on the table above, it can be observed that more than half of the respondents selected "Male" as their gender, accounting for 54.11%. The proportion of female respondents is 45.89%. In terms of monthly salary distribution, the majority of respondents fall into the "5000-7000" category, comprising 38.65% of the sample. Additionally, 35.27% of the respondents reported a monthly salary range of "2000-5000". Regarding age distribution, the highest proportion is found in the "31-40" age group, accounting for 37.20% of the sample. Furthermore, the "21-30" age group represents 31.88% of the respondents.

Table.2 Data distribution of tourism and cultural creativity in Helan Mountain rock paintings

What is the common brand image of Helan Mountain rock paintings in tourism and cultural creativity?	Frequency	Percentage (%)
Photo form	86	41.55%
Petroglyph rubbing form	78	37.68%
Designed creative form	11	5.31%
Never seen	32	15.46%

In response to the question "What is the typical brand image of Helan Mountain Rock Art tourism and cultural products that you encounter?", we can observe that 41.55% of respondents selected "Photographic representation," while only 5.31% chose "Creatively designed and innovative forms." The survey findings indicate that the existing brand images of rock art products in the market are predominantly simple imitations and replicas, lacking innovation. Consequently, Helan Mountain Rock Art remains relatively unknown. Furthermore, some existing designs employ outdated layout techniques and product types that do not align with modern demands. As a result, a gap has emerged between rock art and its audience.

Table 3 Data distribution on the channels of obtaining relevant information on Helan Mountain rock painting.

Through which channels do you obtain information related to Helan Mountain rock paintings?	Frequency	Percentage (%)
New media (Internet, Mobile)	75	36.23%
Paper media special report	24	11.59%
Feature films. Documentaries	87	42.03%
Broadcast	21	10.14%

In terms of the distribution of channels through which respondents obtain information related to Helan Mountain Rock Art, the highest proportion, accounting for 42.03%, is derived

from specialized programs and documentaries. Following closely behind is the new media category (internet and mobile platforms), which represents 36.23%.

Table 4 Data distribution of rock paintings documentaries or special programs by which media

<i>What medium do you use to watch documentaries or special programs about rock paintings?</i>	<i>Frequency</i>	<i>Percentage (%)</i>
<i>Television</i>	54	26.09%
<i>Computer</i>	37	17.87%
<i>Broadcast</i>	23	11.11%
<i>Mobile digital media (mobile phone or mobile TV, etc.)</i>	93	44.93%

In terms of the distribution of media platforms used to watch documentaries or specialized programs on rock art, the majority, accounting for 44.93%, opt for mobile digital media (such as smartphones or mobile TVs). Television follows closely behind with a proportion of 26.09%, while the lowest proportion is attributed to radio at 11.11%. The dissemination of information through new media platforms allows for the continuous update of relevant information about Helan Mountain Rock Art, making it increasingly accessible to the public.

Discussion

In the era of new media, the dissemination of cultural heritage presents both advantages and disadvantages. By expanding the channels of information dissemination and exploring various forms of content, new media can leverage its strengths to enable a broader audience to comprehend cultural heritage. New media has the potential to revolutionize the dissemination of cultural heritage by expanding the reach, enhancing interactivity, and fostering active participation. However, it is crucial to navigate the challenges posed by the vast amount of information and the need for quality control to ensure the accurate and responsible communication of cultural heritage.

Social media platforms. With the popularity and development of the Internet and mobile devices, new media has become the primary means for people to access information. Currently, the dissemination of the Helan Mountain Rock Paintings through new media mainly includes WeChat official accounts, influential blogs, and internet search engines. In particular, WeChat official accounts and renowned blogs possess powerful user-generated media functions. Through user interactions such as likes, shares, and comments, relevant information can be rapidly disseminated and promoted. For example, the WeChat official account "Helan Mountain Rock Paintings" specifically provides readers with detailed cultural and touristic information, offering users a convenient and enriching experience. Furthermore, internet search engines play a significant role in promoting and publicizing the Helan Mountain Rock Paintings.

However, short video platforms have limitations in disseminating information about the Helan Mountain Rock Paintings. The fast-paced and fragmented nature of short videos restricts the depth of information dissemination. With limited video lengths, it becomes challenging to delve into the historical and cultural significance of the Helan Mountain Rock Paintings, resulting in a shallow and narrow understanding of this cultural heritage and its inherent value among the public. Additionally, due to the limitations of short videos in dissemination, there is a risk of falling into the trap of pursuing mere popularity and overlooking factual truths and cultural depth. This poses significant challenges to the protection and inheritance of the Helan Mountain Rock Paintings. Their content may need further supplementation to allow users to have a more

comprehensive understanding of the profound millennium-old culture represented by the Helan Mountain Rock Paintings. Same way Bednarik (1992), and the group with a copy of a magnificent collection of rubbings of the Helan Shan petroglyphs. He then proceeded to regale us with an account of the socio-economic progress of Ningxia Huizu Zizhiqu.

The current status of the Helan Mountain Rock Paintings' dissemination on short video platforms is not ideal. In future promotion efforts, we need to pay attention to these issues and leverage the advantages of short video platforms. By adopting more diverse, rich, and professional forms and approaches, we can promote the cultural significance and historical value of the Helan Mountain Rock Paintings to the public, strengthening their awareness of cultural preservation and heritage inheritance.

Not only are short video platforms ineffective in disseminating the Helan Mountain Rock Paintings, but other platforms also suffer from simplistic and generic content. Of course, this is related to the characteristics of new media, which prioritize fast information updates and concise content. However, the Helan Mountain Rock Paintings, as a cultural heritage, encompass a wide range of topics, including history, culture, and art. It is not possible to comprehensively and in-depth introduce and showcase their value and significance solely through brief text and simple images.

In summary, although new media platforms provide convenient and extensive channels and formats for the dissemination of the Helan Mountain Rock Paintings, we must not overlook their limitations and shortcomings. It is necessary to further enhance the depth and breadth of content, focus on brand building, and innovate communication methods and strategies based on the characteristics and habits of the audience. By doing so, we can elevate the dissemination effectiveness and influence of the Helan Mountain Rock Paintings on new media platforms.

In general, the dissemination of the Helan Mountain Rock Paintings is constrained by various factors. Firstly, due to geographical location and historical reasons, the development level of the Helan Mountain Rock Paintings is hindered, facing relatively lagging economic growth. In such an environment, the preservation and inheritance of cultural heritage often struggle to receive sufficient attention and support.

Secondly, the dissemination of the Helan Mountain Rock Paintings is limited by outdated communication methods and channels. Traditional media remains the main avenue for the dissemination of the rock paintings, while new media plays a supporting role. This leads to issues such as diluted dissemination awareness, limited channels, and stereotypical content. The lack of innovative communication methods and content restricts the reach and impact of the rock paintings, limiting their attractiveness and longevity in dissemination.

Additionally, influenced by mainstream culture, the understanding of the Helan Mountain Rock Paintings tends to be superficial, focusing solely on their appearance and form, lacking a profound understanding of their connotations and significance. This also results in a mismatch of information during the dissemination process, making it difficult to resonate with and capture the public's attention.

Furthermore, with the popularity of the internet, the public has access to a diverse range of information through various means. The dissemination and awareness of the Helan Mountain Rock Paintings face challenges. The younger generation is inclined towards pursuing novelty and enjoying the pleasures brought by technology, gradually diminishing their knowledge of traditional culture. The declining interest in cultural heritage and traditional culture among the public greatly impacts the dissemination of the Helan Mountain Rock Paintings. Traditional media

remains the main avenue for the dissemination of the rock paintings, while new media plays a supporting role. This leads to issues such as diluted dissemination awareness, limited channels, and stereotypical content. The lack of innovative communication methods and content restricts the reach and impact of the rock paintings.

Strategies for Inheritance and Protection. There exists a close relationship between the inheritance, preservation, and dissemination of the Helan Mountain Rock Paintings. Inheritance refers to the intergenerational transmission of the historical, cultural, and artistic value of the rock paintings, ensuring their preservation and passing them on to future generations. Preservation, on the other hand, entails various measures such as restoration, maintenance, and management, aimed at safeguarding the material integrity and uniqueness of the Helan Mountain Rock Paintings.

Inheritance and preservation form the foundation for the dissemination of the Helan Mountain Rock Paintings. Only with a solid basis in inheritance and preservation can the rock paintings possess substantive content and value worthy of dissemination. Inheritance and preservation provide the authenticity and authority that make the rock paintings a culturally significant heritage.

Dissemination, on the other hand, involves conveying the knowledge, stories, and value of the Helan Mountain Rock Paintings to a broader audience. Through various media and channels, including traditional and new media, dissemination introduces the distinctive features of the rock paintings to the public, capturing their interest and attention, thereby promoting awareness and popularization of the Helan Mountain Rock Paintings.

Therefore, inheritance, preservation, and dissemination are interdependent. Inheritance and preservation provide the essence and integrity of the Helan Mountain Rock Paintings, while dissemination extends their reach to a wider audience. It is only with a solid foundation in inheritance and preservation that the rock paintings can be authentically presented and conveyed during the dissemination process, thereby facilitating the dissemination and shared appreciation of their cultural value.

Policy and legislation. Precise measurement, modeling, and preservation of the Helan Mountain Rock Paintings through digital technology can effectively record and safeguard this precious cultural heritage. The digitized data of the rock paintings can be comprehensively showcased and disseminated on virtual platforms, providing more people with the opportunity to appreciate the magnificent landscapes of the Helan Mountain Rock Paintings. Additionally, leveraging artificial intelligence technology can enable the classification, recognition, and analysis of the rock paintings, delving deeper into their historical and cultural value and providing a more scientific and accurate basis for preservation and inheritance efforts.

Conclusion

In conclusion, the dissemination and preservation of Helan Mountain Rock Art, as a significant cultural heritage of China, face challenges in contemporary society. While the government has implemented policies to revitalize cultural heritage, Helan Mountain Rock Art still lacks audience engagement and sufficient inheritors. Research on the dissemination of Helan Mountain Rock Art from a communication studies perspective is relatively limited. Traditional media, although important, has outdated information dissemination models and limited feedback mechanisms, hindering the dissemination of Helan Mountain Rock Art. However, the modernization process also presents new opportunities for its inheritance and dissemination.

Future research should include the government providing guidance and support in the dissemination and preservation of Helan Mountain Rock Art, ensuring its integration into national cultural development strategies. Efforts should be made to improve the quality of communication subjects, including scholars, experts, artists, and inheritors, who can effectively convey the cultural significance and value of Helan Mountain Rock Art. Embrace the opportunities offered by new media platforms, such as the internet and mobile devices, to expand the dissemination space of Helan Mountain Rock Art and engage wider audiences.

Emphasize the diversity of content production related to Helan Mountain Rock Art, highlighting various aspects of its cultural heritage, historical context, and artistic value to attract different audience segments. Collaborate with media organizations to produce high-quality documentaries, programs, and promotional materials that effectively showcase the uniqueness of Helan Mountain Rock Art.

Explore the development of cultural industries related to Helan Mountain Rock Art, such as tourism, art exhibitions, and cultural products, to create economic incentives for its preservation and dissemination.

References

- Anati, E. (1988). *Origini dell'arte e della concettualità* (Vol. 218). Editoriale Jaca Book.
- Carrero-Pazos, M., et al (2022). *Rock Art Research in the Digital Era: Case Studies from the 20th International Rock Art Congress IFRAO 2018*, Valcamonica (Italy). BAR Publishing.
- Chen, W., & Guo, J. (2022). Activation Strategies of Intangible Cultural Heritage Handicraft Brand IP from the Perspective of Integrated Media: A Case Study of Liling Underglaze Color. *Comparative Study of Cultural Innovation*, (04), 58-61.
doi:CNKI:SUN:WCBJ.0.2022-04-012.
- Castells, M., et al (Translator). (2018). *The Power of Communication* (New Edition).
- Demattè, P. (2004). Beyond shamanism: Landscape and self-expression in the petroglyphs of Inner Mongolia and Ningxia (China). *Cambridge Archaeological Journal*, 14(1), 5-23.
- Feng, G. W. (2020). *Research on Visual Design Based on Jiayuguan Heishan Rock Art* (Master's thesis). Lanzhou University. Retrieved from <https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD202101&filename=1020655569.nh>
- Jia, X. N. (2018). *Opportunities and Challenges of Intangible Cultural Heritage Inheritance in the New Media Environment: A Case Study of Jingxing La Flower*. *Guigu*, 004(016), 36-38.
- Dan. L. (2022). Research on the Communication and Development of Intangible Cultural Heritage from the Perspective of New Media: A Case Study of Intangible Cultural Heritage in Liaoning. *China Collective Economy*, (24), 122-124.
doi:CNKI:SUN:ZJTG.0.2022-24-041.
- Li, M. Y. (2017). *Construction and Promotion Practices of Intangible Cultural Heritage WeChat Public Platform* (Master's thesis, Wuhan University of Technology). Retrieved from <https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD201901&filename=1019806765.nh>

- Shu, X. H., et al (2015). Research on the Archival Protection Mode and Implementation Mechanism of Helan Mountain Rock Art. *Lantai Shijie*, (11), 101-102. doi:10.16565/j.cnki.1006-7744.2015.11.020.
- Wang, P. (2002). Exemplar of Ancient Stylistic Art - Helan Mountain Rock Paintings in Ningxia. In Proceedings of the 7th National Conference on Archaeology and Conservation Chemistry of Cultural Relics (pp. 211-214). Beijing: Chinese Chemical Society.
- Xue, Z. C.(2004). The Culture of Helan Mountain Rock Art. *Ningxia Social Sciences*, (2), 72-77.
- Yang, C. (2012). *The "Art" Issue of Rock Art: A Discussion with Mr. Shi Hualong.Xueshujie*, (08), 116-125+287-288. doi:CNKI:SUN:SSJI.0.2012-08-011.