

Analysis and Thinking on the Status Quo of Digital Construction of Stone Inscriptions

He Zhizhang

College of Humanities, Ningxia University, Yinchuan City, Ningxia Hui Autonomous Region, 750021, China
hezhizhang@126.com

Keywords: stone carving literature; digitization; improvement measures.

Abstract: The stone carving literature has extremely high artistic value and cultural relic value. Therefore, in order to better protect the stone carving literature, the current digital technology is used to classify and preserve the stone carving literature, which not only facilitates the development and utilization of the stone carving literature, but also facilitates the retrieval and retrieval. Identification, the ability to dig deep into the academic value of stone inscriptions. Therefore, the current digital construction of stone carving literature is in a period of rapid development, using the network to establish a database, and constantly adding new stone inscriptions. Based on this, this paper starts with the current situation of stone inscription literature database construction, firstly explores the shortcomings in the current digital construction of stone inscriptions, and then analyzes the improvement measures of digital construction of stone inscriptions, hoping to provide certain research on the digital construction of stone inscriptions in China. References.

1. Introduction

The stone carving literature records the text, image information and other content on the stone in a carved way, which not only has high artistic value and academic value, but also has the value of cultural relics. Therefore, the stone carving literature has been valued by many parties, and China has made stone carving literature an important expression of traditional culture. In order to better utilize and preserve the stone carving literature, the digital information technology is currently used to develop the stone carving literature, and the stone carving literature is converted into digital media form and uploaded into the network database, so that the user can quickly identify and query the depth. Excavate the intrinsic value of stone inscriptions.

2. The status quo of stone inscription database construction

2.1 Construction unit

The digitization of stone inscriptions is the use of modern technology to develop and utilize stone engraving documents. The current main construction units are the National Library of China, the Fusin Library of the Institute of History of Taiwan Academia Sinica, the Institute of Humanities, Kyoto University, Japan, and the East Asian Book of the University of California, Berkeley. Pavilion, Heidelberg Academic Institute, Germany. At present, there are about 10 digital development and construction units of stone inscriptions in the country. One of them is a corporate structure such as a digital technology company, and the other is an educational institution.

It can be seen from the above summary that in the current digital construction of stone inscriptions, academic research institutions are the main force, and digital technology companies provide technical support for the corresponding digitalization of stone inscriptions. In the stone inscription database, some of them belong to Jinshizhishu. They are strictly not in stone carvings, but paper ancient books, but these can be attributed to the same category, which has positive significance for the improvement of related research in stone inscriptions.

2.2 Construction Content

The work of data engineering for stone inscriptions began in the late 20th century. They were the first to digitally process and process stone inscriptions, and the relevant construction units had huge stone resources and talents, such as the National Library of China. Many of their stone carvings are extremely precious and even lonely. However, most of the construction at that time was spontaneous and spontaneous, and there was no mutual communication and exchange of resources. On the whole, the construction of digitalization of stone inscriptions is mainly the digital preservation of historical stone carvings, which is used in the study of literature, cultural relics and art.

2.3 Construction results

The dataization results of the stone inscriptions can be divided into three types, one is the stone engraved graphic database, the other is the image database of the stone engraving, and the other is the stone engraving database. When the user has relevant requirements, the keyword search can be performed in the database, and information such as the author, the time of unearthing, and the engraving can be found. Moreover, with the continuous improvement of the digital construction of stone inscriptions, the interaction and communication of current resources have made great progress compared with the past, so the content of the stone inscription database is more complete and rich.

From the overall perspective, the current digital construction of stone inscriptions is still in a period of rapid development, more and more related construction units, and more comprehensive construction content, which further increases the digitalization of stone inscriptions. From the end of the 20th century to the present, the data construction of the stone carving literature has initially formed a system. There are more than one million pieces of various types of rubbings, and a rich form of extensions and images have been formed. However, the use of relevant construction results is not mature enough for databases, most of which are used for retrieval and browsing, and the auxiliary functions are not perfect, which is also a place that needs to be improved in the follow-up construction.

3. Deficiencies in the digital construction of stone inscriptions

3.1 The lack of direction for development and utilization

At present, the digital construction of stone carving literature has certain blindness. Various libraries and so on are only subjectively collecting and collating materials from a certain topic. Before the database construction, there is no targeted market research, so the user needs. Understanding is not clear enough. The database construction of most stone inscriptions is a separate matter, so the construction content has repetitive problems, which is not conducive to the modern use of stone inscriptions.

The stone engraving literature is a precious art and cultural relic. Its development and utilization must start from a certain direction, and then the targeted construction becomes a system, so that the value of the stone engraving literature can be better utilized. However, the current digital construction of stone inscriptions generally has a lack of direction, which also leads to the slow development of database construction of stone inscriptions.

3.2 The single content expression

Most of the stone inscription literature databases use images to display relevant content. Taking the current largest stone inscription database as an example, users can collect relevant image information in a targeted manner, and can also understand related content. However, there is a certain gap between the presentation form and the user's needs. For example, the research function cannot be supported, and the full-text search cannot be performed. This leads to the insufficiency of the digitalization of the stone inscriptions. This is the most deadly digital construction of the current stone inscriptions. problem. Therefore, the social benefits and academic value of the stone inscription database have been weakened to a certain extent, and cannot be diversified to meet user needs.

3.3 Insufficient resource exchange

Most of the current database of stone inscriptions is built with its own resources. Therefore, many contents have one-sided features, which cannot fully reflect the contents of stone inscriptions in specific periods or specific topics. The reason for this phenomenon is the lack of resource exchange in the process of digital construction of stone inscriptions. Most of the regions take the direction of their own development as the subjective direction, and there is also a lack of reference in the process of construction. However, the stone inscriptions have many commonalities. Many texts and pictures can reveal the content and thoughts of a particular period. Due to the unearthed areas and historical reasons, the stone carving literature is divided, and the resources are not effectively integrated in the subsequent database construction process. It has led to the problem of unilateralization of stone inscriptions, which is not conducive to the utilization of stone resources.

The stone carving literature belongs to the cultural heritage of all mankind. Therefore, it must be developed and utilized by modern means. On the one hand, it shows the wisdom of the working people, on the other hand, it fully exploits its intrinsic value. Due to the short development time of the digital construction of the stone inscriptions, there is a problem of lack of direction for development and utilization, single expression of content and insufficient communication of resources. However, with the continuous development of the digital construction of stone inscriptions, it will speed up the improvement and improvement in the follow-up.

4. Measures for improving digital construction of stone inscriptions

The modern development and utilization of stone inscriptions needs to be combined with the needs of users, so as to maximize the value of stone inscriptions and to make traditional art show new charm. Based on the current digital construction of stone inscriptions, the following measures can be taken to improve.

4.1 Establishing graphic database

The digital construction of stone inscriptions is not a simple scan, which will not only cause a lot of waste of resources, but also is not conducive to the development of modern stone carving literature. Based on the current social needs, the digital construction of stone inscriptions requires in-depth development, deepening the existing literature results, and improving the service capabilities of the database through information processing and data association, so that users can better use the database. Research and learning. The original stone inscription is the information material that has been inherited for thousands of years, and it has a very high academic value. However, simple browsing will bring about a large understanding problem, and the user needs to have a high ancient writing skills. Therefore, in the subsequent database development and construction, it is necessary to complete related functions, on the one hand, to perform hypertext browsing, and on the other hand, to carry out functions such as retrieval and research support. In addition, it is necessary to establish a close relationship between the text and the image of the stone inscription, which enables the user to quickly obtain relevant information and improve their service capabilities.

The establishment of the database of stone inscriptions needs to closely meet the needs of the development of the current era. With the significant improvement of people's quality of life, there is a higher pursuit in the spiritual level, and stone carving literature is one of the important ways to understand history and feel the art. In order to simplify the process of communication between people and art, we must enrich the elements in the construction of the database, and effectively transform the ancient art through dismantling and combination, presenting it in front of the user in a modern way. Just like the study of classical Chinese, comments and comments are attached after each sentence. Before the opening, there is a relevant background introduction, so that the user has a preliminary understanding before the observation, and can better understand its charm. At the same time, in order to facilitate the use of stone engraving literature content, it is necessary to build a scientific research platform on the database platform, and use the auxiliary functions to help users learn and use.

4.2 Establishing thematic database

Because the stone inscriptions need to be engraved on the stone, there are not many words in a single stone inscription, and the geographical distribution of the country is wide, and the distribution of stone inscriptions is also wide. Therefore, the effect of digitalization of stone inscriptions can be well reflected. It can effectively concentrate the resources of stone engraving documents, provide help for different types of researchers, and maximize the possession and utilization of time resources. However, in the current digitization process of stone carvings, there are obvious regionalities, which are often one-sided and cannot effectively cover all the contents of a specific period or a specific topic, which leads to the unilateralization of relevant academic research data, which is not conducive to the efficient use of stone carving literature. Based on this, in the subsequent digital construction of stone inscriptions, it is necessary to build a corresponding special database to fully integrate the stone inscriptions and provide support for academic research in different fields. In order to make targeted use of the stone engraving literature resources, it is also possible to formulate corresponding thematic databases and use digital technology to effectively protect and utilize the stone engraving literature resources.

At present, the database of some stone inscriptions has appeared in the trend of specialization. For example, the theme of the Heidelberg Academic Institute in Germany is the topic of Chinese Buddhist stone scriptures. The topic of Fu Si Nian Library of the Institute of History and Language of Taiwan Institute of Chinese Studies is the stone carving image of the Han Dynasty. Although the database still receives the limitations of the unit's own resources is not comprehensive, but also pointed out the direction for the subsequent development. For the domestic digital construction of stone carvings, this method should also be adopted to enrich the database of stone engraving resources through special topics, which not only can promote the role of traditional culture, but also provide massive data support for academic research.

4.3 Strengthening resource sharing and exchange

The current number of existing stone carvings is small, first because the stone carving literature is more difficult to produce, so its number in history is less. Secondly, the damage of the stone inscriptions due to environmental corrosion during the preservation process further reduces the number of stone inscriptions. Of course, damage to the stone inscriptions may also be caused by factors such as war and geological disasters. Moreover, most of the current stone inscription literature database construction is their own, which leads to the shortage of resources for the digital construction of stone inscriptions. Many stone inscriptions have faults, which is not conducive to the development of academic research. Based on this situation, in order to build a modern stone engraving literature database, it is necessary to strengthen the sharing and exchange of resources, break the restrictions of regions and national boundaries, and share the art of stone carving. Only in this way can the database be more colorful.

In order to effectively speed up the digital construction of stone carving literature, it is necessary to adopt diversified measures and boldly innovate. All kinds of databases should be based on the improvement of service capacity and improve their own construction. Since the current Internet technology is relatively mature, the implementation of webpage auxiliary functions is very simple. Therefore, the stone engraving literature database needs to be combined with market demand for its own positioning and function research and development, diversified to meet user needs, and make the use of stone engraving literature resources more convenient. In this way, the effect of digital construction can be effectively exerted, and more people can understand the resources of stone carvings and play a role in promoting culture and inheriting culture.

5. Conclusion

The stone carving literature is an important historical material. It has a very high cultural value and artistic value. Therefore, the digital construction method is currently used to protect and utilize the stone engraving literature resources. However, in the current digital construction of stone inscriptions,

there are problems of lack of direction in development and utilization, single expression of content and less communication. In view of this situation, this paper proposes three methods of establishing a graphic database, establishing a special database and strengthening resource sharing and exchange, hoping to provide a certain direction for the follow-up development of stone digital construction.

Acknowledgement

Fund Project: Shaanxi Provincial Social Science Fund Project (2016GJ003).

References

- [1] Gu Ruoyan, Zhou Agen. The Misunderstanding of the Illustration of the Chinese Dictionary from the Stone Inscriptions of the Jin Dynasty [J]. Chinese Character Culture, 2019(05): 44-46.
- [2] Zhang Yonghui. Analysis of the Multi-sounding Phenomenon of Stone Carvings in Weijin, Southern and Northern Dynasties [J]. Journal of Longyan University, 2019, 37(01): 37-41.
- [3] Li Xuezhen, Chen Heng juice. The value of the Bashu stone carving literature in the study of classical literature [J]. Journal of Xihua Normal University (Philosophy and Social Sciences Edition), 2018 (06): 21-26.
- [4] Song Yazhen. An Example of the Value of Historical Materials in Stone Inscriptions--The Problem of National Number and Year Number in the Change of Dynasty [J]. Journal of Qujing Normal University, 2018, 37(05): 103-105.
- [5] Jiang Zhaohui. On the Characteristics and Value of the Literature of Chaoshan Stone Carving [J]. Journal of Shantou University (Humanities and Social Sciences), 2018, 34(09): 45-53+95.
- [6] Liu Hanzhong. A Case Study of the Interpretation of the Stone Inscriptions in Guangxi (Part Two)--Taking the Collection of the Collection of the Stone Carvings in Guangxi as an Example [J]. Guangxi Local Chronicles, 2018(04): 37-43.