

# **Archive System of University Cultural Heritage Resources Based on Natural Characteristics**

Wenli Jia<sup>(⊠)</sup>

Department of Archives, Shandong University of Science and Technology, Qingdao 266590, Shandong, China

Jiawenli2123@163.com

**Abstract.** To establish archive system is urgent for the protection and utilization of university cultural heritage resources. Based on systematic sorting of relevant work practice and theoretical investigations, the connotation of university cultural heritage resources is clarified, and an archive system including material and nonmaterial cultural heritage resources is proposed in this article. The insights on university cultural heritage resources and the archive system presented here can provide a reference for further investigation and practical utilization of heritages.

**Keywords:** Archive system  $\cdot$  cultural heritage  $\cdot$  resource classification  $\cdot$  university  $\cdot$  oral archive

# 1 Introduction

A university has functional activities such as education, scientific research, administration and service, and the cultural heritage resources accumulated during its development involve all levels of its related activities. The university cultural heritage is a collection jointly formed by its departments, faculty, students and alumni, and it is multidimensional, stereoscopic, and extensive. In literature databases, some articles discuss about the archive construction of cultural heritages [1, 2], but as for university cultural heritage resources, now it is lack of systematic analysis and refinement and there is no clear archive system, and consequently it is not in favor of the protection and utilization of university cultural heritages.

The university cultural heritage resources are classified into material cultural heritage resource (including movable and immovable resources) and non-material cultural heritage resource (traditional culture resource, especially that complemented with group dictation) according to their natural characteristics, i.e., the state of inherent appearance of resources, in this article [3, 4], in contrast to traditional practice which compiles archives based on departments, events and years.

# 2 Material Cultural Heritage Resource Archive

## 2.1 Movable Cultural Heritage Resource Archive

# (1) Text type archive

The text type archive is composed of text archives of education, scientific research, administration, service, and infrastructure construction, which reflect the historical evolution, rules and regulations, institution foundation, appointment and removal of cadres, personnel training, scientific research, and campus construction, etc., and most of them belong to permanent period of management. Nevertheless, like the sayings "that with one hundred years is not wastepaper", the early archives relating to the university foundation regardless of their management period are always significant. It is prominent that these archive resources are incomplete and unsystematic because of the migration, separation, and incorporation of the university in its early times. For instance, the predecessor of the author's university, Huainan Mining College, which was founded in 1951, did not bring a considerable number of its important archives of the early development stage when it was merged into the intermediate institution Shandong College of Coal Mining in 1963. On the 70th anniversary in 2021, my institution Shandong University of Science and Technology copied 135 volumes of archives and set them up.

# (2) Substance type archive

The substance type archive includes important honor certificates (prize certificates, trophies, medals, etc.), souvenirs, memorials, logos (school emblem, flag, badges, etc.), void official seals and signatures, typical teaching models, experimental equipment, technological products, inscriptions, calligraphy and paintings of important leaders and celebrities, etc. It is worth mentioning that in recent years universities have actively conducted archive construction projects of scientific and technological celebrities, and they collected a large number of precious substantial archives reflecting the historical facts of the early development stage of their dominant disciplines, with diverse contents and carrier media.

# (3) Audio and video type archive

The audio and video type archive refers to the photos, audio tapes and video tapes of important conferences and activities held by the university, important construction projects, and those reflecting the campus landscape, etc. In fact, it is also reflected in the text type and substance type archives, and these three types of archives are interdependent and complementary with each other. For instance, the author's institution saves the old photos in text format reflecting the institution foundation, department establishment, appointment and removal of cadres, etc., and it also has honor certificates and prize medals of substance type archive. All these archives with multiple types of carriers reflecting the same connotation are all rendered with reference number to ensure the completeness of the characteristics of the archives.

# 2.2 Immovable Cultural Heritage Resource Archive

# (1) Natural environment type archive

The natural environment type archive includes topography and landforms of campus planning and layout, such as mountains, wetlands, waters, plants, roads. Wuhan University is located at the foot of mountain Louisan and at the shore of the East Lake. There are some weaving terrain, varied topography and abundant vegetation, and a variety of botanical gardens with trees such as cherry, plum, cinnamon and maple. As early as in the 1930s, Wuhan University was praised by Shi Hu and Moruo Guo as "peach land outside the world".

# (2) Cultural landscape type archive

The cultural landscape type archive includes those superimposing cultural characteristics such as foundation background, education philosophy and professional accumulation of the university on its natural environment. It mainly refers to general architecture landscape, which is divided into teaching/researching buildings (teaching buildings, laboratories, internship factories, handicraft manufacture workshops, research centers, etc.), auxiliary teaching buildings (administration buildings, department buildings, library, archives, university history hall, museum, herbarium, clubs, auditorium, affiliated hospital, affiliated schools, sport stadium, etc.), living buildings (dormitories, cafeterias, hotels, former residences of celebrities and other living facilities), dependent buildings (university gates, archways, squares, towers, pavilions, bridges, sculptures, relics, monuments, inscriptions, etc.), by their functions. For example, the main buildings of Wuhan University have exquisite campus layout with a combination of Chinese and Western elements. Its novel architectural style and advanced design ideas can be regarded as a model of campus architecture of Chinese universities.

In fact, the natural environment and humanistic landscape on university campus form an organic assembly of overall planning and intermingling. The assembly is a combination of silent education medium and sound education, which complement each other. According to investigation on most Chinese universities built around the founding of the nation, the archive resources have experienced many vicissitudes, but the original landscape is worth of praising.

# 3 Non-material Cultural Heritage Resource Archive

## 3.1 Traditional Culture Archive

#### (1) Spiritual culture

The spiritual culture refers to the culture that expresses the education goals, moral values and spiritual temperament of a university, and it is the root and soul that leads the development of the university. At the 20th anniversary of the author's university in 1971, the institution extracted its essence through the retrospect of its early tough experience, found bright spots from major events, important nodes and representative personages, and discovered characteristics from the coal mining industry background. It fully reflects

the unique historical and cultural temperament. From that, the main body of traditional culture and its manifestations including university song, department song, university atmosphere, teaching atmosphere, study atmosphere, etc. were formed. They corroborate each other and intermingle with each other, and they advance with inertia as a gene of teachers and students passing from generation to generation.

## (2) Institutional culture

The institutional culture refers to laws, regulations, rules, and stipulations, which govern the internal working of the university and relate the university with outside. It is a composite of a series of rights, obligations and responsibilities jointly maintained and abided by teachers and students. Just like the "ball-ramp" theory of Haier Group Company, it is the basis and guarantee for the healthy development of universities. It reflects in various aspects of a university, such as running by law, democratic management and supervision, functional work (teaching and research, administrative management, ideological building and political affairs). Of course, institutional culture is dynamic, which keeps advancing with times. According to the investigation on university archives, most institutional documents before the 1960s have been invalidated and abolished, but the important role played at that time is unassailable.

## (3) Symbolic culture

The symbolic culture refers to the static design representation that standardly expresses and propagandizes the specific environment elements of the university, such as the font and color design of university name, logo and flag, the design and semantic name of buildings, roads, statues and gardens, the unique museum and campus space layout. The symbolic culture is closely related to the education idea, development history and spirit of the university, which plays a significant role in setting off the campus environment and highlighting the charm of the university. For example, in Wuhan University, the palace building groups show an impressive image and the charm of the campus, and the beautiful skyline outlined by College of Engineering and mountain Luojiashan shows the wonderful layout of a modern university and the essence of symbolic culture of the university.

## (4) Behavior culture

The behavior culture refers to the values widely recognized by teachers and students and sublimated into group values, which are then internalized into individual thoughts and manifested as group behavior characteristics, including staff behavior culture and student behavior culture, such as the dedication behavior of the founders and early pioneers of the university to work hard and make sacrifices, and the diligent studying and struggle behavior of students. The author's institution was founded in mining area to serve coal industry and rely on coal industry development; therefore, the university people developed the spirit of hard-working and adaptiveness at the beginning of the university foundation, and now it becomes an important behavior character of the university. It is

also the manifestation and vivid embodiment of spiritual culture, by the relationship of "behavior" and "spirit".

# (5) Skill and technic culture

As a kind of professional education at the level of academic qualification, higher education cultivates talents according to the categories of majors. Therefore, the teaching skills and technics related to its distinguished majors of a university are also important parts of its traditional culture. The author's institution is a coal industry related university specializing in coal mining. In the mid-1950s, the teachers explored and formed the skills and technics for teaching disciplines such as coal mining and geology. They designed and implemented representative training concepts, training objectives and training programs, etc. Their education achievements have won several national, provincial and ministerial teaching awards. By the end of 1970s, most of these majors developed into independent secondary colleges (departments), whose strength have always been in the forefront of coal related universities.

# 3.2 Group Oral Archive

According to certain technical procedures, standards and regulations, the group oral archive is established by interviewing participants and witnesses, such as old leaders, professors, staffs, and alumni, of a cultural heritage. Interview is an important measure to record and construct a cultural heritage, including the whole process and details of its formation and development. It explores the fine-grained historical information elements by effectively excavating and extracting the hidden information. It forms narration archives by chronological order and logical relationship, then it can make up the deficiency of cultural heritage display itself, and it helps to deeply understand the internal and external environment of the formation of a heritage. According to the construction paradigm of James Wertsch [5], in view of the multi-subjectivity of memory, relevant information can be homogeneous, complementary, or conflicting, but overall, it is relatively complete and systematic. Group oral narration belongs to the category of non-material cultural heritage, but no matter material or non-material cultural heritage, oral interview can be used for memory construction.

The author's institution has completed 32 interviews for 54 topics by now. There is no doubt that an oral interview is an active memory of a specific cultural heritage, and each active memory is a series of lines. As the memory continues, the lines will extend and then connect with each other into a net. With the multi-level and multi-angle expansion of the interview subjects, it will gradually form the history of the entire cultural heritage of the university.

# 4 Conclusions

The archive system for university cultural heritage resources is proposed in this article based on the insights on conceptual connotation of educational cultural heritages. It includes material and non-material cultural heritage resources, in which the former involves movable and immovable cultural heritages, and the later involves traditional

culture and group oral archives. The archive system is in favor of the deep understanding of university cultural heritages, and it is helpful for further theoretical research and real utilization of university cultural heritage resources.

**Acknowledgment.** The author gratefully acknowledges the support from Department of Shandong Province Social Science for project "Digitizing protection and utilization of university cultural heritage" (No. 17CKPJ09).

## References

- Chong, H.T., Lim, C.K., Rafi, A. et al. Comprehensive systematic review on virtual reality for cultural heritage practices: coherent taxonomy and motivations. Multimedia Systems 28, 711–726 (2022).
- 2. Karle, S., Carman, R. Digital cultural heritage and rural landscapes: preserving the histories of landscape conservation in the United States. Built Heritage 4, 5 (2020).
- 3. Thatcher, M. Direct and market governance paths for the creation of an EU political identity: cultural heritage policy. Comparative European Politics 17, 585–602 (2019).
- 4. Munster, S., Utescher, R., Ulutas A.S. Digital topics on cultural heritage investigated: how can data-driven and data-guided methods support to identify current topics and trends in digital heritage? Built Heritage 5, 25 (2021).
- 5. Wertsch, J.V. Voices in the mind. Cambridge, Ma.: Harvard University Press (1991).

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (http://creativecommons.org/licenses/by-nc/4.0/), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

