

Retraction

Retracted: Research on Urban Historical Block Planning Method Based on Big Data Multimedia Technology

Advances in Multimedia

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This article has been retracted by Hindawi following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of one or more of the following indicators of systematic manipulation of the publication process:

- (1) Discrepancies in scope
- (2) Discrepancies in the description of the research reported
- (3) Discrepancies between the availability of data and the research described
- (4) Inappropriate citations
- (5) Incoherent, meaningless and/or irrelevant content included in the article
- (6) Peer-review manipulation

The presence of these indicators undermines our confidence in the integrity of the article's content and we cannot, therefore, vouch for its reliability. Please note that this notice is intended solely to alert readers that the content of this article is unreliable. We have not investigated whether authors were aware of or involved in the systematic manipulation of the publication process.

Wiley and Hindawi regrets that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our own Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation.

The corresponding author, as the representative of all authors, has been given the opportunity to register their agreement or disagreement to this retraction. We have kept a record of any response received.

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- [1] M. Yang and M. R. B. M. Afla, "Research on Urban Historical Block Planning Method Based on Big Data Multimedia Technology," *Advances in Multimedia*, vol. 2022, Article ID 9423504, 6 pages, 2022.

Research Article

Research on Urban Historical Block Planning Method Based on Big Data Multimedia Technology

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With the application and popularization of big data technology, it is more advantageous than traditional urban planning to use big data multimedia technology to reasonably plan the historical blocks of the city. The protection and renewal of historical and cultural blocks have become the core elements to improve the quality of urban development and promote the development of “people-oriented” new urbanization. We analyze and study the planning methods of urban historical blocks under the big data technology. This paper analyzes the different values of historical blocks. By comparing the division effect and business operation mode of historical blocks under different technological environments, it is concluded that the efficiency of traditional data survey and statistical mode is faster than that of big data multimedia technology, and it is more accurate and efficient in analyzing and studying the commercial market and tourism development planning of historical blocks. Through big data multimedia technology data query, we have mastered the cultural connotation of the historical district, protected the historical environment, excavated the historical culture, activated the vitality of the district, and optimized the district environment. It provides convenient scientific and technological means for the protection and development planning of cultural heritage such as historical blocks in China.

1. Introduction

In the wave of urban construction, many historical blocks in cities have undergone the development of blocks or the transformation of “demolishing the old and building new”. This top-down renovation mode has caused the homogenization of many historical blocks, destroyed the original historical characteristics and diversity of social structures of historical blocks, and some social changes have occurred in the process. With the enhancement of the consciousness of historical protection and independent participation, the government and the development subject have begun to attach importance to the protection and utilization of the material and cultural elements of the historical district. The public has also begun to try to participate in the protection and updating of the historical district through protection activities, nongovernmental organizations, and other means. Guo stated that the Urban Planning Museum is an important part of the city. Through the Planning Museum, resi-

dents can quickly understand the structure and functions of the city. The use of multimedia technology in the Urban Planning Museum can better display information and provide more fun [1]. Fan’s paper analyzes the application of multimedia technology in Urban Planning Museum, studies the application advantages of multimedia technology, and analyzes the specific multimedia display and interaction technology, aiming to build an intelligent and humanized urban planning Museum, so as to promote residents to better understand urban planning and construction planning, actively participate in urban construction, and promote urban sustainable development [2]. Wang et al. stated that the utilization value of historical and cultural blocks in modern society needs to be considered from the perspective of modern planning, and the protection methods and commercial development trends should be analyzed [3]. Ke et al. stated that historical block is an important landscape building, of which the commercial value and tourism development account for an important proportion. The protection

and management of it require technical research such as data collection, information analysis and management, and real-time monitoring and detection. Adopting big data technology can provide technical support for effective governance and protection [4]. Liao et al. said that the transformation and activation of historical blocks are important for improving the living standards of local residents. For the proper use of historical buildings and the utilization of cultural values, the supporting infrastructure needs to be properly planned and studied. The management system can be improved by using modern science and technology to conduct simulation research [5]. Pei stated that with the improvement of living standard and the change of living mode, the residents' living environment is also improved. With the development of the city, it is inevitable to transform the historical block. In order to preserve the cultural characteristics of the historical block and better integrate into the modern urban and rural construction, the planning of the block needs to be reasonably arranged and improved [6]. Wu stated that the development, planning, and construction of historical blocks is an important decision, which directly affects the quality and efficiency of urban construction. The application of multimedia technology and big data technology in statistics, language, text, and image simulation is more suitable for the construction of modern urban development [7]. Xiao et al. stated that with the economic growth of modern cities, the historical blocks of the city have gradually changed from the living space of the original residents and foreign tourism to the public places for daily recreation and play. The public transformation of the historical district needs to comply with the overall economic development and cultural value inheritance of the city and planning and management from the perspective of public services [8]. Through the analysis of the application of big data multimedia technology in the planning of urban historical blocks, it can be seen that the development of modern society is accompanied by the application of big data, artificial intelligence, and other high-tech technologies. In many fields, it has shown great value. There are many limitations in the historical district, which conflict with the modern development environment in terms of space and use value, living environment, and commercial scale. In the reconstruction and planning of historical blocks, modern digital technology and big data multimedia design methods need to be used for reasonable planning and combine the styles of different times to create a historical block that conforms to the concept of modern social development and develop the historical block reasonably.

It not only protects the material entity of the historical information carrier but also plays to greater value. The protection of residents' living environment and the construction of dynamic blocks have also been improved to meet people's psychological and life needs.

2. Development of Big Data and Multimedia Technology

With the rapid development of the design industry in China, more and more traditional design methods are gradually changing. Take multimedia as an example. In traditional

design, multimedia is just icing on the cake. However, with the rapid development of science and technology, traditional design methods can no longer meet the design concept of the big data era. Therefore, it is particularly important to deeply understand the significance of multimedia graphic design under the current background. In fact, big data has been changing our lives. In the past, the data was completed by professional teams, professionals, or professional companies. Now, it is more individual behavior. Everyone can send data through the terminal. For example, the photos and videos taken can generate a large amount of data through the computer. This has changed the data. Xu stated that big data technology has achieved rapid development. Due to the diversity of data and the continuous maturity of technology, the content of multimedia picture language can be richer and more diverse. The multimedia picture language has added a new perspective and can better adapt to the development of the times. In the continuous development of multimedia picture language, big data has become the driving force, and the application of big data to multimedia picture language can realize various functions [9]. Ding stated that the increase in the number of multimedia users will generate a large amount of information data. With the increase in the number of users, a large amount of information data will be generated each time. These information data will continue to accumulate and increase, making the network storage and processing technology unable to meet the storage requirements of information data and affecting the security of the Internet [10]. Zhong stated that multimedia technology is now applied to urban planning, which is more intelligent and humanized. More multimedia equipment is used in the display process to make the urban planning and design more concrete [11]. Therefore, it is necessary to innovate the development mode and optimize the development concept, so as to effectively solve the problems of network security and comprehensively improve the level of computer information processing technology with big data as the main carrier.

3. Value and Planning Mode of Urban Historical Blocks

The urban historical block is not only an important carrier of the urban historical value and image but also an important part of the urban function. With the passage of time, the urbanization process is developing rapidly, the restoration is insufficient, and the protection consciousness is weak. The environment and style of the urban historical district have lost its original appearance. For the proper renovation of buildings with historical features and the improvement of infrastructure, the method of gradual renovation and gradual improvement shall be adopted to oppose large-scale demolition and construction and better protect the historical heritage. The characteristics and connotation of urban historical blocks have laid a foundation for the development of block planning and the protection of blocks in the new urban development. As the material foundation of the city, the urban historical district can reflect the unique regional cultural characteristics of the city, maintain the

historical urban pattern and architectural style, and thus improve the overall value of the district. The protection of historical blocks is an important part of the urban historical and cultural heritage protection system. Appropriate protection strategies should be selected according to the characteristics of historical blocks, and different protection methods such as transformation and repair should be adopted according to different types of protection objects. Wu Yi and Wu Ya stated that by using multimedia technology and big data technology to analyze and plan the historical buildings in urban blocks and combining the historical and cultural atmosphere of the blocks and modern tourism culture to plan the surrounding street areas, the commercial blocks not only protect the block buildings but also use tourism to drive the development of the historical blocks economy [12].

4. Analysis on the Planning Methods of Urban Historical Blocks

4.1. Value Analysis of Urban Historical Blocks. The value of historical blocks has the characteristics of diversity. The development degree of history as a period of time reflects the life atmosphere of a certain period and has been preserved as a characteristic historical value. In terms of artistic value, many buildings and decorative styles are full of cultural atmosphere. In terms of social value, as the residence for residents to live for a long time, the urban historical district is connected with the long-term social relationship network. This intangible network relationship is also the driving force and dependence of people's life. The following figure shows the visual processing according to the value classification of historical blocks:

As shown in Figure 1, the value of historical blocks is divided into historical value, artistic value, social value, use value, and tourism value. As a cultural relics protection area, historical blocks are different from modern urban road blocks and also have wireless value in the overall planning and development. To make effective use of historical blocks to contribute to the modern society and play a useful role, it requires us to plan and operate reasonably.

4.2. Comprehensive Analysis of the Effect of Historical Block Planning under the Big Data Environment. The urban planning in different periods is inconsistent, and different planning methods of historical blocks will also lead to different effects. For the planning of blocks, there are different classification methods according to different functions. This paper classifies the planning of historical blocks under different development environments and makes statistics on the management effect after the division:

As shown in Table 1, from the aspects of population monitoring and regulation, traffic management, cultural heritage protection, and commercial market renewal, the effect of block planning under the big data multimedia environment is significantly higher than that under the traditional environment. For clearer comparison, the data in Table 1 are processed visually in Figure 2.

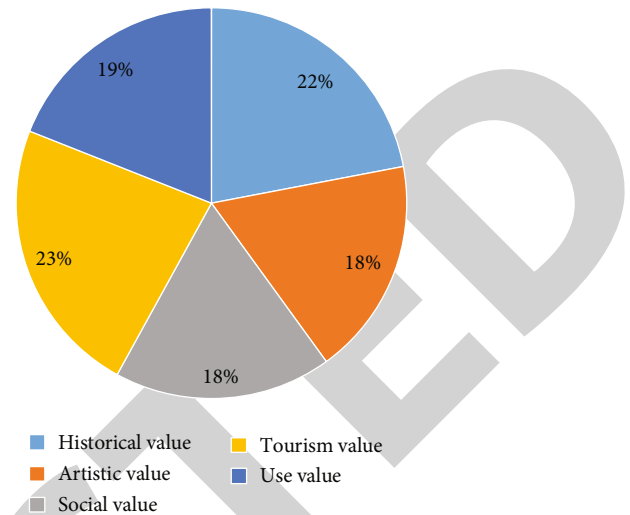


FIGURE 1: Value classification of urban historical blocks.

As shown in Figure 2, big data multimedia should be technically superior to the traditional technical models and methods. Data simulation and calculation can be carried out in advance for the tourism route planning of block roads and the planning and installation of current monitoring facilities. As a means of commercial operation, historical district has more commercial value. Adopting big data technology can screen out more appropriate statistical data results for such business planning and tourism route planning. It can also timely adjust the changes of the commercial market of the historical district to a certain extent.

4.3. Research on Planning of Historical Blocks under Different Technologies. As a kind of cultural heritage, historical blocks contain a lot of historical and cultural values. Now, the improvement of residential life has also emerged more spiritual curiosity and exploration desire for China's historical culture. The commercial value of historical blocks in major cities has also been developed to a greater extent. To better plan, develop, and utilize the blocks, this requires more reasonable planning. The following table shows different planning modes for historical blocks under different technological environments:

Shown in Table 2 are the specific planning of historical blocks including the business, tourism, resident occupancy, and block protection planning. Under the high-end intelligent technology, the big data multimedia technology can be used to study the market situation, residential life, and tourism trend through data analysis in terms of business positioning and use value positioning, and targeted planning can be carried out according to the lifestyle of modern people. The visual processing of data input of Table 2 is shown in Figure 3.

As shown in Figure 3, big data multimedia technology is more prominent in planning effect than traditional technology. With the development of modern network technology, the calculation and simulation of data are humanized. Under the influence of big data technology, the principle of updating the spatial quality of historical blocks is summarized.

TABLE 1: Analysis of planning and management effects of historical blocks under different environments.

Group	Population monitoring and control	Traffic planning management	Cultural heritage protection	Business update
Traditional environment	43.84	41.55	47.26	38.06
Big data environment	73.26	69.24	66.74	71.96

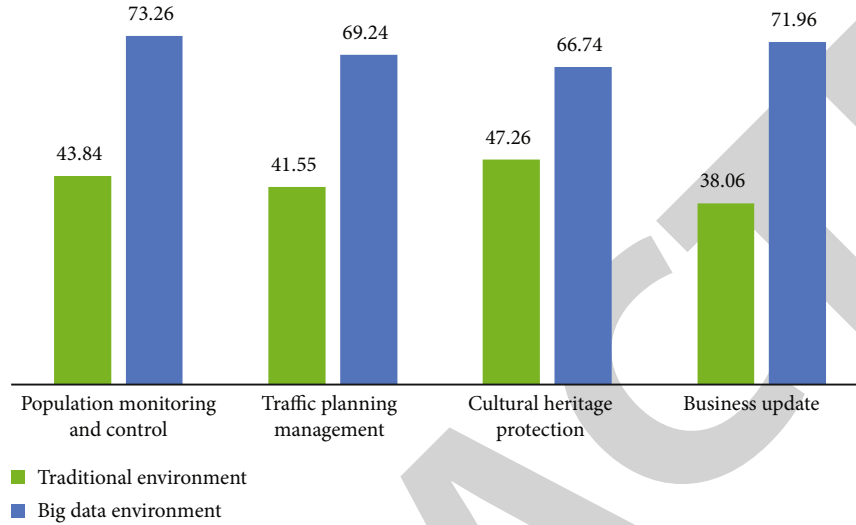


FIGURE 2: Analysis of planning and management effect of historical blocks under different environments.

TABLE 2: Planning of urban historical blocks under different technologies.

Group	Business planning	Tourism planning	Residential planning	Protection planning
Traditional technology	41.32	36.26	40.87	46.65
Big data multimedia technology	62.35	75.26	53.02	71.11

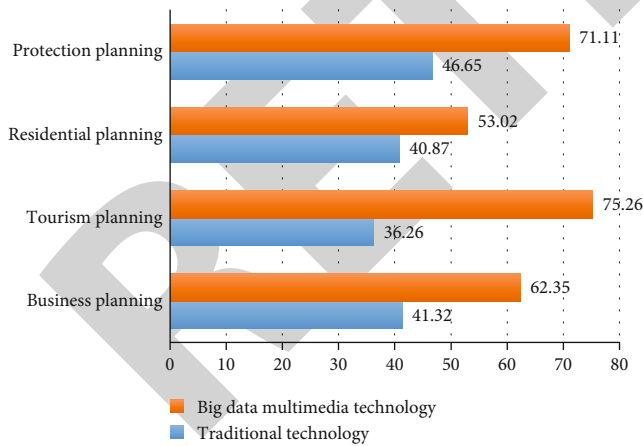


FIGURE 3: Planning analysis of urban historical blocks under different technologies.

The application of big data technology in the space of historical blocks is summarized from the acquisition of spatial data, the quantification method of spatial quality, and the updating strategy of spatial quality. The use of multimedia technology for communication and publicity has avoided the waste of labor force in personnel survey. There are still

some contradictions between the planning of roads and the flow of commerce in the historical blocks and the modern society. In terms of traffic, the old roads in the blocks cannot meet the parking of modern vehicles, and there are also insufficient facilities such as personnel living.

4.4. Analysis of Coupling Degree of Urban Historical Block Planning. The reasonable planning of urban historical blocks will directly affect the economic and cultural development of the city where they are located. The historical blocks with rich historical and cultural knowledge will have a positive impact on investment attraction and tourism business. With the use of modern multimedia technology, combined with the network data of the local government and the region, the data records of the historical blocks are planned and deployed in a targeted manner to avoid waste of resources and to accelerate efficiency. The following figure compares and analyzes the planning coupling degree of historical blocks under different technologies:

As shown in Table 3, the coupling degree of urban historical blocks under the big data multimedia technology is relatively high. According to the data analysis, it is found that $T < 10$ and $P < 0.05$, and the data are statistically significant. Figure 4 visualizes the data in Table 3.

TABLE 3: Comparison of coupling degree of historical block planning under different technologies.

Group	Urban Historic District planning	
	Before coupling	After coupling
Traditional technology	42.56	52.11
Big data multimedia technology	53.68	71.15
t	8.325	7.065
P	0.025	0.013

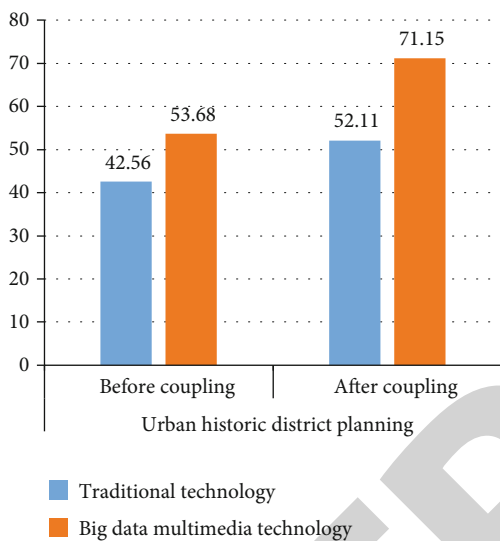


FIGURE 4: Coupling degree of urban historical block planning.

As shown in Figure 4, through the analysis and comparison of the coupling degree, it can be seen that the planning of historical blocks should not only conform to the complex environment of modern society and meet the consumption groups of different potential customers but also be perfect in terms of cultural protection and personnel living guarantee. Through the application of multimedia technology and big data technology, we can find more suitable solutions and countermeasures in multiple planning platforms and data analysis. Compared with the traditional old survey scheme, it is more in line with the development concept of modern society.

5. Summary

Through the analysis and research of different angles, the conclusion can be developed that the urban historical blocks in modern society have the value of diversity in different aspects. The ancient construction was restricted by the society, humanistic thought, and science and technology at that time, and many layout and convenience were not suitable for the needs of modern social development. From the perspective of combining ancient and modern, to plan and arrange the historical blocks on the basis of protecting cultural heri-

tage needs to consider the safety, the convenience of commercial operation, and the safety of personnel living and mobility. It needs to conform to the development benefits of modern society and carry out targeted transformation, maintenance, and use. The protection of historical and cultural blocks needs to give full play to social forces and participate in the formulation and implementation of planning, which is a complex and systematic project. With the use of big data multimedia technology, we can conduct surveys and statistics from the network, conduct comprehensive analysis and simulation planning, and conduct rehearsal and design in advance. It is of great significance to the development and protection of historical blocks in China in the future. It is also a powerful factor for China's cultural, artistic, and economic development. More and more cities have begun to pay attention to the use of digital media technology to excavate, display, and reshape historical and cultural values, thus promoting the improvement of urban image and spatial quality.

Data Availability

The data underlying the results presented in the study are available within the manuscript.

Disclosure

We confirm that the content of the manuscript has not been published or submitted for publication elsewhere.

Conflicts of Interest

There is no potential conflict of interest in our paper, and all authors have seen the manuscript and approved to submit to your journal.

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