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# Survey and Research on Ancient Academy Inscription Literature in Zhejiang Province

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#### **Abstract**

A history in stone, inscriptions are a common cultural carrier in ancient China, which not only take various forms but also carry a wealth of social information, and are an important part of our traditional culture. History is the life of memory, an important element of human culture, the main support of the traditional cultural order, and an important core of everyone's sense of identity and belonging. The inscriptions, which enrich everyone's historical memory, have historical objectivity and credibility. This paper takes ancient Zhejiang academy inscriptions as the main object of study, and will trace the cultural lineage of ancient academy culture from the inscriptions to create a new pattern of development of Zhejiang academy culture. At the same time, the author examines ancient academy inscriptions around Zhejiang, digs deeper into the current situation of collecting, collating and protecting academy inscriptions, rescues inscriptions abandoned in the wilderness, and uses new media technology to create a database of inscriptions and a distribution map of inscriptions, laying a solid foundation for the future protection and development of academy inscriptions.

### Keywords

Inscriptions; Academy; Conservation.

### 1. The Importance of the Academy Inscriptions

## 1.1. The academy inscriptions have profound connotations and are an important cultural carrier

The ancient academies studied in this paper are those established in Zhejiang Province before the Xinhai Revolution (excluding ancient government-run educational institutions such as county academys and prefectural academys); the ancient academy inscriptions studied in this paper are those once preserved in ancient academies (built before the Xinhai Revolution) and do not include those forged by later generations. The main forms of the inscriptions include monuments on the culture of the academy, monuments on the founding of the academy, monuments on the rules and regulations of the academy, and monuments on the number of branches of the academy, etc. The content of these inscriptions is extensive, covering various fields such as education, society, economy, law, politics, religion, folklore and language, and is an important part of the culture of the academy and the culture of inscriptions.

Known as 'history carved in stone', inscribed documents have great historical value and have always occupied an unshakeable position in historical research. The authenticity of the inscriptions is guaranteed by the fact that they are mostly carved in stone and cannot be tampered with or destroyed over time. The immediacy of inscriptions is an important reason why they are valued by historians. It can fill in the gaps or deficiencies in the writing of the official histories, and also provide a more informative and reliable historical basis for research.

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The inscriptions in Zhejiang Province have a strong authenticity and can be used as an important supplement to various classical texts, an important basis for the study of folklore, an important record of traditional academy culture and an important resource for sightseeing. The inscriptions are of great value as authentic and reliable first-hand information, as they are highly contemporary, regional and long-preserved. The inscriptions are widely used by scholars to trace the history of the region, to explore the history of regional development, and to uncover the inner laws of cultural transmission, so as to achieve an overall knowledge of the regional culture and a better understanding of the connotations of the region's academy culture. The inscriptions of the academies in various cities of Zhejiang province record information on various aspects of the region and its academies, preserving a large number of original materials with local cultural characteristics and containing a great deal of cultural colour. The interpretation and verification of the inscriptions by scholars and experts can help to clarify the development of the academy since its establishment, which is important not only for understanding the operation and management of the academy at its inception, but also for uncovering the deeper cultural connotations of the academy.

### 1.2. Cultural lineage renewed, the academy inscriptions face a number of difficulties

Many of these inscriptions have been abandoned in the corners of study halls, with fractures and blurred handwriting, but the relevant authorities have not taken the necessary measures to protect them. Although some local governments in Zhejiang Province have carried out the conservation of inscriptions in an orderly manner, they have done so in a more traditional manner due to a lack of expertise and guidance from experts in the field. Rather than individualising and refining their conservation measures, the local authorities have adopted the same set of measures to protect inscriptions in different conditions.

In addition, various local governments in Zhejiang Province have not conducted a census of the resources of the monuments in the academy, and the scope of protection is limited. The census of inscriptions requires a great deal of financial, material and human resources, making it more difficult for the government to invest a certain amount of money, organise special, census work on inscription resources and mobilise private organisations and individuals to participate in this work.

Heritage conservation funding is the foundation of China's heritage conservation and is the guarantee for the development of heritage undertakings. In recent years, China's heritage conservation funding has encountered serious challenges, with a serious shortage of funding for grassroots heritage conservation and a lack of motivation for local governments to provide funding for heritage conservation. The lack of funding for local administrators and the lack of relevant policies for the importance and support of inscription resources has led to the inability to protect the inscription resources of the academy. Local governments and their relevant departments are increasing their awareness of the need and urgency of inscription conservation, and under the guidance of this philosophy, the government and its relevant departments are carrying out the conservation of inscriptions in an orderly manner. However, there is still an undeniable lack of publicity for the protection of inscriptions, which has led to a lack of awareness among the general public of the importance and preciousness of inscription resources.

On 29 January 2022, the State Administration of Cultural Heritage issued a notice on strengthening the management of stone inscriptions, which calls for the effective strengthening and standardisation of the management of stone inscriptions to ensure the safety of cultural relics. This is a constructive milestone in the history of the conservation of the country's inscribed cultural heritage resources, and the conservation activities of inscriptions nationwide will be accelerated, scaled up, and made more systematic and large-scale.

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### 2. The Current State of Preservation of The Academy Inscriptions

## 2.1. Overview of the distribution and characteristics of ancient academy inscriptions in Zhejiang

It was formed in the Five Dynasties, flourished in the Song Dynasty, was revived in the Ming Dynasty and fell into decline in the late Qing Dynasty. As a place to receive students and study, Zhejiang has been home to many academies since ancient times, and the fragrance of books has always been present. Thousands of years ago, they were renowned as a place of spiritual leadership in the north and south of the country, and a large number of prestigious academies such as Wan Song and Lize emerged throughout history.

These academys are either hidden in the downtown areas of the prefectures, or in remote villages, or in ancestral halls of the clans, or in beautiful water and mountains. The locations vary, the times differ, but what is the same is the thirst for knowledge, the dedication to the practice of theories, the continuation of the cultural lineage, and the sincerity of the family. The Zhejiang academy inscriptions are unevenly distributed in time and space, with a strong concentration. In terms of time, the rapid development of Zhejiang's academies since the Ming and Qing dynasties has resulted in the preservation of more and more complete inscriptions from that period; in terms of space, more inscriptions survive in places of cultural prosperity such as Ningbo, Hangzhou, Shaoxing and Wenzhou.

### 2.2. The content reflected in ancient Zhejiang academy inscriptions

### 2.2.1. The contents of the ancient Zhejiang academy inscriptions

### 1) History and General Information of the College

The main information contained in the historical materials of Zhejiang's academies is the history of the local academies, and by analysing these materials, one can have a clear understanding of the history of the rise and fall of the academies in a place. After the Song and Yuan dynasties, Zhejiang's academies spread across the province like stars in the night sky, and during the Ming and Qing dynasties many of them were rebuilt and repaired, leaving behind a large number of inscriptions. The inscriptions record in detail the formation process and history of the academies, and bear witness to the process of their construction.

In addition to documenting the historical lineage of the academy, the inscriptions often provide an introduction to the basic conditions of the academy, including its address, its buildings, its philosophy, its teachers and students, and its books and publications. For example, the Tablet of the Founding of Changshan academy records the conditions of teachers and dormitories, providing information on the establishment of the academy.

#### Academic Regulations and System

The academy rules are the general term for the ancient rules of the academy. Since the Southern Song Dynasty, the academy began to pay attention to the development of its management system and preserved its rules in the form of inscriptions. For one thing, the inscriptions are eye-catching and serve as a constant reminder for students to observe the rules and regulations of the academy; for another, the inscriptions can be retained for a long time and the rules can be passed on from generation to generation.

The academy rules and regulations cover a wide range of subjects, including admissions, attendance, examinations, and codes of conduct, and the regulations are clear, with clear rewards and punishments. For example, in the inscriptions of the Li Ze Academy, it is written that the basic principles of the Academy are "filial piety, fraternal duty, faithfulness, understanding and conduct", which were formulated by Lu Zuqian himself. Any student who "lived apart from his relatives, did not bury his relatives, gathered for funerals and weddings,

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or violated the public purse, or made a noise in the house, or wandered around in a disorderly manner" would be withdrawn from the academy.

### (2)Financial records

There are three main sources of funding for the education of the Zhejiang Academy, as reflected in the inscriptions: the academy field, donations from officials and gentry, and income from the education institution's own operations. For example, the inscriptions on the Li Zheng Shu Yuan (Li Zheng Shu Yuan) inscriptions show the donations made to build the academy and the details of the academy's expenditure, including donations from officials and merchants, joint donations from counties and municipalities, donations from social gentry and field rents, and expenditure on staff salaries, scholarships for students, teachers' salaries, books and scrolls, etc., with the smallest unit of funding being accurate to 'cents'.

In order to motivate students to pursue their studies, the academy often gave them a certain amount of money, silver or ink, paper and inkstones, as well as material rewards for the best students, which are also recorded in inscriptions. For example, if a student was a resident at Hangzhou's Wan Song Academy, he or she would receive a fixed monthly allowance for tuition. Each academy also had a monthly examination, which was open to all students of the academy, and those who excelled were rewarded in varying amounts. As the amount of the monthly stipend was limited, many students from poorer backgrounds travelled from one academy to another, taking part in the regular examinations to obtain extra money for their fees; some members of the community would also participate in the examinations, learning the art of literature and knowledge in order to obtain material rewards to cover their daily expenses.

### 2.2.2. Ancient Zhejiang academy inscriptions and documents

As a vehicle for reproducing the content of the inscriptions, paper documents are important historical materials for the study of Zhejiang's academies. The research found that the paper documents of the Zhejiang academy inscriptions are mainly found in local chronicles, academy histories and chronicles of academies, as well as in the notes, anthologies and diaries of literati throughout the ages. The paper documents reflect the historical development and institutional evolution of the academy, and are also of high literary value. Through a combination of literature search and fieldwork, the author collates and analyses the documentation of ancient Zhejiang academy inscriptions.

### (1)Chronicle of the Literati Academy

academy zhi refers to a comprehensive document that records the history and development, educational management and rules and regulations of a academy in the style of a compilation of square zhi. Since the Ming and Qing dynasties, the academies in the Zhejiang region began to compile academy zhi and publish classical arts, and these academy documents became firsthand sources for the study of the content of the inscriptions. Most of these inscriptions record the founding or restoration activities of the academies and explain their significance, and some also deal with the teaching and lecturing of the academies. In the Song and Yuan dynasties, there were already scholarly histories, and in the Ming dynasty, more and more scholarly histories were compiled, and in the Qing dynasty, when scholarly institutions flourished, the compilation of scholarly histories was also quite popular. In the Qing dynasty, the compilation of books was also quite popular. Take the book of Ying Shan Academy as an example, which was compiled six times by the Fang family, starting with the Ming man Fang Yingshi. The four engraved editions of the Qing dynasty (Qianlong 39) contain a variety of art and literature represented by the academy inscriptions in Volume 5 and below. Whenever the academy was rebuilt, rebuilt, or increased field, carved books, there are often literary celebrities for the academy to write a record, Huang Yaochi wrote "rebuilt Shikwen academy record", Xu Zhu wrote "rebuilt Ziyang academy monument record" is a typical example. Scattered among the literary collections, the

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records of the academy blend the historical facts of the inscriptions with literary art, and become a valuable historical source for interpreting the contents of the academy inscriptions.

### (2) Local Jinshi County Records

Indirectly, there are a large number of documents on academy inscriptions, of which the local chronicles are a general collection of historical, geographical and cultural materials of a certain region. From the Song dynasty to the Republic of China, many of the local chronicles included special volumes on academys and education, including accounts of the construction of the academy inscriptions and their contents. Local zhi, especially the jinshi and yiwen zhi, are one of the most important sources of information on the inscriptions of the academy. Before the Ming dynasty, the records of the inscriptions in Zhejiang local documents available for inspection often only mentioned the time and place of the establishment of the academy and its founder, while the internal regulations of the academy, the development of teaching and academic activities, and the interaction between the academy and the local community were often not mentioned in detail or even not mentioned at all. In some cases, the historical facts recorded do not corroborate each other, for example, the political orientation of respecting Zhu and restoring the king has led to differences in the records of the academy and the local chronicles of Ying Shan academy. The discrepancies between the records of the academy and those of the local histories are to some extent due to political influences and academic changes. These omissions and contradictions make it difficult to collate the paper-based documentation of the academy inscriptions, making it particularly important to understand the academy inscriptions in the context of the cultural background of the period.

### (3)Posthumous documentation

Another indirect source of inscriptional documents from the academy is the jinshi journals compiled by later scholars, such as the Wulin jinshi journals, the two Zhejiang jinshi journals, and the Yuezhong jinshi journals. As most of the jinshi journals compiled by later generations appeared in the Ming and Qing dynasties and were written relatively late, these jinshi journals often have the advantage of being clearly printed and classified, but they also suffer from a lack of historical material. Many of these inscriptions are incomplete, missing the names of their authors and erectors and the time of their erection, and in some cases, only the names of the inscriptions remain. In response to the errors and omissions in the jinshi journals compiled by later generations, modern researchers have also carried out research on to fill in the gaps. For example, Ruan Yuan's Jin Shi Zhi (The Golden Stone Records of Two Zhejiang Districts) contains the golden inscriptions of east and west Zhejiang from the Qin to the Yuan dynasties, including information on the inscriptions of the academy, but the inscriptions and the testimonies also contain omissions or errors, and the book has been refined by later scholars. The book has been improved by later revisions and corrections, including the correction of inaccuracies in the Bibliography of the Xihu Academy and the reconstruction of the Dacheng Hall Tablet in the Yuan Xihu Academy, as well as the modern transmission of paper documents on ancient Zhejiang academy inscriptions.

As can be seen from the above, the historical sources of the paper-based documents of the academy inscriptions are relatively diverse, but the number of documents that have been excavated, collected, collated and used is still limited, and there is still a considerable amount of information lurking in the canonical literature to be studied. In particular, it should be noted that, in addition to being located in China, the academy inscriptions are also found in countries and regions outside of China, such as Korea and Japan, while the development of academy studies has also provided a constant flow of new documents for the study of ancient Zhejiang academy. Therefore, the development of the study of academy inscriptions is always new and needs to be further explored and studied.

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## 2.3. The current state of conservation of the Zhejiang Provincial Academy inscriptions

The physical value of inscriptions cannot be ignored as they are one of the important carriers of history and culture. The culture of inscriptions is an important part of Chinese history and culture, combining history, literature, calligraphy and engraving, and is of great historical and cultural value. As a non-renewable historical and cultural resource, it is the duty of everyone to protect them.

Firstly, the preservation is scattered and the damage is serious. The overall state of preservation of the inscriptions in the various study halls in Zhejiang Province is that they are scattered and seriously damaged. Due to the heavy quality of the stone, it is not easy to move between regions, so most of the inscriptions are stored locally and managed in a fragmented manner, making it difficult to form a systematic, standardised and integrated management. Due to the scattered storage, funding is seriously lacking, and the small-scale study halls or cultural relics collection units are limited to the conditions that make it difficult to keep the inscriptions closed, with some placed outdoors and others stacked at the roots of the walls, which are vulnerable to weather erosion and human damage. Due to the lack of funds and limited manpower, as well as the lagging concept and the lack of attention from the government and the public, the protection of inscriptions has become a major obstacle in promoting the collection and study of inscriptions in the province's academies. Local academies are only responsible for the display of exhibits within the academy, and do not have the function of leading or guiding the conservation and management of stone inscriptions in the city, so it is difficult to carry out conservation initiatives for academy inscriptions across the city, and even if they do, it is difficult to ensure standardisation and sustainability.

Secondly, management is stratified and varies greatly. In the academies that are rich in stone inscriptions and have opened scenic spots, most of the inscriptions are well protected, with additional fences generally installed to avoid artificial touching, leaning, bumping or trampling. For example, the three inscriptions at Jinhua's Bajinglou, mainly the Li Zheng academy (Collection of Letters of Income and Expenditure), have been properly placed in a non-open-air corridor, with additional safety warning signs, protective fencing and electronic monitoring facilities near the stone inscriptions. For example, at the Confucius Temple in Quzhou, some of the inscriptions are displayed indoors for viewing by the public, and are protected by fences so that the inscriptions are at a relatively large distance from the audience; some of the smaller inscriptions are embedded in the walls to avoid the sun and rain.

However, in some areas of Zhejiang Province, there is no special fame, not through the good tourism development of the more desolate academy, subject to preservation conditions, funds, means and other constraints, most of the monuments are still scattered outdoors, subject to the sun, rain, freezing snow cover and other daily wear and tear, and even acid rain, bird droppings erosion and other infringements to accelerate the rate of damage, at the same time, because the academy was built a long time, so the inscriptions of the long span of time As a result of the long history of the monuments, they have been subjected to the stresses of the natural environment and physical, chemical and microbiological weathering for a long time, resulting in serious weathering phenomena such as chalking and flaking on the surface of the stone monuments.

Third, inappropriate conservation and lack of paradigm. For example, in the case of the Dupeng Academy in Lishui, the author found that in the early years of inscription conservation, some of the inscriptions were protected by painting after the initial restoration was completed, in order to present the textual content of the inscriptions more clearly and to prevent daily wear and tear and slow down the rate of indecipherability. However, judging from the current state of these inscriptions and the current more scientific perspective, I believe that this is only a temporary means of conservation that is obsessed with immediate and timely benefits. This

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approach destroys the original surface of the inscriptions, to the extent that it makes restoration work difficult afterwards. At the same time, the paint applied is mostly red and green, which destroys the aesthetic experience of the inscribed relics and to some extent diminishes the physical value of the inscriptions. The research and application of new conservation techniques started late and has only recently begun to make progress, but progress has been slow, with insufficient experience and results being disseminated.

It is understood that Zhejiang Province is effectively strengthening the protection and study of stone monuments and carvings of cultural relics. Strengthen the daily patrol to look after, to carry out stone monuments and stone carvings disease monitoring and analysis, the discovery of heritage safety hazards to be able to take timely measures.

## 3. The Problems in The Collection and Protection of Ancient Academy Inscriptions in Zhejiang

### 3.1. The physical documentation of inscriptions is poorly protected and most of them are in a state of natural extinction

Within Zhejiang, ancient academy inscriptions are caught in limbo and facing a serious crisis of survival. On the one hand, the relevant information on ancient academy inscriptions in Zhejiang has not been systematised, and there is a lack of up-to-date research materials. The author found that there is still a gap in the systematic documentation of ancient academy inscriptions in Zhejiang Province, and there is no record of the recent status and latest research results on ancient academy inscriptions. The research related to ancient academy inscriptions is only a record of individual examples of representative inscriptions in Zhejiang's ancient academys, and there is a lack of systematic and comprehensive collation of ancient academy inscriptions. The time span of the preservation of inscriptions, especially those handed down from the Song and Ming dynasties, is such that they are more or less subject to breakage, deformation and cracking over the years, as in the case of a damaged inscription preserved in the Wan Song Academy in Hangzhou.

In addition, the erosive effects of weathering on the stone inscriptions during the reconstruction of the academy are equally serious. When placed in a natural environment, temperature and humidity are often important factors in the deterioration of ancient monuments, especially those placed outdoors, where sun exposure on a sunny day can lead to dryness and cracking and flaking, and rainfall on a rainy day can lead to corrosion and peeling. The damaged inscription shown this afternoon was originally stored in the Confucius Temple in Quzhou, but was severely damaged by open-air storage. The weather in Zhejiang is known to be humid, and when left out in the open for a long time, the inscriptions are prone to moss, mould and even chalking.



**Figure 1.** Inscriptions in the Confucius Temple, Quzhou

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### 3.2. Poorly restored and heavily patterned development sets

After a hundred years, some of the ancient academy inscriptions are more severely damaged, and even fractured, missing pieces and chalked, to the point where they have to be restored. However, due to technical and financial constraints, the ageing of old restoration materials can also have an impact on the monuments. This is a difficult problem because, on the one hand, without restoration, the inscriptions will become more severely damaged; on the other hand, the ageing of the restoration materials will also cause some damage to the inscriptions. In all cases, this requires a scientific approach to conservation.

The transmission of inscriptions is also an important means of spreading and protecting inscriptions. It is the process of using paper to cover the text and drawings of a stone or gold object and then printing them in ink. It is widely used in inscriptions, but in fact, the work itself can have a damaging effect on inscriptions, especially when a single inscription is topologised more than once, causing serious damage to the inscription.

The author found that the development mode of the monuments in the academy is relatively single, and in the physical protection of the monuments often does not combine the actual situation of the resources to develop a variety of options, such as in situ physical restoration and protection, for the special value of the monuments will be reproduced and stored in museums, heritage museums, etc. for special protection.

### 3.3. Inadequate cultural heritage and insufficient publicity and protection channels

As most of the people's awareness of tangible cultural heritage is at a shallow level, their acceptance of unprocessed digitised inscription resources is also low, and they are unable to develop a stronger sense of conservation. As a result, I found that most people have little understanding of the culture of inscriptions and lack basic knowledge of the urgency and importance of collecting, protecting and organising inscriptions. In addition, government propaganda departments and cultural conservation departments do not make enough efforts and channels to promote the conservation of monuments in the academy, and the propaganda targeting the public as the audience is not strong enough to create a good atmosphere conducive to the conservation and development of monuments in the whole society, and to help the general public from point to point to form a deep understanding of the culture and conservation of monuments in a way that will give them a strong sense of participation and cultural conservation. A sense of responsibility. In terms of the mode of exhibition of the inscriptions, the display is old, the presentation lacks innovation, and the degree of association with other cultural promotion units is low, which leads to a weak cultural heritage and makes it difficult for the public to absorb and export what they have gained even after visiting the exhibition.

## 3.4. Low importance attached to the collection and conservation of ancient academy inscriptions

Compared to other historical and cultural heritages, academics and the general public have paid less attention to the conservation of monuments in the academy, with fewer research funds invested by the relevant research units and less investment by the relevant publicity units, resulting in the monuments in the academy remaining hidden in a corner that lacks attention and focus. The lack of funding from local administrators and the lack of policy support for inscriptions has prevented large-scale conservation initiatives. As we all know, inscriptions are basically stone materials, which are large in size, difficult to move, occupy a large area and require huge human, material and financial resources. However, due to the lack of attention and funding from the local cultural authorities and the management of the academy where the

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inscriptions are located, it is difficult to move all the remaining inscriptions to one place for special management or to protect them in situ.

Under the guidance of this philosophy, governments and their relevant departments are increasingly aware of the need and urgency of inscription conservation, and are carrying out the protection of inscriptions in an orderly manner.

However, there is still an undeniable lack of publicity for the conservation of inscriptions, making the general public unaware of the importance and preciousness of inscription resources. The low level of public attention comes from the lack of understanding of the inscriptions on the monuments and the difficulty in identifying and understanding the inscriptions on the monuments; on the other hand, the inscriptions have not been collected, sorted, protected and effectively developed in some of the monument sites, resulting in the public having less access to the inscriptions and paying less attention to them, and focusing their attention on other historical and cultural heritage.

## 3.5. Insufficient funds for conservation, and rescue work of inscriptions cannot be carried out in a timely manner

The collection and restoration of inscriptions from ancient academies and the collation of paper documents cannot be achieved without financial support. At present, the source of funding for the protection of inscriptions in Zhejiang's academies is narrow, relying heavily on government grants and generally not setting up a special fund for the protection of inscriptions. The state funds allocated to repair the monuments are mainly used to repair some key monuments, while some monuments that are not included in the national and provincial protection lists are severely damaged and lack funds for repair. Due to the remote location of some ancient academies, the lack of convenient transportation, the serious pollution of the river, the accumulation of rubbish and the large amount of vacant land in the vicinity of the academies, there is no long-term development plan for cultural monuments, and the lack of supporting development with the surrounding areas as an extension of the academy industry, which does not drive the social and economic benefits of the academies as a whole and affects the restoration and preservation of inscriptions.

## 4. Zhejiang Ancient Academy Inscriptions Collection and Protection of Countermeasures and Suggestions

## **4.1.** Formulating protection regulations and improving the management system for inscriptions

### 4.1.1. Establishing regulations for protection and management with clear powers and responsibilities

For a long time, the regulations governing the protection of inscriptions in Zhejiang's academies have been vague, and the inscriptions in Zhejiang's academies are scattered, with significant differences in their degree of preservation. With the exception of a small number of ancient academy sites, which have been listed as national key cultural heritage units, most of the inscriptions are in fact poorly supervised or unsupervised, with obvious damage to the inscriptions and illegible inscriptions, leading to a serious erosion of the value of the inscriptions as cultural heritage entities and cultural carriers.

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Figure 2. Inscriptions in the Wansong Academy in Hangzhou



Figure 3. Inscriptions in the Changshan Academy in Jinhua

Since 2016, the state has promulgated policies such as the Opinions on Implementing the Project of Inheritance and Development of Excellent Chinese Traditional Culture and the Opinions of the State Administration of Cultural Heritage on Strengthening the Management of Stone Inscriptions and Topography, and Zhejiang Province has issued instructions such as the Action Plan for Inheritance and Development of Excellent Traditional Culture in Zhejiang Province, which outline the path for the conservation and management of cultural relics and cultural inheritance in China. However, these policies are broad and not very specific, and have little practical reference value for the conservation and management of inscriptions. Therefore, in order to achieve more precise and detailed management, government departments can, under the guidance of national, provincial and municipal regulations on the protection of cultural relics, formulate policies and regulations with clear powers and responsibilities, taking into account the distribution and protection of inscriptions in Zhejiang Province, so as to provide instructions on the protection and management of inscriptions.

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### **4.1.2.** Implementing a comprehensive and dynamic conservation strategy for inscriptions

With the rapid economic development of Zhejiang Province and the inevitable urbanisation process, the traditional static protection mechanism for inscriptions, which emphasises 'comprehensive protection' to the detriment of the value of inscriptions as cultural carriers, has become increasingly problematic. It is therefore possible to develop a 'dynamic conservation' system that treats the inscriptions and their surroundings as an organically integrated unit. This system requires all parties to grasp the local characteristics of development, and to work with the relevant heritage conservation units to implement daily maintenance and regular inspections, and to innovate ways of protecting and developing the inscriptions to effectively improve their utilisation. The dynamic conservation system will ensure that the residents' standard of living is improved while preserving the deep historical heritage of the inscriptions.

## 4.2. Implementing a census of inscriptions and creating a database of inscription information

### 4.2.1. GIS Technology Enables Comprehensive Census

As one of the four ancient civilisations, China has been moving forward in a tortuous manner throughout its 5,000-year history, and in the process has accumulated a rich tangible cultural heritage. These tangible cultural heritages not only have valuable historical, scientific and artistic values of their own, providing a wealth of historical materials for future generations to grasp the historical context and conduct relevant research, but are also the root of Chinese culture and an important resource for the construction of socialism with Chinese characteristics.

At present, most of the inscriptions in Zhejiang's academies have not been scientifically and systematically protected, and there are gaps in the relevant inscription archives or the information is not updated in a timely manner, which seriously hinders the development of conservation work, and the excavation of their cultural connotations is at a standstill. Therefore, it is imperative to implement a census system for inscriptions, which is also the basis for the subsequent construction of a database.

In order to improve the efficiency of the census, the relevant authorities can use geographic information systems (GIS) to further contribute to the capacity-building and modernisation process of cultural heritage conservation and development. Firstly, in combination with descriptive locational information,the GIS digitised maps can be used to locate the inscriptions in Zhejiang Province, which are scattered and difficult to collect comprehensive information on. It can also help to 'recover' some of the inscriptions that have been lost due to building construction, road changes, etc. In addition, in practice, GIS can be used to codify the six main attributes of cultural relics, such as category and burial site, and record vector data, image data, text data and other information to achieve the transition from 'census' to 'detailed understanding'. The transition from "census" to "detailed understanding" can be achieved, which facilitates the subsequent screening and integration of relevant information to complete the construction of the database. Finally, GIS technology can be used to analyse the natural and human environment around each inscription, and to develop a heritage management system and conservation plan that is in line with the actual conservation of inscriptions, thus promoting the sustainable development of inscription culture.

### 4.2.2. Digital means of building a database of inscriptional information

After completing a census of the location and basic information of the storage of inscriptions in Zhejiang Province, heritage conservation units should scan and process cultural entities through digital means with the help of hardware equipment such as computers, in order to achieve digital archiving and display of inscriptions. Compared to the traditional way of

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topography, digital topography of inscriptions can be used to obtain information related to inscription topography without touching the inscriptions. With the support of the 3D model depth digital topography generation technology, the 3D information of the inscriptions can be scanned to obtain their point cloud data to generate a triangular grid model of the inscriptions. This can then be used to build a 3D model of the inscription and obtain the final digital topography of the inscription. In addition, conservationists can also use digital image processing technology to combine the images of the inscriptions with optical equipment to produce the corresponding digital topographies, which is also very easy to do.

However, in the process of digitising inscriptions, experts often find that the information collected from the digitised inscriptions is affected by factors such as the tilt of the photographed surface. In order to reduce the interference of these factors, the same 3D reconstruction and 3D model depth generation techniques can be used to correct the collected digital image information in order to obtain the best storage and display results.

## 4.3. Focusing on scientific restoration and breaking up the development of inscriptions in a set manner

### 4.3.1. Cleaning of the surface and filling of the colour

The lack of guidance from professional units and the application of a set approach to conservation management are the main reasons why the conservation of inscriptions in Zhejiang Province's academies has faced so many obstacles. The current conservation measures often ignore the characteristics and attributes of individual inscriptions themselves, failing to apply targeted conservation measures and even causing irreversible human damage to some of the inscriptions through inappropriate conservation methods.

The monumental relics themselves are large and difficult to move, and most are protected in the open air, where they are not only susceptible to erosion by natural elements, but can also be damaged by the touch of visitors. [4] Therefore, government units need to develop individualised restoration plans for inscriptions under the guidance of experts such as heritage restoration, and implement scientific conservation and restoration of inscriptions to lay a solid foundation for subsequent inscription information collection and analysis. Firstly, for dirt and deposits on the surface of the inscriptions, heritage experts can use tools such as bamboo sticks and brown brushes to simply clean the surface. For stubborn dirt, EDTA solution can be used to soak through the pulp, wrapping it around the surface of the inscription to dissolve it, and then rinsing the entire inscription with deionised water. If the surface of the monument is found to be damaged to varying degrees, it can be restored by filling it with a stone binder such as epoxy resin with curing agent and finishing it with a colour slightly lighter than the original monument.

#### 4.3.2. Surface lamination to retard wear and tear

Conservation units can introduce internationally leading coating and laminating methods, using silicone coatings, nano-bionic and other coating materials or cold-mounting films on the surface of the inscriptions, depending on the stone characteristics of the inscriptions themselves. This is a convenient and effective way of protecting the inscriptions, and the text of the inscriptions can be clearly displayed. If the inscriptions are kept in a courtyard that is open to the public and has a high traffic flow, the relevant authorities can install protective barriers and glass partitions around the inscriptions, as appropriate, to reduce the damage caused to the inscriptions by the flow of visitors. As can be seen, the conservation and restoration of inscriptions needs to be scientific and targeted rather than routine, in order to ensure that the historical relics and the cultural values contained in them are passed on in a sustainable manner.

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## 4.4. Tapping the cultural connotation and reshaping the profound heritage of inscriptions

In addition to their artistic and historical value, the inscriptions are also a source of authentic and reliable information, providing experts and scholars with a variety of research directions and rich research materials. However, at present, some of the monuments in Zhejiang Province are only preserved at the level of the material body, but not at the level of cultural value, leaving a valuable spiritual treasure lost in the dust of nature.

Therefore, it is important to develop a conservation and management path of "information survey  $\rightarrow$  database establishment  $\rightarrow$  cultural connotation excavation" for the inscriptions, and to actively exploit the documentary value of the inscriptions while scientifically protecting the inscriptions themselves. In order to ensure the smooth progress of this process, the local government needs to take the lead with the Cultural Heritage Bureau and experts and scholars in various fields, using the digitised information on the inscriptions as a grip to restore the history and analyse and interpret it in conjunction with the available historical materials, in order to effectively enhance the utilisation of the inscriptions. In addition, for the small number of inscriptions stored secretly by individuals or units, the relevant departments should also strengthen guidance and standardise management, and carry out timely investigation and recording of the relevant inscriptions, so that the actual value of inscriptions, heritage value and historical value can be fully reflected, and the profound cultural heritage of inscriptions can be recreated.

### 4.5. Linking neighbouring resources to develop the potential of multiple funds

Compared to the material cultural heritage of ancient buildings, less attention has been paid to the conservation of inscriptions, and less funding has been invested, which has directly hindered the conservation and management of inscriptions in the academy. In fact, the funds required for the management of inscriptions are not only to ensure the direct protection of the material objects, but also to attract and introduce more experts and scholars to carry out research on the content of the inscriptions and to enhance their cultural value.

At present, the conservation of inscriptions in Zhejiang Province is mainly dependent on government funding or the support of relevant research institutions. With the exception of a small number of monuments in provincial and national conservation sites, which receive support from the monument conservation fund, the majority of monuments are located in small, remote sites, and the financial support they receive is only a drop in the bucket, making it difficult to ensure their daily operation and conservation.

In response to the above-mentioned status quo, government departments should examine and link the surrounding resources of the academy where the inscriptions are located, formulate a sustainable development plan for heritage conservation, improve the match between the main body of cultural relics and the surrounding area and related industries, and thus broaden the funding channels for the conservation and development of the inscriptions. After going through the review, the author has come up with a list of a series of severely damaged Zhejiang academy inscriptions. Relevant government units can launch calls to social groups dedicated to the restoration and protection of cultural relics and enterprises with a need to enhance the image of the community to organise fund-raising activities for restoration work to provide financial security for the in-depth restoration of the ageing monuments.

In addition, as some of the inscriptions are located in highly reputable study halls, and the surrounding facilities are well established, the relevant authorities can make full use of this advantage to preserve the cultural relics in question, while treating the research and conservation of cultural relics and additional industries such as tourism as an organic whole, bringing into play the value of the collaboration between the two. On the other hand, the development of the historical and cultural value of cultural relics, such as inscriptions, will not

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only enrich the cultural heritage itself, but also enhance the cultural atmosphere of the surrounding area, thus enhancing the popularity of tourism and other related industries, forming a virtuous cycle of development and alleviating the pressure of insufficient funding for the conservation of inscriptions across Zhejiang. This will in turn enhance the cultural atmosphere of the surrounding area, thereby enhancing the popularity of tourism and other related industries, creating a virtuous cycle of development and alleviating the pressure of insufficient funding for the conservation of inscriptions throughout Zhejiang.

### 4.6. Broaden the dissemination channels and enhance the public recognition of the preservation and transmission of inscriptions

At present, government departments at all levels in Zhejiang Province are becoming more aware of the need to protect inscriptions, and conservation and development work is gradually getting underway. However, the majority of the public have little understanding of the culture of inscriptions and lack basic knowledge of the urgency and importance of protecting them. This is mainly due to the fact that most people have a superficial understanding of tangible cultural heritage and are less receptive to unprocessed digitised inscriptions, which naturally prevents them from developing a strong awareness of conservation.

Therefore, authorities at all levels should follow the guidance of General Secretary Xi Jinping and bring to life the cultural relics collected in museums and the heritage displayed on the earth. In order to achieve this vision, the relevant authorities can break away from the traditional way of displaying important inscriptions and digitise them, adding elements such as interpretive videos and VR immersive interaction, and opening thematic inscription exhibitions in museums, cultural centres or universities to broaden the dissemination of the art and culture of inscriptions. In addition, various departments can also create cultural IPs related to inscriptions by combining local characteristics and developing creative and historical cultural and creative products, so that the ancient inscriptions can be presented to the public in a new light.

In terms of propaganda methods, both online and offline should be combined. On the one hand, the relevant authorities can make full use of online platforms such as WeChat and short videos to innovate cultural communication and enhance the public's understanding and acceptance of the culture of inscriptions. On the other hand, government units can mobilise inscription collectors or private heritage conservation organisations to encourage them to carry out inscription exhibitions and related inscription cultural popularisation activities to help the general public develop a deeper understanding of inscription culture and conservation methods and gain a stronger sense of participation, which will also help to create a favourable atmosphere for inscription conservation and development in society as a whole.

#### 5. Conclusion

The richness of the monumental resources of the academy is an important documentary and physical source of history, culture, calligraphy and engraving, and is indispensable for the study of the culture of the academy and the exploration of the cultural value of the monuments themselves. However, with the passage of time, coupled with human destruction and natural erosion, these materials are slowly fading away. Therefore, there is an urgent need to take effective measures to enhance their protection. It is reported that various local governments and their relevant departments in Zhejiang Province are carrying out the protection of inscriptions in an orderly manner by means of continuously establishing and improving the regulatory system and supervisory mechanism, as well as increasing financial investment.

In Zhejiang Province, there are many problems in the process of protecting and organising the monuments, such as the limited scale and inappropriate way of protecting the monuments; weak awareness, worrying conditions and inappropriate methods of protecting the

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monuments; insufficient funds for the protection of the monuments, weak cultural heritage and low publicity and few channels. In response to the existing problems, this paper, through thorough fieldwork and theoretical exploration, summarises a scientific model for the conservation of the monuments in Zhejiang, proposing five initiatives: implementing a census of monuments, creating a database, focusing on scientific restoration, tapping into cultural connotations, and linking with neighbouring resources, so as to optimise the conservation methods, enhance conservation concepts, and standardise the conservation process. This will lead the way in rescuing and preserving the inscriptions of Zhejiang's academies and explore a reference path for the conservation and collation of inscriptions in other regions.

General Secretary Xi Jinping has repeatedly emphasised the need to "systematically sort out traditional cultural resources, so that cultural relics collected in museums, heritage displayed on the vast earth and texts written in ancient books can all come to life", and the need to strengthen the promotion and awareness of the preservation of inscribed documents, combining the preservation of inscribed documents with rational development and utilisation, as well as leveraging inscribed resources to open up new horizons for the culture of the academy and to enhance its vitality and creative ways of passing on this important historical and cultural heritage.

As an important historical and cultural heritage, the importance of the inscriptions of the Academy cannot be overlooked and should be organised, systematically and systematically protected, combining the protection of the inscriptions with rational development and utilisation, taking rescue conservation as an opportunity and activating the rich content of the inscriptions as a way to make them play a more positive and special role in the continuation of our cultural roots, the construction of a strong cultural nation and the enhancement of cultural confidence.

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