

Creativity, Heritage and the City 6

Francesco Augelli  
Matteo Rigamonti *Editors*

# Cultural Heritage Preservation for Vulnerable Territories

The Hunan Province in China

 Springer

# **Creativity, Heritage and the City**

## **Volume 6**

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Cities are faced with various problems, including terrorism, energy challenges, and environmental issues, as well as inter-urban competition brought about by expanding globalization forces. What is required is to gather theoretical insights from various scientific areas, not only social science– humanities but also natural science, and connect them to the practical insights already gained through numerous efforts to deal with these issues on the ground. In this way, paradigms for urban creativity can be developed and we can start to accrue dependable practice and theoretically based intelligence that can be used for improved policymaking. The keywords for this book series are “urban creativity”, “(cultural) heritage”, and “social development”. Developing cultural and natural resources, including heritage, so as to take the lead in evaluating, implementing, and suggesting urban or regional designs that harmonize ecology, society, and people, and to further develop urban and regional culture is essential. There is a particular focus in this book series on fostering individuals who can design, manage, and direct models, technologies, and tools for promoting interfaces between such actors as policymakers, urban planners, engineers, and residents. The above-stated goals can be implemented through cooperation with international research communities and networks, international organizations, and natural history institutions, academies of science, and research institutes.

Francesco Augelli · Matteo Rigamonti  
Editors

# Cultural Heritage Preservation for Vulnerable Territories

The Hunan Province in China

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**Part I**  
**Introduction**

# Chapter 1

## A Long Journey in the Fragile Cultural and Natural Heritage of Hunan. Research and Teaching Collaborations and Experiences 2009–2023 Between Politecnico Di Milano and Hunan University



Francesco Augelli

The Hunan is a province in China located southeast in the middle reaches of the Yangtze River and south of Dongting Lake. Hunan borders Hubei Province to the north, Jiangxi Province to the east, Guangdong Province to the south, Guangxi Zhuang Autonomous Region to the southwest, Guizhou Province to the west, and Chongqing Municipality to the northwest. The capital city is Changsha. Hunan covers an area of 211,800 square kilometres and has a population of 67,370,000 (2014 data). It is a province rich in cultural and environmental assets, with traditional villages that, in many cases, are still well-preserved and of rare beauty and value. Changsha, the capital, has a population of 7,044,118 (2010 data) (Fig. 1.1).

Among its notable features is the old Yuelu Confucian school, founded in 976 during the Song dynasty (960–1279), now known as Yuelu Academy. Today, it is an important tourist attraction and has been the core of the subsequent Hunan University since 1926.

Particularly rich have been, in the last bit less than 15 years, the occasion of collaborations in Hunan University–School of Architecture, for teaching (from bachelor students to PhD), for workshops and training activities in the field, for research and consultancies in the restoration works sites.

These notable collaborations started thanks to Prof. Arch. Su Liu, who, in 2009, was in charge as dean at the School of Architecture of Hunan University.

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**Fig. 1.1** The map of Hunan Province and its principal city

Professor Su is a well-known expert and Professor in the history and preservation of historical architecture of China, mainly of the Hunan Province. Since the writer of this contribution is a woodworking expert and since the historical buildings in Hunan are primarily made with wood, he invited me for a week as Speaker at the 11th International Symposium on Culture and Architecture (ISAC) at the Hunan University in Changsha, held in November 2009. Prof. Susanna Bortolotto, also from Politecnico di Milano, was invited. On that occasion, I gave a speech about the wood architecture culture in Italy: knowledge, diagnosis, and preserving cultural heritage.

That week was also the occasion to meet professors, researchers, and PhD students and visit a fantastic traditional village in Hongjiang with Prof. Liu Su, who was the Dean of the College of Architecture, and Zhong Mingfang, a PhD student at Hunan University.

After visiting the village, I carried out a one-day workshop about conserving and maintaining the old town of Assumptions and the Hongjiang insertion site in the UNESCO tentative list. Another workshop at the headquarters of the Association of Artisans of Hongjiang City was about establishing a training centre for cultural heritage conservators (Figs. 1.2 and 1.3).

After these exciting collaborations, October 2015 was the occasion to give a keynote speaker in Changsha at the International Symposium on Architecture History Study and Cultural Heritage Conservation. The speech was about the design and execution of inspections and diagnostic tests for the preservation and reuse design of woodwork in the central body of the Royal Villa in Monza. The Symposium was also the occasion to visit with Liu Su and his two PhD students, Yuwei Li and Tian Changqing and a Politecnico di Milano specialisation School student, Matteo Rigamonti, many villages (Figs. 1.4, 1.5, 1.6 and 1.7) and one of these (Gayantun) were then decided to use for a future workshop.

In 2016 at Politecnico di Milano, has been signed the Agreement of the Joint Management Committee between the two universities for joint activities of study, research and training in the field of Cultural Heritage by the rector, a delegate of Prof. Giovanni Azzone and a delegation of Hunan University rector, Prof. Dejie Yu, Professor, President Assistant of Hunan University, Zhaohui Yuan, Ass. Professor, Vice Dean of School of Architecture; Yahui Zhao, Ass. Professor, Acting Director of the International Programs Division and Hui Chen Professor, currently dean of the School of Architecture.

For this agreement, the support of Professor Hui Chen has been fundamental. This agreement has been renewed and is still active today. The same year, they invited me as a visiting scholar at the College of Architecture of HU and research for the Hunan Institute of South China Village Culture (RISCVC). From July to September 2016, I was the organiser, co-director and professor at the Summer International School on Preservation and Reuse of Historic Architecture and Landscape of China Village Culture for the Hunan University of Changsha and Research Institute of South China Village Culture, guided by Professor Liu Su. The work on site was carried out at the Ganyantou ethnic village in Yongzhou and mainly at the Black Door Mansion. This activity also involved two students from USA University and two from the Specialization School of Architecture and Landscape Heritage of Politecnico di Milano (Figs. 1.8 and 1.9) One of them, Davide Strada, gave his specialisation thesis on that topic under my supervision.<sup>1</sup>

2016 was also the occasion to visit the historical Villages of Huaihua, Yuanling, and many others.

A PhD thesis of a Hunan University student, Shiruo Wang, under my supervision at PhD School on Conservation of Architecture of Politecnico di Milano, Department

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<sup>1</sup> See the contribution within this book.



Fig. 1.2 Hongjiang visited in 2009



Fig. 1.3 Hongjiang visited in 2009



**Fig. 1.4** Dong Guajing visited in 2015

of Architecture and Urban Studies, started with the topic of Drum Towers knowledge and preservation of Gaobu Village, Dong Minority in Hunan.<sup>2</sup>

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<sup>2</sup> See the contribution in in this book.



**Fig. 1.5** Lingling visited in 2015

After many collaboration activities carried out in 2016, I received the honour of being included as an Honorary Professor at Hunan University of Changsha–School of Architecture.

For the official proclamation on this role, I gave an open *Lectio Magistralis* entitled *The Relationship Between Old and New in Architecture. Examples.*

A former student of mine at the Specialization School of Architecture and Landscape Heritage of Politecnico di Milano, and still now a collaborator of mine, Matteo Rigamonti, also a professor at the European Institute of Design of Milan, started to join the activities of collaborations deeply.

Together, we provided consultancy for the preservation and reuse project of the Hunan University Campus “Building Two,” a modern building completed in 1916.<sup>3</sup>

The activities carried out in research and teaching experiences in the Hunan historical villages were presented in May 2017 in the Milan Expo Area during the Human Factory Day “Research & Civil Society for Social Innovation”. Panels and a stand were about the Human Factory in Hunan province (RPC), which is the development of traditional villages in China. In October of the same year, an exhibition about the HNU & POLIMI Architectural Conservation Techniques Bootcamp was organised in the Central Library of Changsha, Juzhou Public Forum.

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<sup>3</sup> Look at the contribution within this book.



**Fig. 1.6** Xiaoshui village visited in 2015

In 2018, we also continued disseminating collaborations through participation at the World Multidisciplinary Civil Engineering, Architecture, Urban Planning Symposium (WMCAUS) held in Prague (Czech Republic) in June. Have been presented by collaborators and us the followings: Hunan University Campus “Teaching and research building two” preservation and reuse design; Preservation



**Fig. 1.7** Xiaoshui village visited in 2015

practice between identity and social issues: the case of Ganyantou ethnic village in Yongzhou; Preservation and valorisation of Public Historical Areas in Gaobu Village, Dong Minority of Hunan.

The same year, I received an invitation as a Visiting professor from August to September at the Hunan University of Technology of Zhuzhou, also in Hunan, where we organised a summer workshop, “Historic buildings’ conservation and reuse”, for the School of Urban and Environment. Students and professors also came from Hunan University and South China University. After the in-classroom lectures helped prepare the students for the in-site activities, we started to work in the Zhuting historical core for preservation, valorisation, and reuse.<sup>4</sup> After that, an exhibition was held at the university.

Davide Strada and Shiruo Wang participated, in September 2018, at the RURALIA International Congress on “Architecture and Landscape in the ethnic minority territories” in Alagna-Valsesia Italy, with a speech the first about Ganyantou ethnic village in Yongzhou: an example of fragile territory in China and the second about a comparison Study Between Pingtan River Basin in Hunan and Jiudong Area in Guizhou on Chinese Dong Minority’s Village and Drum Tower.

In November, a workshop called “Architectural Heritage Preservation and Reuse-Preliminary Preservation and Reuse Design on Timber Structure Tea Workshop of

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<sup>4</sup> Look at the contribution within this book.



**Fig. 1.8** Gayantou village was visited in 2015, and the first workshop was organised here in 2016

Quing Dynasty in Anhua’s First Tea Factory” was organised in the field and at the School of Architecture of Hunan University. The workshop concluded with an exhibition of the results in the hall of the School of Architecture.<sup>5</sup>

In 2017, we also included visiting the villages of Bajingxiang-Miluo Shuijadian-Pingjiang, Youchong, Dongguan Museum, and the traditional pottery village and factory.

In July 2020, Shiruo Wang concluded and discussed his thesis about the Chinese Dong Minority Drum Tower: from knowledge to Preservation.<sup>6</sup> In September, Davide Strada discussed his Specialization degree in the vernacular settlement of Ganyantoucun. Conservation and enhancement of a fragile territorial reality: the case study of the Zhou complex (fifteenth century).<sup>7</sup>

In 2021 and 2022, due to the Covid troubles, online meetings and lectures have been organised. In October 2022, Professor Chen Hui and I supervised Yihui He Ms’s thesis at the School of Architecture, Urban Planning, Construction Engineering in Architecture-Built Environment-Interiors. She was a student at Hunan University and an MSc student at Politecnico di Milano. The research discussed the ancient

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<sup>5</sup> Look at the contribution within this book.

<sup>6</sup> Look at the contribution within this book.

<sup>7</sup> Look at the contribution within this book.



**Fig. 1.9** Gayantou village was visited in 2015; the first workshop was organised here in 2016

warf architectural heritage in Zhuting town and the preservation and design of linear architectural heritage routes.<sup>8</sup>

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<sup>8</sup> Two contributions about this topic are in this book.

During this year (2023), meetings and lectures online and workshops in China with Hunan University are ongoing about Hesheng Village, Shegang Town, Liuyang City preservation and reuse project and Cao's Ancestral Hall and Goulan Yao Village. PhD students attend these activities about the project's methodology and using new digital technologies such as Heritage Building Information Modelling (HBIM) and Digital Twin modelling.<sup>9</sup>

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<sup>9</sup> Look at the contribution within this book.

**Part II**  
**Territorial Scale Research**

# Chapter 2

## The Tea Road and the Tea Culture Heritage of Hunan Province



Chen Hui, Ma Zhuwan, and Xu Zegang

**Abstract** This chapter first sorts out the historical evolution of the Tea Road, laying the foundation for the preliminary study of the overall framework system of the Tea Road. We plan to take the protection of the Tea Culture heritage in Hunan province as an example and summarise the influential heritage factors of the Tea Culture heritage in Hunan province according to the preservation characteristics of various local heritages. On this basis, we will conduct a vulnerability assessment of the tea culture heritage in Hunan and finally determine the principles and methods for protecting tea culture heritage in Hunan. In the end, we extract the content and significance of the Tea Road communication.

**Keywords** The Tea Road · The tea culture heritage of Hunan Province · The combination of tea cultural heritage · Vulnerability

### 2.1 The Historical Evolution of the Tea Road

The Tea Road refers to the long-distance commercial trade route between ancient China and Russia from the end of the seventeenth century to the beginning of the twentieth century. It is another important international trade route that has risen in Eurasia since the decline of the ancient Silk Road. The route starts from the mountainous tea-producing areas of southern China in the south, goes north by land and water transportation, passes through Hankou and Zhangjiakou, and extends to

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C. Hui (✉)

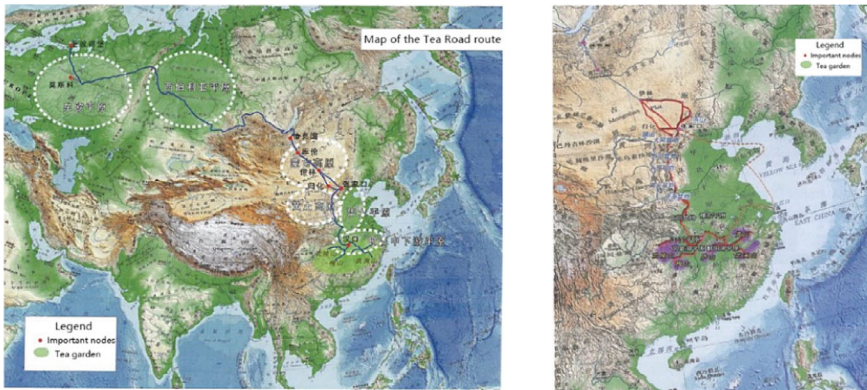
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**Fig. 2.1** Map of the Tea Road route (left). Map of the Tea Road route, China Section (right)

the ancient tea trading port city of Chaktu on the border between China and Russia after passing through Kulun. After that, it was sold to Siberia, Moscow, St. Petersburg and Europe, totalling over 14,000 km (Yingzi et al. 2015). The route connects the core areas of farming civilisation and grassland nomadic culture in the north–south direction of the Asian continent. It extends to Central Asia and Eastern Europe, showing the world trade boom of tea as a global commodity (Fig. 2.1, left).

The Tea Road China Section is composed of 45 representative historical and cultural relics distributed along the Tea Road in the tea garden, village, an ancient road, wharf, factory, town, guild hall, customs, bank, temple and homestead (Fig. 2.1, right). The trade process of the Tea Road mainly includes three complete links: production (planting, picking, production), distribution (acquisition, packaging, transportation, storage, transfer, commercial activities), and export (tea trading, currency exchange, tea consumption). Hankou and Zhangjiakou are the important node cities: the route south of Hankou is the production section, the section between Hankou and Zhangjiakou is the distribution section, and the north of Zhangjiakou is the export-oriented section. The villages, towns, cities and transportation systems along the Tea Road have promoted the development of architectural types, functions, patterns and forms due to the prosperity of the tea trade across regions. The concept, culture and technology of many geographical and cultural regions along the tea road are further exchanged and integrated.

### ***2.1.1 The Beginning of the Tea Road***

China is the country of origin of tea. As early as the sixteenth century, China had a history of tea export. By the seventeenth century, China's brick tea had cultivated a stable and huge consumer group in Russia and Europe, especially the nomadic people in Siberia, who mainly ate meat and milk, to the point that they would rather

have no food for a day than no tea for a day, they have to rely on tea to get rid of their food (Xiaohang 2006). The Tea Road began with the Treaty of Nebuchu, which was signed by China and Russia in 1689. Since then, trade relations between the two countries have been established, and the border and caravan trade in China have gradually become active.

### ***2.1.2 The Prosperity of the Tea Road***

From the first half of the eighteenth century to the end of the nineteenth century, with the continuous expansion of the Russian tea market, the tea trade between China and Russia entered a golden development period. Tea has gradually become an essential commodity for China to export to Russia. At this stage, the tea trade is dominated by Shanxi businesspeople, who complete the collection, processing, and packaging of tea and transport it to Chaktu by land and water. The prosperity of the tea trade has promoted the development of a commodity economy in cities along the Tea Road and maintained the border's peace for nearly a century. From the second half of the nineteenth century to the beginning of the twentieth century, Russian merchants took advantage of trade privileges to gradually set up factories in mainland China to make tea. They considerably changed the route of tea export to Russia, becoming progressively the leading tea trade between China and Russia at this stage. Russia also became the largest exporter of Chinese tea.

### ***2.1.3 The Decline of the Tea Road***

In the first half of the twentieth century, due to the change in Chinese social nature, Chinese businesspeople not only had to bear the heavy taxes under the Qing government's policy of emphasising agriculture and restraining commerce but also faced the impact of advanced technology and a series of trade privileges of Russian businesspeople, which led to their gradual loss of competitiveness in the Tea Road trade. After nearly half a century of prosperity, the tea trade between China and Russia, dominated by Russian merchants, gradually declined under the influence of the First World War, the October Revolution and other internal and external factors (Zhiping 2018).

## 2.2 Study on the Overall Value Characteristics of the Tea Road

China's tea and tea culture has spread far to Europe through the "The Tea Road", and the Western machine-making technology has also been introduced to China. China and the West have carried out extensive cultural exchanges and mutual learning of civilizations. The ruins along its route are the crystallization of human wisdom and the witness of cultural exchanges between China and the West, with important economic and historical and cultural value (Yingzhi and Baiquan 2020).

### 2.2.1 *Memory Inheritance: The Historical Value of "The Tea Road"*

Along with the extension of this Eurasian international ancient tea trade road, the long old road depicts the historical map of the frequent exchange of culture, value, art, technology and material of different countries, regions, nationalities and civilisations in more than 300 years, which leads to the fierce collision and integration between the agricultural society in the Central Plains, the grassland civilisation in Mongolia and the industrial civilisation in the European continent. Walking on The Tea Road, we can browse the ancient towns, wharves, workshops, teahouses, post stations and other material relics along the line. We can appreciate the Jinshang culture, tea culture, nomadic culture, industrial culture and religious culture, leaving fresh samples for today's inspection of the mountain and river landscape, ecological environment, civilization integration, urban changes and the development of the area along the line, which will help us further explore the prosperous scene and historical value of "The Tea Road" (Yi 2014).

### 2.2.2 *Spirit of the Tea Road: The Cultural Value of "The Tea Road"*

The Tea Road is not only a corridor of thousands of miles of Europe and Asia, but also a channel of Chinese and Western cultural exchanges that reflects the spirit of The Tea Road. In the Tea Road, the "tea ceremony civilisation" with "tea ceremony benevolence" as the core, which has been inherited so far, reflects the standard value orientation of openness and tolerance, mutual learning of civilisations, win-win cooperation, equality and mutual benefit (Xiaojun 2016). In the process of refining the connotation of "Tea Road spirit", we should adhere to the value pursuit of "guiding harmony with tea" and explore the value concept of "equality, tolerance, mutual learning and sharing". Equality refers to the cooperation mechanism of equal sovereignty, equal dialogue and equal opportunity; Tolerance relates to respect for

differences, mutual trust and mutual benefit, and an open-minded mind of inclusiveness; Mutual learning refers to the open mind of civilisation, mutual learning, cultural exchange and technology complementary; Sharing refers to the concept of resource sharing, risk sharing and benefit sharing. Therefore, the Renaissance of “the Tea Road” in the new era is to excavate the profound cultural heritage of the Ancient Tea Road, realise the interconnection of cultures and civilisations among countries, and enhance the humanistic spirit and value orientation of “the Tea Road”.

### ***2.2.3 Industrial Integration: The Economic Value of “The Tea Road”***

As an important international trade channel, the “Tea Road” has great economic functions and plays a vital role in the history of Sino-Russian exchanges. Many remains are on the road of tea, and tourism resources are rich. Therefore, we should strengthen resource integration and strive to build a tourism route for tea between China and Russia, which not only promotes the economic and cultural development of the two countries but also promotes the exchanges between the two peoples. From tourism planning, scenic area construction, product development, talent training, scenic area management and maintenance, we will build a characteristic tea tourism town and create a typical sustainable development scenic spot. When carrying out the development of the cultural and tourism value of The Tea Road, the state should take the lead, local cooperation, actively publicize and jointly promote, and excavate and protect its rich historical and cultural relics. It is necessary to make efforts in the aspects of organization and leadership, scientific planning, layout of scenic spots, and cultural drive, put them in the national strategic background of the Belt and Road Initiative, and strengthen economic and cultural exchanges and interaction (Rong 2016; Mingwu and Yan 2020).

## **2.3 Overview of Tea Culture Heritage of the Tea Road (Taking Hunan Section as an Example)**

### ***2.3.1 Preservation Status***

Hunan Province is the “region of origin”. The Tea Road mainly involves production (planting, picking and making) and distribution (acquisition, packaging, transportation, storage, transportation and commercial activities). There is a large number of tea cultural heritages with complete heritage structures, mainly including the following material relics: A tea factory, tea shop, tea farm, tea garden, tea pavilion, wind and rain bridge, an ancient road, old street, wharf, tea merchant manor, tea farmer settlement and so on more than 90 (Fig. 2.3) (Bo et al. 2016).

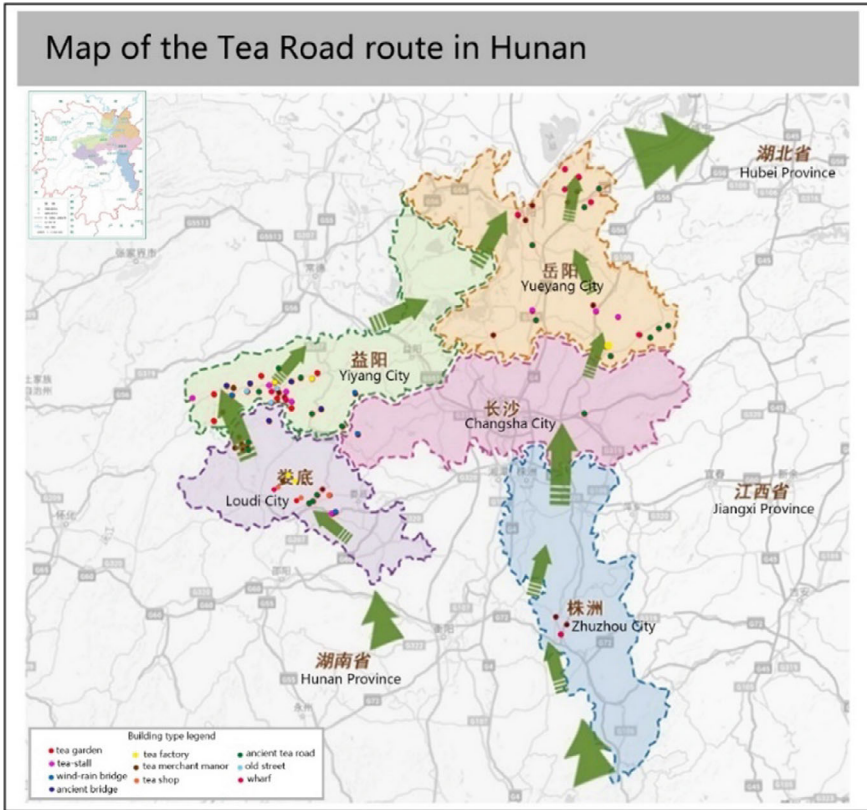


Fig. 2.3 Map of the Tea Road route in Hunan

Health examination measures consider the preservation characteristics of different tea cultural heritage in Hunan Province. Meanwhile, through long-term and regular inspection measures such as body monitoring and environmental monitoring, the overall pattern and various remaining elements of tea cultural heritage in different places are in a relatively stable state of preservation. The protection level of this tea cultural heritage is diverse, among which is that the protection status is better than 32%, the current protection status generally accounts for 35%, and the protection status is poor, accounting for 27%.

### 2.3.2 Category of Heritage Elements

Starting from the overall value of Tea Road, we need to consider the historical background, geographical space, cultural attributes, and other aspects to connect heritage elements and construct this section’s combination of characteristic value elements.




To strengthen the value representativeness in the form of a “small combination” of heritage elements, make up for the thinness of the connotation and scale of a single heritage, and strengthen the presentation of the value characteristics and the overall relationship. For example, “origin type”: tea garden + village + ancient road, “facility type”: Ancient Road + tea pavilion + bridge, and “product type”: market town + wharf + tea house (Hui et al. 2018).

### 2.3.2.1 Category of Heritage Elements

The production of traditional Chinese tea is mainly based on small-scale family handcraft production in rural areas. Therefore, the material heritage elements of origin revolve around tea planting, picking and production: tea garden + village + ancient road (Table 2.1).

Daan Village and Tea Garden in Qujiang are well-preserved examples of the original type of material heritage elements. The composition of the heritage elements is Ancient Tea Garden (Lianpo’ao tea garden, Gantian tea garden, Daping tea garden) + Daan village in Qujiang (Daan area building group, Zhongguping building group, Laowu courtyard building group) + Xin’an Xugu road. This Meishan tea-producing area was recorded in Yang Ye’s “Shanfu Jingshou Lu” in 816 of the Tang Dynasty: there were Qujiang slices in Tanzhou tea of the Tang Dynasty, which was an important birthplace of “Qujiang slices” in royal tribute tea. Tea planted and processed in this area is transported to Shenwan by the Zijiang River, mainly for rice exchange. There

**Table 2.1** Physical heritage elements of origin category

<i>Physical heritage elements of origin category</i>		
Tea garden	Building	Ancient road
Lianaopo tea garden	Buildings in Da’an district	Xinanxu ancient road
It is located on the hillside of Lianaopo, southwest of the Da’an area. There are old tea gardens on both sides from the west end of Qilingqiao to the mountain along the ancient road of Xinanxu	The construction time of wooden houses in the three concentrated residential areas is more than 50 years. The earliest building is the earth brick gable wooden frame structure building (Hu Xianglan house) in Daan district, which has more than 100 years of history	The length of the ancient road is 5000 m, and there are two sections of well-preserved pavement, about 1800 m, of which Xinanxu’s pavement is about 1000 m
		




are still many traditional tea-picking and tea-making tools in the existing traditional dwellings, reflecting tea farmers’ living places, tea-making places and storage places (Zhuwan et al. 2021).

**2.3.2.2 Physical Heritage Elements of Infrastructure**

The tea-producing regions in Hunan Province are mainly plain, with low mountains and hills. Anhua County, the third largest county in Hunan Province, has 82% mountainous area, and the main rivers in the region are water resources. Therefore, the infrastructure related to tea transportation is mainly land water transportation and related service management facilities, including roads, rivers and bridges; Wharves and ferries; storage; pass; Post station, vehicle; Natural (artificial) landmarks; Physical geographical elements (Table 2.2).

Yongxi Bridge is one of the representative remains of the bridge facilities. It is on the Maxi River in Xitan village, Jiangnan Town, Anhua County. It is the only way for Xinhua to connect with Anhua. Yongxi Bridge was built in 1878. It is 83 m long, 12.8 m high and 3.7 m wide. It is a wind and rain bridge with beams, arches and pavilions. Both ends of the bridge are composed of bridge pavilions and stone

**Table 2.2** Physical heritage elements of infrastructure

<i>Physical heritage elements of infrastructure</i>		
Ancient tower	Ancient bridge	Building
Linxiang tower	Yongxi bridge	British expert building of Canton-Hankow Railway
The tower is 33.44 m high and covers an area of 75 m <sup>2</sup> . It is a solid tower with a brick and stone structure. Its base is made of granite, which is thick and solid. In January 2011, Hunan Provincial People’s government announced the tower as a provincial cultural relic protection unit	Located on the Maxi River in Xitan village, Jiangnan Town, Anhua County, it is the only way for Xinhua to pass through Anhua. Built in 1878, Yongxi Bridge is 83 m long, 12.8 m high and 3.7 m wide	The “expert building” is a brick and wood structure with a slightly rectangular plane. It is 18 m long from north to South and 19.8 m wide from east to west. It covers an area of 293 square meters and is 10.9 m high
		

stairs. There are specially assigned people living in the bridge guard pavilion to be responsible for the safety and health of the bridge and to cook tea for pedestrians. There are stone tablets in the Beiting Pavilion and Shouqiao Pavilion at the bridge's north end. Among them are three tablets for recording events and prefaces; the rest are donation inscriptions registering the names of 43 old tea shops in Anhua in the Qing Dynasty. Yongxi Bridge not only protects pedestrians from rain and water erosion but also prolongs the service life of the bridge. It is equipped with benches for rest, recreation, cooling and trading. It organically integrates transportation, commerce and leisure, representing the spirit of local working people fighting for living space with natural rivers.

### 2.3.2.3 Material Heritage Elements of the Product Category

Tea raw materials flow to a regional market, forming a commodity with use value through human labour processing. The purchase, packaging, transportation, storage, transshipment and commercial activities of raw materials and commodities reflect the different social relations behind tea as a commodity. It mainly includes tea houses, tea shops, Tea factories, downtown streets, Market towns and castles, Tea merchant residences, Tea merchants' guild halls, and temples (Table 2.3). Tangjiaguan ancient town has market town-type material heritage elements; the overall pattern of the old city is well preserved, as a commercial complex remains, can fully reflect the regional political, economic, cultural and social development history, and was listed in the national traditional village protection list in 2014. The composition and general situation of its heritage elements are as follows.

Because of its flat terrain and gentle water flow, Tangjiaguan ancient town is the docking point for the river valley folk houses to communicate with the outside world by boat. Historically, Anhua was the economic centre, water and land transportation hub, and distribution centre of passenger and cargo flow in the Ming and Qing Dynasties. The shape of the ancient town is parallel to the North Bank of the Zijiang River in an east–west direction. Its land waterway structure comprises Qingshi Main Street, three horizontal streets and several wharves extending to the river. The East–West ancient street and the buildings along the street parallel the Zijiang River. The stone slab Road near the river is suspended at the end of the building house on the south side. The ancient street is about 500 m long. The architectural functions on both sides of the road are wooden houses, brick and wood ancient ancestral temples, public places, houses and buildings, a church, tea charters, business conventions, pier charters and other steles more than 10.