

# A Study on the Spatial Structure and Its Cultural Factors in Pingyao, China

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## Abstract

Because of the rapid development of heritage tourism, heritage conservation is receiving increasing national and international attention, albeit most of it is concerned with personal structures rather than space conservation. The first step in conserving the heritage, especially in a historic city's environment, is to identify the social and cultural factors that have generated the changes. The Ancient City of Pingyao in China comprehensively reflects the traditional city planning of the Han people throughout the Ming and Qing Dynasties. Furthermore, in the second half of the 19th century, as the center of banking in China, Shanxi merchants in Pingyao had a profound effect on the modern economic development of the country. Meanwhile, the spatial has been affected by the commercials. In this article, to clarify the associativity between cultural factors and spatial structure, researchers studied the development of Shanxi merchants and the modification of Pingyao's spatial structure with the analysis of profundity logic and social factors. By analyzing the data from ArcGIS, this paper found that cultural heritage is a living entity, the result of the change, a dynamic pattern, and an evolving inter-relationship between history and culture, which allows cultural heritage to present a unique characteristic. Accordingly, for sustainable heritage tourism, the authors argue that it is necessary to refer to the traditional cultural factors and sociocultural requirements that influenced the spatial shape and consequently propose planning measures for improvement rather than simply studying the spatial structure.

**Keywords:** associativity, spatial structure, ArcGIS, Chinese cultural heritage, characteristic

## 1. Introduction

The international community and countries are now emphasizing the protection of cultural heritage, and by the end of 2021, the number of World Heritage sites have reached 1,122 (UNESCO Heritage List, 2022). One hundred forty-one National Historical and Cultural Cities have been recognized in China from 1982 to 2022 (The List of National Historical and Cultural City, 2022). However, it has been pointed out that there is still a lack of recognition and protection of the "space" in which cultural heritage is located and that cultural heritage protection is dispersedly separated from its historical and scenic background (Elizabeth, Steve, & Chris, 2009). Since the inclusion of "cultural landscapes" in the World Heritage List in 1992, there has been a growing awareness that, in addition to the protection of architectural forms, it is essential to study spaces and places that represent the local culture (Aplin, 2007). In addition to the traditional protection of architecture, the protection of space is also essential for places where traditional culture and regional characteristics can be seen and should be included in the scope of protection of regional characteristics and traditional architecture (Davis, 2005).

Furthermore, to protect the space, it is first necessary to clarify the relationship between spatial transition and the social factors (Institutional, departmental, and social environment) behind it (Elizabeth, & Lesley, 2010). For this reason, it is necessary to clarify the evolution of the distribution of cultural heritage scattered throughout the region and its social and cultural context to protect and create character and preserve and utilize architecture in the region (Liang, Yang, Wang, Yang, & Chen, 2021; Li et al., 2021). In addition, this will allow us to embody a unique tourist culture that will lead to the formation of sustainable tourist destinations in the future (Japan Travel Bureau, 2013).

The Ancient City of Pingyao is a traditional city with an area of 2.25 km<sup>2</sup>, located in Pingyao County, Jinzhong

City, Shanxi Province, China (Figure.1). The uniqueness of the Pingyao culture can be seen especially in the cultural heritage related to Shanxi merchants. This is because, in the late 19th and early 20th centuries, Pingyao was China's economic center and influenced the whole country's trade and finance. The "Shanxi merchants" is said to have both stimulated the development of Pingyao and influenced the culture of the city, which had existed prior to the "Shanxi merchants." (Xing, 2005). In particular, during the Ming and Qing dynasties (1368-1912), the commercial and financial industries flourished, and the urban development of the Ancient City of Pingyao progressed. After the warfare at the end of the Qing Dynasty and during the period of war, the financial industry declined before New China. Due to the decline in economic power, the urban space has not been changed and preserved intact. As a perfectly preserved traditional Han Chinese city, the Ancient City of Pingyao was designated as a National Historical and Cultural City of China (1982) and registered as a World Cultural Heritage Site (1997). As mentioned above, to protect the Ancient City of Pingyao, it is first necessary to clarify the unique cultural characteristics of the city. To this end, the relationship between Shanxi merchants and the use and spatial structure of the Ancient City of Pingyao must be understood and organized.

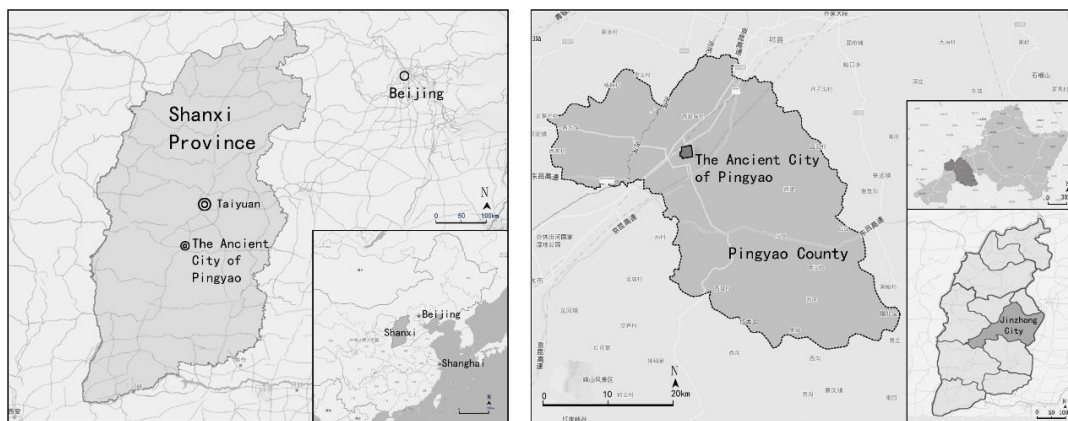


Figure 1. The location of the Ancient City of Pingyao

This study concentrated on the Ancient City of Pingyao, which would be the Centrepoint of Shanxi merchants and where spatial transition would be seen through an attempt to understand how Shanxi merchants had already transformed the use and structure of traditional urban space to the present, as well as to clarify the character traits and structure process of the Ancient City of Pingyao, which would be a blend of tradition and Shanxi merchants. This project aims to understand the relationship between commercial and financial facilities, administrative, religious, and other facilities, the spatial extent and connections within the region, and to identify the social and cultural factors that define these relationships. In addition, the authors are also considering future ideas for protecting and creating characteristics in the Ancient City of Pingyao.

## 2. Method

This study used a literature review and geographic information system (using ArcGIS). With ArcGIS, this study can integrate the dispersed cultural heritage sites in the historic city and spatially represent them in a more intuitive and figurative framework, studying the culture, historical relationships, and meaning among them in a broader historical and landscape context.

### 2.1 Literature Survey

Through the literature survey, this study first grasped the outline and characteristics of the Ancient City of Pingyao and then organized the causes for selecting the "Shanxi merchants" characteristic and the relationship between the "Shanxi merchants" characteristic and other characteristics. Through the history of Shanxi merchants and the construction process of the Ancient City of Pingyao, the relationship between the spatial transition of the Ancient City of Pingyao and the history of Shanxi merchants was discussed by dividing it into periods.

### 2.2 Data Analysis

This study structured the distinctive representation of the geographical structure by "Shanxi merchants" with ArcGIS and investigated the social factors behind this spatial expression utilizing resources such as the "Pingyao County Annals" produced by the administrative office of Pingyao. In conclusion, this study summarized the

above contents, discussed the issues based on the current status of the Ancient City of Pingyao, and offered future perspectives.

### 3. Results

#### 3.1 Characteristics of the Object Area Characterizing Elements of the Ancient City of Pingyao

Based on the World Heritage registration (ICOMOS-Pingyao city’s value), the designation as a National Historical and Cultural City of China (The Ancient City of Pingyao), and previous studies (Wu, 2005), the Ancient City of Pingyao is characterized by ancient Chinese city planning based on the “*etiquette culture* (Note 1)”, a group of ancient houses in the *Courtyard House style* (Note 2), the defense system, various religious buildings, and cultural assets related to Shanxi merchants, such as *Piaohao* (Note 3), four types of Shanxi merchants’ residences: divided by functions, *Shangpu* (transaction and residence); *Zuofang* (production and residence); *Shangfang* (transaction, production, and residence); *Dayuan* (residences of successful Shanxi merchants), shopping streets, and the *Guan Yu* (Note 4) Temples (Figure 2).

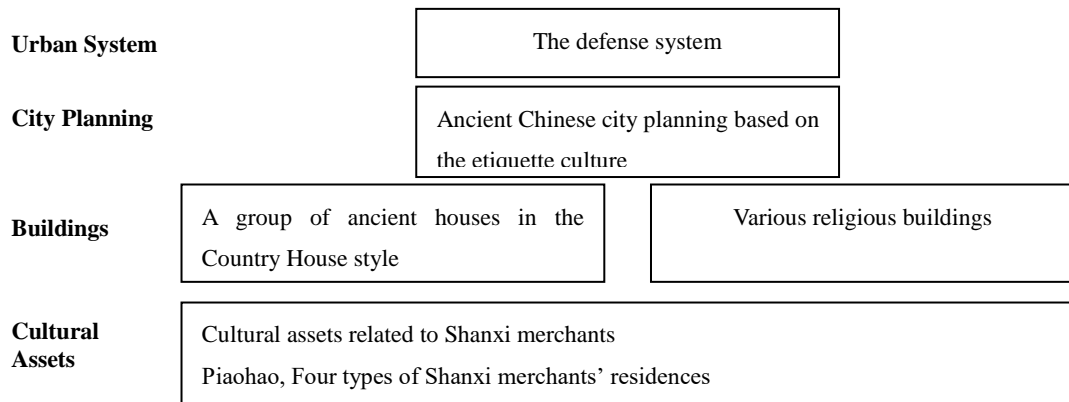


Figure 2. Present characterizing elements of the Ancient City of Pingyao

Since the influence of the ancient Chinese city planning according to the “*etiquette culture*”, the criteria and materials of the planning were used to design and develop not just for the entire ancient city, public amenities, and traditional dwellings, as well as the facilities of Shanxi merchants. Although the residences in the city were initially built in the *Courtyard House style*, the functions of the residences have changed under the influence of Shanxi merchants and commercial activities. The four types of private residences constituted the Shanxi merchants’ private residences.

The maintenance records of the defensive system and diverse religious architecture describe the donations of the Shanxi merchants and *Piaohao* (Qiao, 2006). Moreover, among the stations of the defensive system, there were many people engaged in commerce. In addition, with the development of Shanxi merchants and commercial activities, many religious buildings of *Guan Yu*, the Shanxi merchant’s deity, were constructed. Despite architecture, Shanxi merchants have left behind much intangible cultural heritage.

As described above, Pingyao is distinct in its various scales, and it is necessary to clarify the space with a focus on the relationship between the *etiquette culture* and Shanxi merchants at the time of its construction (Figure 3). But the relationship between each element is not yet clarified. After understanding the relationship between “Shanxi merchants” characteristic and other characteristics, cultural assets related to Shanxi merchants came to be regarded as the cultural uniqueness of the Ancient City of Pingyao.

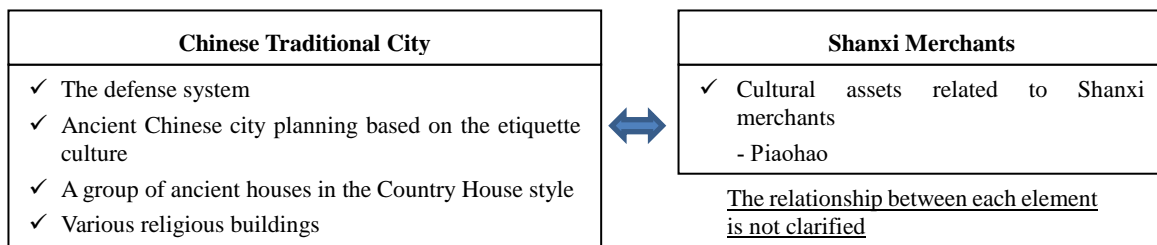


Figure 3. The changes in the social conditions and present characterizing elements in the Ancient City of Pingyao

### 3.2 History of Shanxi Merchants and Shanxi Merchants in Pingyao Ancient City

During the mid-14th to 20th centuries (Ming and Qing dynasties), the commercial activities of Shanxi merchants expanded from Shanxi Province to the whole of China and even overseas. During the Ming and Qing dynasties, the Shanxi merchants are considered the best among China's "ten major merchants' enterprises" (Zhou, Hao, Jin, & Zhou, 2017). The history of Shanxi merchants can be primarily divided into three periods: the period of development of Shanxi merchants (1370-1823), the period of prosperity of Shanxi merchants (1823-1914), and the period of decline of Shanxi merchants (1914-1921) (Zhang, Sun, & Bai, 2006). The development of Shanxi merchants was driven by the government's policies and convenient transportation. The financial industry also developed with the development of Shanxi merchants' commercial activities. With the opening of the financial institution *Piaohao*. Shanxi merchants reached their peak. Since the Pingyao Ancient City, where almost half of *Piaohao* of the whole country is located, was the center of Shanxi merchants during this period, it was considered the financial center of China. Then, due to political, war, and other causes, Shanxi merchants declined (Zhang, Sun, & Bai, 2006).

### 3.3 Changes in the Urban Space of the Ancient City of Pingyao

Based on the history of commercial activities of Shanxi merchants in the Ancient City of Pingyao and previous studies (three volumes of Pingyao County Annals) (Wang & Kang, 1706; Hou, 1882; Du, 2002) and urban planning in the Ancient City of Pingyao (Practical conservation guidelines in Pingyao) and other research (Xie, 2015), this study examines the transition of urban space in Pingyao Ancient City in the following three periods:

- 1) Pre-emergence period of Shanxi merchants (8th century BC - 1370)
- 2) The period of Shanxi merchants' development (1370 - 1823)
- 3) The period of prosperity to the decline of Shanxi merchants (1823-1921)
- 4) The late period of the decline of Shanxi merchants (1921-present)

#### 3.3.1 Pre-Emergence Period of Shanxi Merchants (8th century BC - 1370)

During the Western Zhou Dynasty, the Ancient City of Pingyao was beginning to build with a military defense function to protect against the enemy. According to the history of Pingyao County, the Jingling site is located 3.5km northeast of the ancient city, and the Zhongdu site is located 10km southwest of the city. They were the county's administrative center at first. It is assumed that the Ancient City of Pingyao was not formed before the Southern and Northern Dynasties.

From 424, the Ancient City of Pingyao became the county's administrative center, and the city's construction began. The ancient city was built around County Government Office, and the city's development spread along the Main Axis. Development of the city was proceeding in the east and southeast directions. Four public facilities (County Government Office, Temple of Civil Culture, Temple of Taoism, Temple of Buddhism) were also established. The size of Pingyao Ancient City at this time was about 0.5 km<sup>2</sup>. The Fair, commercial activity of the ordinary people, was located at the T-shape in the former County Government Office. However, before 960, commercial activities were restricted, and the Fair was strictly controlled (Figure 4).

In 1312, the city walls collapsed due to a great earthquake, and the old City was enlarged when the walls were reconstructed. At this time, the size of the Pingyao old City was about 1 km<sup>2</sup>. The southern part of the ancient City was the center of urban development during this period. Two public facilities, Temple of City God and Temple of Warfare (the temple of Guan Yu), were established. Due to population growth and urban development, the commercial activities of the ordinary people expanded eastward from the T-shape on the front side of the county offices to the South Main Street between County Government Office and Temple of City God, forming a "十"-shape. The Main Axis of the old city moved from County Offices to the Southern Main Street. Restrictions on fairs gathering were alleviated, and fairs appeared to be held around the religious buildings (Figure 4).

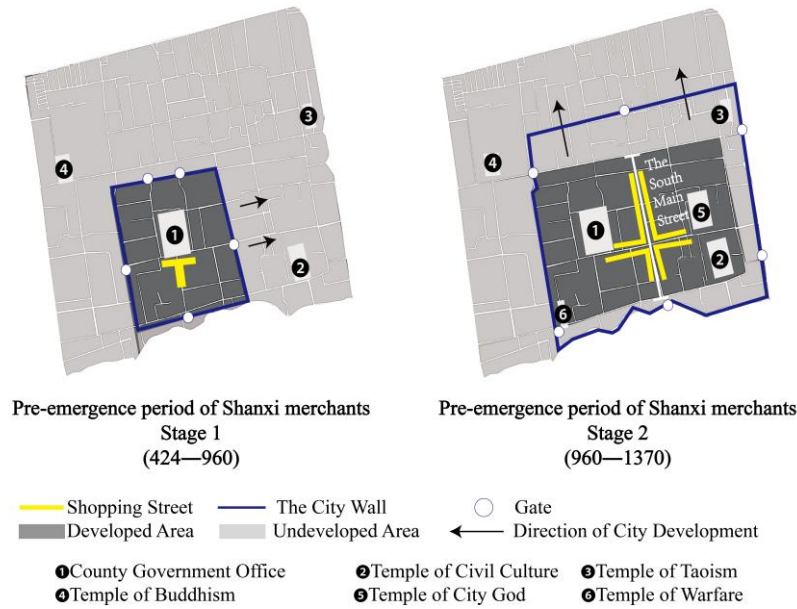


Figure 4. The Spatial Structure of the Ancient City of Pingyao in the Pre-Emergence Period of Shanxi Merchants

### 3.3.2 The Period of Shanxi Merchants' Development (1370-1823)

In 1370, the Ancient City of Pingyao was under reconstruction to strengthen its defensive functions. The size of the Pingyao Ancient City at this time was approximately 2.25 km<sup>2</sup>. Jinjing City Tower was built at the center of the city on the Main Axis of the South Main Street. The center of the old city was also changed from County Government Office in the early days of the construction to Jinjing City Tower. The city's development was completed with the concentration of buildings on the east side of the old city, and development to the north and west was also started. During this period, due to the development of Shanxi merchants and the commercial activities that accompanied it, commercial activities were extended to the main streets, the East and West Main Streets, and became a shopping street in the shape of “±”. Stores and other businesses also began to be seen on the North Main Street. The flourishing commercial activities promoted population growth and the construction of religious buildings, and commercial activities such as *Temple Fair* (Note 5) and markets also increased. Markets and shopping centers appeared on both the West and East Main Streets. With the development of commerce, Jinjing City Tower was also constructed as the central building of the ancient city to manage commercial activities. In the Ming Dynasty (1368-1644), there were 38 public facilities in the Ancient City of Pingyao, and by the Qing Dynasty (1707), there were 55. Many temples were established to venerate Guan Yu, whom the Shanxi merchants worshiped. As the economic power of the Shanxi merchants increased, they began to donate to the construction of public facilities (Figure 5).

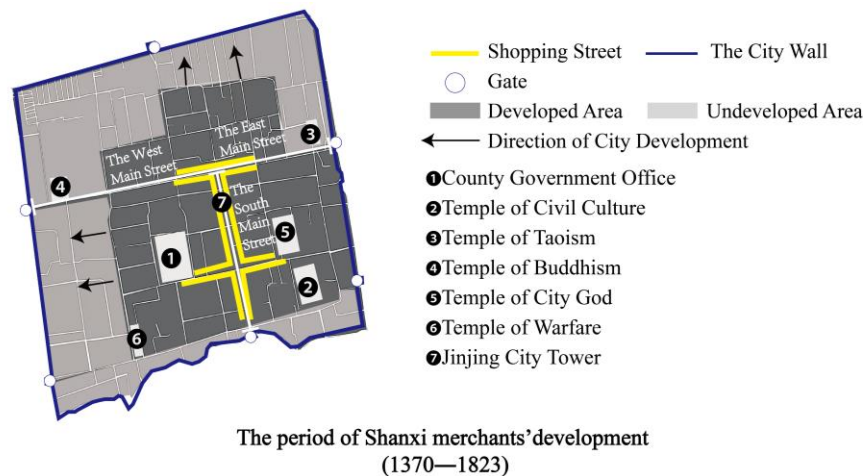


Figure 5. The Spatial Structure of the Ancient City of Pingyao in the Period of Shanxi Merchants' Development



### 3.3.3 The Period of Prosperity to the Decline of Shanxi Merchants (1823-1921)

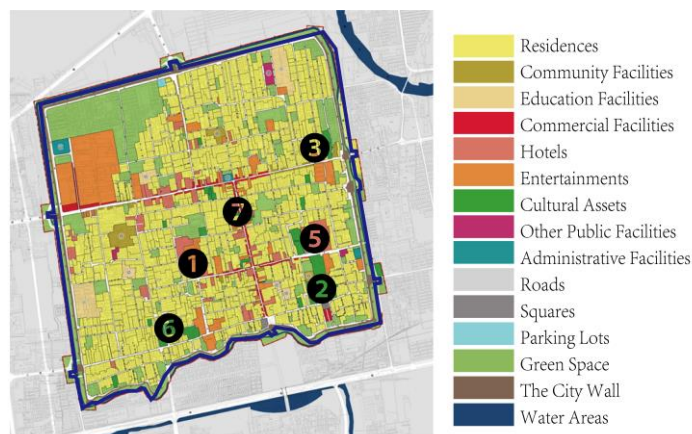
The Pingyao Ancient City took on its present form after the 1850-1857 construction. Within the walled city, the streets continued to be developed in more detail. Development in the northeast and southwest directions was completed, while the northwest direction was less advanced. During this period, the population was concentrated in the southeast, northeast, and southwest areas of the ancient city of Pingyao. In addition, due to the convenience of transportation between the east, west, and south main streets, 22 *Piaohao* were established at the intersections of the three main streets. With the prosperity of the currency exchange business, the center of the old city changed from Jinjing City Tower, the highest building in the city, to the location where the 22 *Piaohao* were concentrated. With the rise of commerce, the area became an “土”-shaped shopping street. Many business establishments were also distributed on the North Main Street. As the business of *Piaohao* flourished and the economy of the entire ancient city improved, the influence of Shanxi merchants became deeper, not only in the maintenance of public facilities but also in the building activities of the overall ancient city. There are records of donations made by the Shanxi merchants to maintain the city walls, construct rivers and bridges, open factories, and other city-building activities. (Figure.6)



The period of prosperity to the decline of Shanxi merchants (1823—1921)

Figure 6. The spatial structure of the Ancient City of Pingyao in the period of prosperity to the decline of Shanxi merchants

### 3.3.4 The Late Period of the Decline of Shanxi Merchants (1921-Present)



The late period of the decline of Shanxi merchants (1921—Present)

- ❶ County Government Office
- ❷ Temple of Civil Culture
- ❸ Temple of Taoism
- ❹ Temple of Buddhism (Lost)
- ❺ Temple of City God
- ❻ Temple of Warfare
- ❼ Jinjing City Tower

Figure 7. The spatial structure of the Ancient City of Pingyao in the late period of the decline of Shanxi merchants

Source: Shanghai Tongji Urban Planning & Design Institute Co., Ltd.

From 1911-to 1949, with the wars engulfing modern China, ancient cities around the country were destroyed, and the Ancient City of Pingyao was also affected by the wars, with the destruction of Temple of Buddhism, but the spatial structure of the Ming and Qing dynasties was preserved. With the decline of Shanxi merchants and the development of railroads and roads without passing through the Ancient City of Pingyao, the economic recession and reduced accessibility have made the Ancient City of Pingyao lose attention from the public throughout the country. Within the city, large-scale maintenance stalled. Since the city was registered as a World Heritage site in 1997, protective and utilization maintenance, have been carried out not to alter the ancient city's spatial structure, and the area surrounding the ancient city also made progress (Figure 7).

### 3.4 A Specific Representation of “Shanxi Merchants” in the Ancient City of Pingyao

#### 3.4.1 Road Construction: Formation of a District

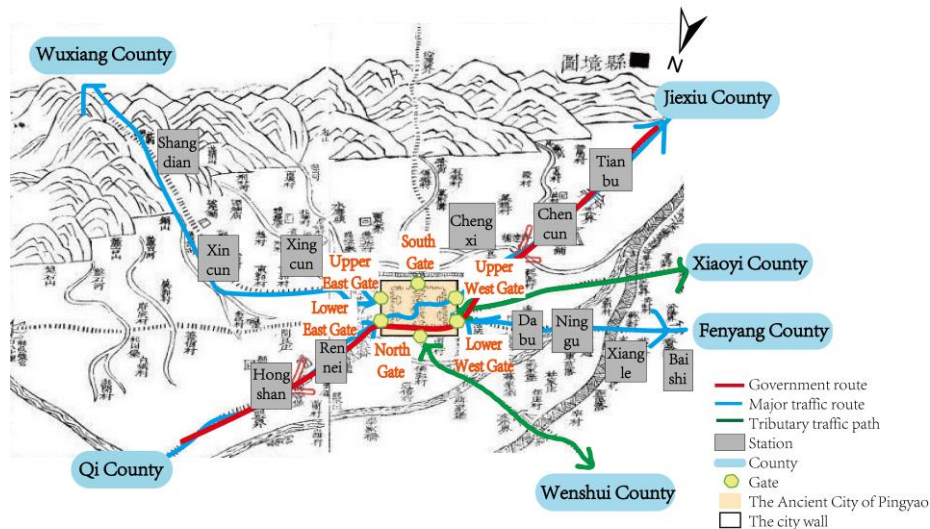


Figure 8. The transportation of the Ancient City of Pingyao

Source: Pingyao County Annals, 1706.

During the Ming and Qing dynasties, the Ancient City of Pingyao was a significant transportation hub connecting various prefectures in Shanxi Province. These stations played an essential role in the commercial activities and city defense of the time, connecting Pingyao to the rest of the prefectures and facilitating the circulation of commodities and money in Pingyao. The road from the west gate to the east gate was the main street in the Ancient City of Pingyao at the time, and the traffic along this street, the West and East Main Street had the advantage in terms of traffic conditions, with the East and West Main Street between the west and east gates having the highest traffic volume (Figure 8).

In the Ancient City of Pingyao, during the Shanxi merchants' prosperity period, six public facilities (administrative and religious buildings) constituted the core of the six architectural zones. These architectural zones were primarily related to roads for selecting locations and the development of religious beliefs after construction. The main street running east-west was formed, connecting Temple of Buddhism and Temple of Taoism. County Government Office and Temple of City God were connected by the County Government Office Street and the Temple of City God Street, with the Main Axis of the South Main Street formed in the center of the two streets. Temple of Civil Culture in the east and Temple of Warfare in the west were connected by the Upper East Gate Street and the Upper West Gate Street. As urban development progressed in the north direction, the Guan Yu Temple and the Fire God Temple were built at the intersection of the North Main Street, forming the section of the eight small streets of “the Guan Yu Temple Street-the Fire God Temple Street” and “the Haizi Street” (Figure 9).

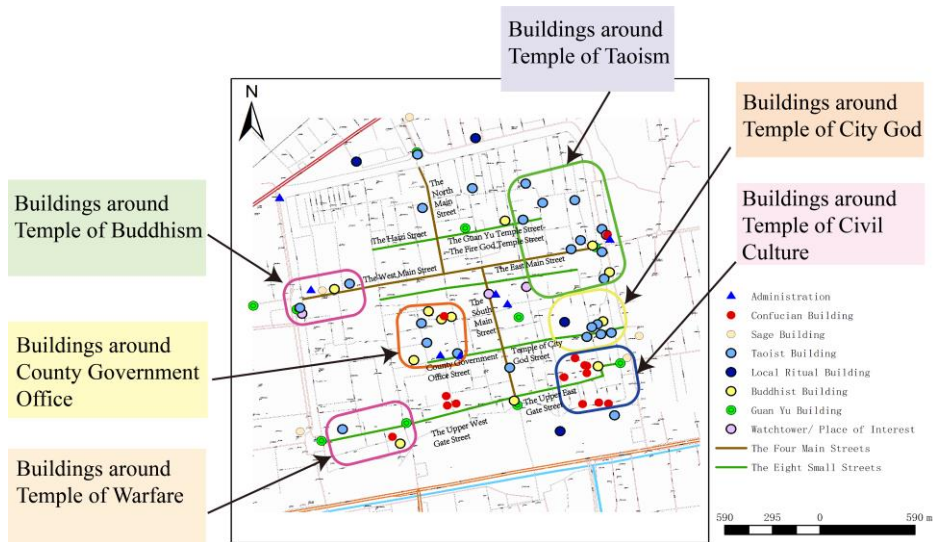


Figure 9. The relationship between religious buildings and roads

### 3.4.2 Infrastructure Development: Land Use Approach

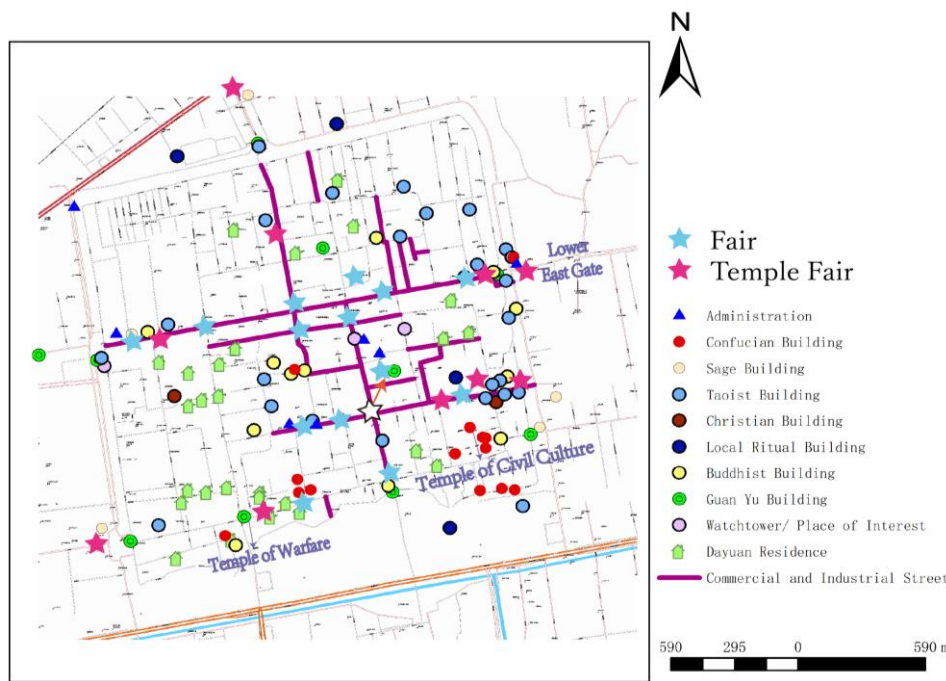


Figure 10. Relationship between public facilities and commercial activities

The roads paved by the construction of religious buildings directly influenced the development of commerce and the distribution of Shanxi merchants' facilities (shopping streets, Shanxi merchants' residences, *Piaohao*, etc.) in later periods. The "Temple Fair", as the commercial activity, the secular function of religious buildings also promoted the development of commerce. However, in the ancient Chinese philosophy of "Officials, Farmers, Manufacturers and Merchants," commerce was held in the lowest esteem (Chen, 2011). In contrast, the Confucian "Temple of Civil Culture," which symbolized the "officials" (bureaucrat), did not have a Fair or the *Temple Fair*, following the philosophy of "Become Officer after Excellent Study." On the other hand, the area surrounding Temple of Warfare architectural zone, which honored Guan Yu by Shanxi merchants, was a quiet residential area with a concentration of *Dayuan* residences of successful Shanxi merchants and thus did not become a shopping district (Figure 10)



22 *Piaohao* were concentrated around the central building and the intersection of the East, West, and South Main Streets. The emergence of “*Piaohao*” resulted from hundreds of years of Shanxi merchants’ commercial activities, which encouraged the prosperity of Shanxi merchants. As the center of the shopping district in the Ancient City of Pingyao, *Piaohao* area facilitated its expansion. Because of the high rent and price of the land, no religious buildings were constructed in the central shopping district, especially in the surrounding *Piaohao*. (Figure 11).

The Ancient City of Pingyao, covering an area of 2.25 km<sup>2</sup> is a thriving commercial center with ten Guan Yu temples dedicated to the God of Shanxi merchants. In addition, due to the commerce, traffic, area, and environment, *Dayuan* residences of successful merchants were mainly located in the southwest and west direction of the ancient city. With the development of Shanxi merchants and commerce, the traditional concept of “Officials, Farmers, Manufacturers and Merchants” in the Ancient City of Pingyao has changed, and the status of merchants has been raised significantly. As a result, few schools were established in the city. For about 550 years, there were only eight schools in the Ancient City of Pingyao (Figure 11).

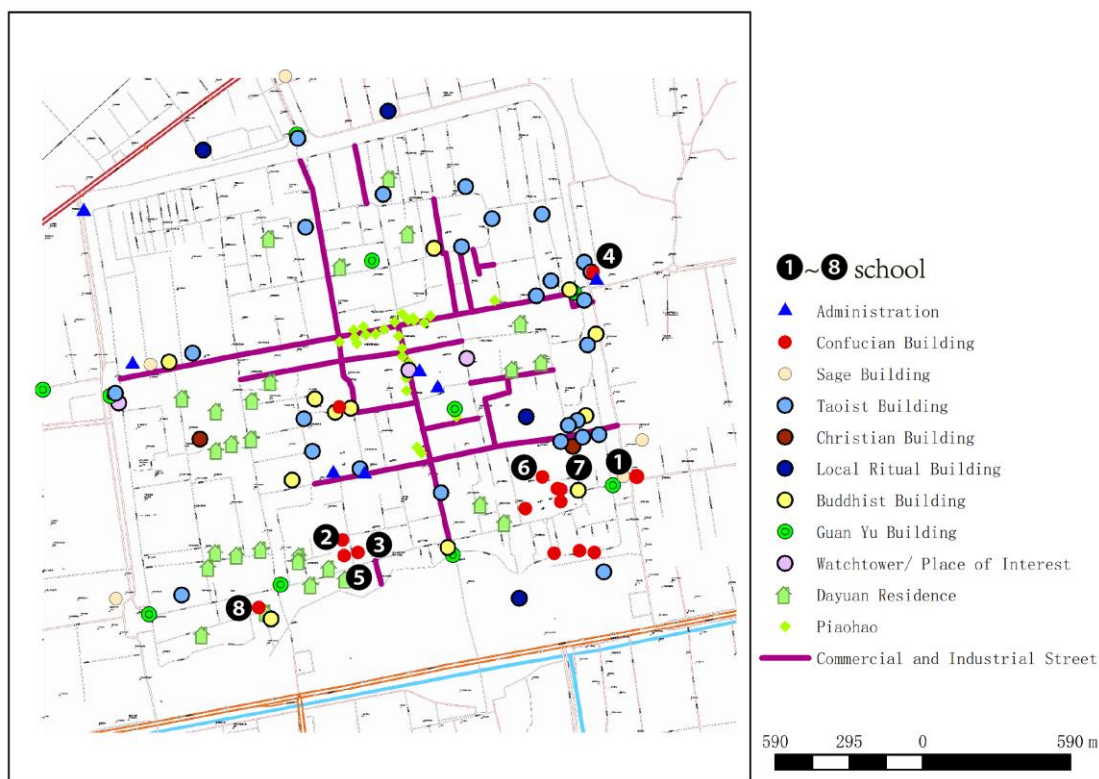


Figure 11. Information about Piaohao, the Guan Yu temples, schools, and other religious buildings

The Ancient City of Pingyao was recognized as a National Historical and Cultural City in 1986 and a World Cultural Heritage Site in 1997, attracting worldwide attention and becoming a representative example of Shanxi’s culture. The maintenance of facilities has begun. Many of the Shanxi merchants’ facilities, which are private property, have been preserved for public use, and in addition to the Shanxi merchants’ facilities, there have been experiencing programs, dramas, plays, and festivals related to the Shanxi merchants’ folklore with the Shanxi merchants’ story as a background. There are 15 cultural assets related to Shanxi merchants among the 22 tourist attractions (including the city wall) in the current combination Tourist Ticket (¥128). In addition, the commercial street has been revived and turned into a new commercial center of the old town, and many Shanxi merchants’ residences have been opened to the public and transformed into functions, evolving into an integral part of Pingyao’s tourist attractions (Figure 12).

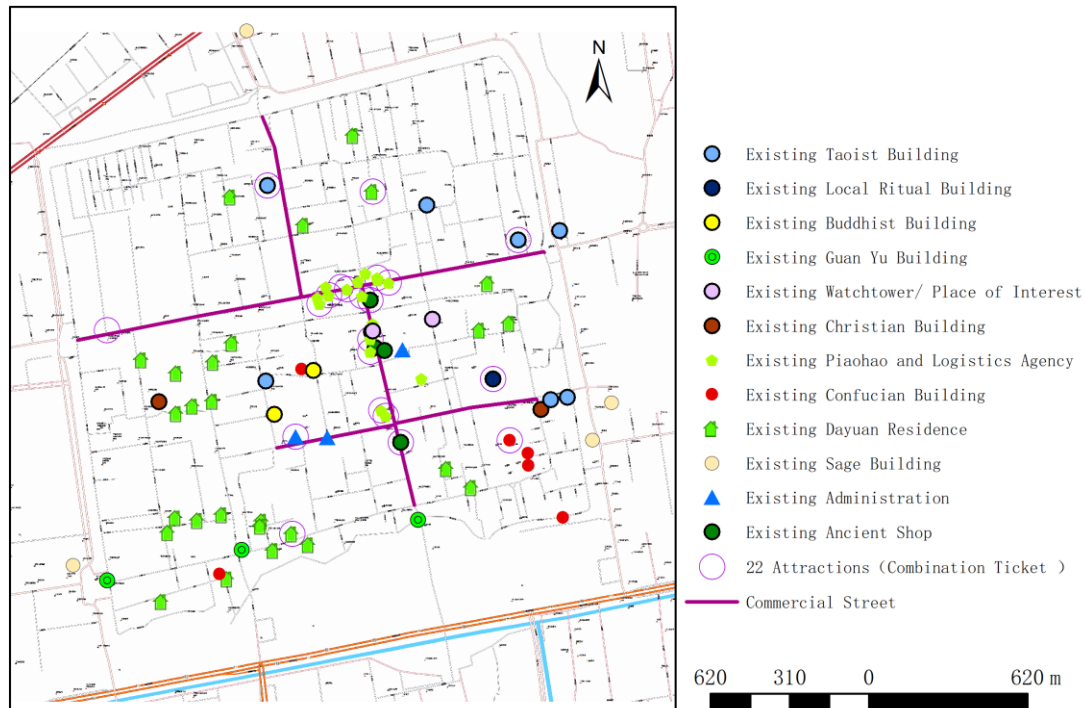


Figure 12. About the status of cultural heritage in the ancient city of Pingyao

#### 4. Discussion

Before Shanxi merchants emerged, Pingyao had County Government Office on the Main Axis, and the shopping street was confined to a T-shape in front of County Government Office. Later, as Shanxi merchants took root and flourished, the shopping street expanded from a crossroad to a “土” shape, and the shopping street changed to the Main Axis. 22 *Piaohao* were inaugurated in the center of the shopping street, and when the Ancient City of Pingyao became the center of the financial industry in China, religious architecture, such as the Guan Yu Temple, was maintained by Shanxi merchants. Later, when the Qing government collapsed and the economy fell into recession due to war, the Ancient City of Pingyao lost its Shanxi merchants, and the city was designated as a cultural heritage site and registered as a World Cultural Heritage site. Shanxi merchants came to be regarded as a symbol of the Ancient City of Pingyao.

The Ancient City of Pingyao, located at the center of the transportation network connecting other counties in Shanxi Province and was a vital point of transportation in a wide area, was formed around the streets leading to other counties. In addition, as religious buildings were constructed, streets connecting religious architectural areas were developed. The *Temple Fair* held along these streets, which were centered around the city assembly and religious architecture, led to the development of shopping streets, and the Main Axis line of the old city shifted from the administrative offices to the shopping street-the South Main Street, and the *Piaohao* developed in the center of the shopping streets. However, because Temple of Civil Culture, a Confucian building symbolizing the bureaucracy, the area around it did not have a Fair or a *Temple Fair*, a shopping street was not developed there, and instead, many *Dayuan* residences of successful Shanxi merchants were built. Thus, the authors consider that the development of shopping streets was related to distributing commodities from other prefectures and the construction of religious buildings.

#### 5. Conclusion

The relationship between Shanxi merchants and spatial structure was clarified:

1) In the pre-emergence period of Shanxi merchants (8th century BC - 1370), the central architecture of the Ancient City of Pingyao, County Government Office influenced the location of the commercial activities. Then, with the development of commerce, the city formed and developed a “十”-shape shopping district, and the urban development and construction of religious buildings proceeded. Also, the city’s center was still County Government Office though the Main Axis gradually moved from County Government Office to the South Main Street.

- 2) During the period of Shanxi merchants' development (1370-1823), the shopping street was expanded from a “十”-shape to a “土”-shape, and the Jinjing City Tower was built to manage the shopping district as the center of the city. Religious buildings were set up throughout the area.
- 3) In the period of prosperity to the decline of Shanxi merchants (1823-1921), the financial facility *Piaohao* opened in the center of the shopping street. Many religious buildings were also established.
- 4) In the late period of the decline of Shanxi merchants (1921-present), although the history of Shanxi merchants has come to an end, as the center of Shanxi merchants, the Ancient City of Pingyao became a cultural heritage and tourist attraction.

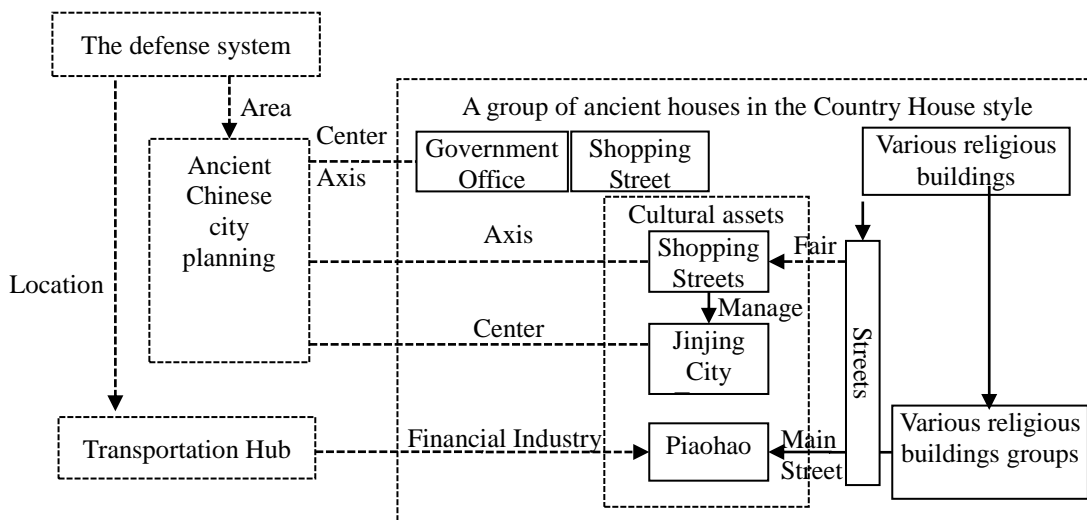


Figure 13. The relationship between the characterizing elements in the Ancient City of Pingyao

The spatial structure of the Ancient City of Pingyao was changing due to the social culture of Shanxi merchants. The components of the Shanxi merchant's system, the *Piaohao*, and the shopping streets became the center of the Ancient City of Pingyao concerning the religious architecture and transportation routes. The findings of this study suggest that the spatial structure of the Ancient City of Pingyao is an expression of the culture of Shanxi merchants.

The Ancient City of Pingyao, built following the ancient Chinese city planning based on the “*etiquette system*,” was first organized around County Government Office, which was the administrative center of the city, and spread along the Main Axis, promoting urban development through the construction of various religious buildings. The Ancient City of Pingyao, a vital transportation point in Shanxi Province, was developed as a city with connections to other counties and those mentioned above, religious architectural areas. The development of Shanxi merchants took place on these streets. With the establishment, development, and prosperity of Shanxi merchants, the Main Axis of the old city was shifted from the administrative office to the main shopping street, and the central building was Jinjing City Tower, which was used to manage the shopping district. At the climax of the Shanxi merchant era, 22 *Piaohao* appeared in the center of the shopping district. These results suggest that, in the Ancient City of Pingyao, Shanxi merchants developed according to a spatial structure based on traditional city planning, and the buildings related to the Shanxi merchants were centered according to the laws of traditional spatial structure. As a result, the city developed its unique structure (Figure 13).

Protecting the spatial structure will lead to the inheritance of the characteristics of the region of Shanxi merchants. Therefore, in protecting the Ancient City of Pingyao in the future, it is necessary to consider measures based on the relationship with Shanxi merchants and the social culture that shaped the space rather than Pingyao as a mere space. To this end, designers should focus on Shanxi merchants and clarify the facilities and spatial structure before and after the emergence of Shanxi merchants, especially the religious architecture and the financial facilities, and inherit the relationship between the two.

The relationship between the spatial structure of the Ancient City of Pingyao and Shanxi merchants is an example of the unique characteristics of National Historical and Cultural Cities. With the development of the

economy and tourism industry, the number of tourism development projects in Historical and Cultural cities is increasing year by year, and it is essential to consider and clarify the changes in the spatial structure and the social and cultural factors behind it in order to formulate regional characteristics and unique tourism culture.

In addition, based on the relationship between the spatial structure and the Shanxi merchants, it is expected that the historical value of the Ancient City of Pingyao will be understood and that development and tourist attractions will be developed without damaging the cultural assets of the city. It is crucial to clarify the objectives from the initial planning. It is desirable to protect and utilize each type of cultural asset after considering and confirming them together, rather than overemphasizing a single characteristic and vaguely considering the relationship with other characteristics. On the other hand, the protection and creation of the characteristics of the Ancient City of Pingyao require the participation of residents, which is why the government needs to educate the old and new residents about the historical and aesthetic value of the Ancient City of Pingyao. It is expected that the residents will deepen their understanding and attachment to the area's characteristics and actively participate in the protection and utilization of the city through education and promotion.

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## Notes

Note 1. Etiquette culture: The Chinese etiquette culture and ideology has been complied with throughout the space layout design and construction of the city, reflecting a theme of “five positions and four directions, making the center outstanding, strengthening the Main Axis, and facing south as honor in the city's space organization and representation”, which can be seen as a live fossil representing the influences of Chinese Etiquette Culture on city constructions in ancient China (Gao, Zhang, & Dai, 2007).

Note 2. A typical northern Chinese architectural style

Note 3. Piaohao: exchange shop; a financial facility for exchange and transfer of currency in China

Note 4. Guan Yu: Guan Yu was the person during the Three Kingdoms period. Because of his character of keeping promises and super fighting power, Guan Yu gradually became the god of wealth in China. In particularly, Guan Yu was worshipped by Shanxi merchants. We can find his statues in temples, shops, restaurants and even residences. People think he can bring them money and good luck.

Note 5. Temple Fair: Temple fair, a cultural gathering held adjacent to temples during the Chinese New Year or other festivals, originated from people's activity of worshiping deities. People also shop and watch various performances as entertainment at the temple fair (Li, 2015).

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