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Study on the location characteristics and defense planning of military settlement of Xiping Bao

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ABSTRACT

Military Settlement is an important part of Chinese traditional settlement system, it contains rich and vivid history information, cultural resources and ethnic connotation. With the time passed away, the spatial pattern of Xiping Bao did not change much, the traditional road network is still clear and the wholeness of overall construction plan can still be seen from the whole to the parts of the settlement. From the points of location characteristics and defense planning of military settlement of Xiping Bao, this paper not only analyzes of depth and layering of Xiping Bao, but also the road space and organizational characteristics, and based on morphological constitutes of the settlement, the building types are divided into point, line and area shapes, the overall historical heritage institutions of Xiping Bao as the Jinbei military fortresses characteristics are grasped. Relevant research results can provide some guidance and reference to modern urban planning.

KEYWORDS

Military settlement; Xiping Bao; Location characteristics, Defense planning.



INTRODUCTION

China has thousands of years of history, splendid culture, in this piece of fertile soil grows silently simplicity and directness of a large building - vernacular architecture. It does not magnificent palaces, nor solemn temple architecture, it is just some people living closest to the temple shrine, the stage, shops, workshops, arch. however, vernacular architecture in a very long time and has not been properly and fully understanding. In the international community, from the beginning of the 20th century, the protection of historic buildings only pay attention to the mid-20th century, many countries have enacted a variety of charter, established the status of historic buildings. Among them, in May 1964 through the "Venice Charter" to the scope of protection of historic buildings deep into the historic district. October 1999 adopted the "Charter on local architectural heritage," added the establishment of a management and conservation measures and principles of local architectural heritage. On the 20th International Union of Architects, the members adopted a Mr. Wu Liangyong drafting of the "Beijing Charter", people began turning to the more protection, inheritance and development of different regional architectural culture, so to carry forward the national culture inherited. At home, we recognize and protect historic buildings also shifted from single building construction groups. Currently, the State Council, the Ministry of Housing and Urban-Rural Development and the State Administration of Cultural Heritage promulgated selected the "Chinese historical and cultural city", "Chinese historical and cultural town", "Chinese historical and cultural village" has received recognition and attention of the masses, national and local levels of government also announced a series of corresponding national, provincial and county-level "key cultural relics protection units," and by the laws and regulations to complete protection. Although the protection of vernacular architecture has been taking strides, but the progress and effectiveness is still worrying, the status quo remains poor in many villages still do not get good attention even still slowly drain.

Vernacular architecture influenced the social, political, economic and geographical, species-encompassing, Military Fortresses belongs to a branch of the highly personalized features. At present, research on the Great Wall defense system more from the history and the Great Wall, the study of the Great Wall from the perspective of military settlements still defective architecture and settlement development. Fort in traditional style defensive settlements on behalf of northern Shanxi region a unique, it carries not only the political, economic and structural information specific historical period, more importantly, is passed stationed together in a feudal society, the state established in order to consolidate border defense one of settlement information. They are an important part of the Great Wall defense system to line the walls enclosed body as a typical external image, to resist foreign invasion, convenient interior space planning offensive and defensive pattern as the primary consideration conditions, xipingbu located in the northeast line of Shanxi Province fortress, outside space combined with the interior space organizations have a complete reproduction of the military Defensive Settlement style, called an outstanding example of such a settlement.

CURRENT RESEARCH ANALYSIS

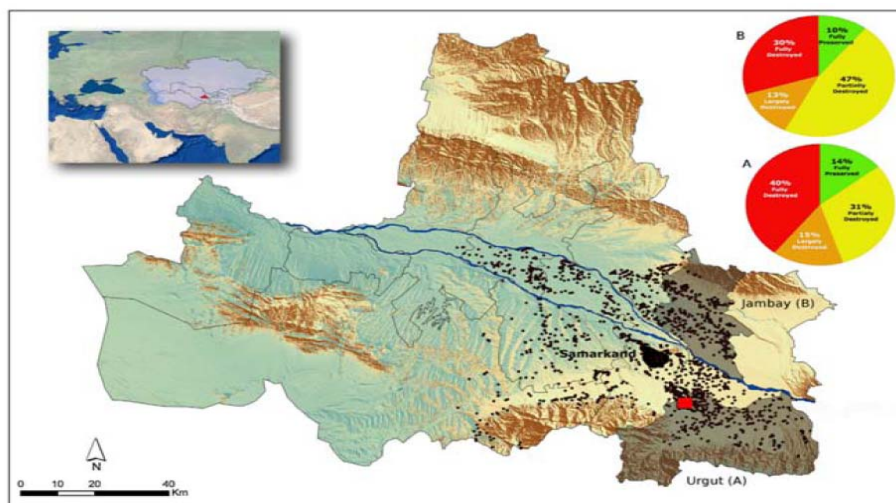


Figure 1: The region of Samarkand with its administrative districts

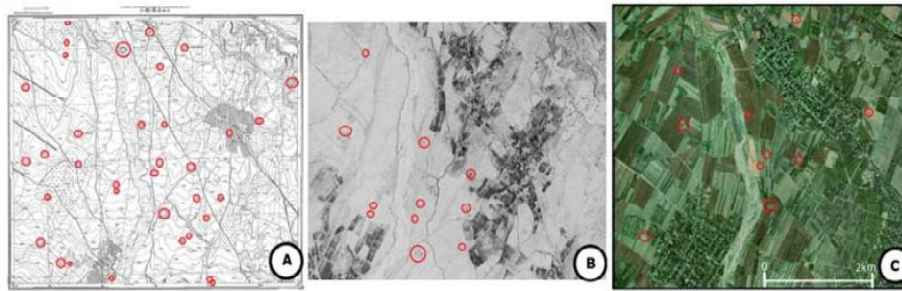


Figure 2: Archaeological mounds (red circles) visible on: A) 1:10,000 map of 1954; B) Corona image of 1972 (without geocorrection and rectification); C) Google Earth image of 2009.

As shown in Figure 1 and Figure 2, the red dots indicate the archaeological mounds that have been registered during the project of the Archaeological Map of the Samarkand region (last updating March 2011). In grey colour the two districts mentioned in the text (Urgut and Jambay) and illustrated in the detailed charts, which show the level of destruction combining information from 1:10,000 map and field survey. In Central Asia, the introduction of mechanised farming and the transformation of the landscape caused by agricultural intensification over the last 50 years have resulted in the massive destruction of archaeological remains. In this paper, we focus on an underestimated and unexploited type of remote sensing for the study of landscape change and anthropic impact on cultural heritage: 1:10,000 Soviet military maps of the 1950s. We present their use in the case study of the Archaeological Map of the Samarkand region. We argue that their precision and the early date at which they were produced make it possible to employ them as a reference tool for systematic survey and archaeological heritage management in Central Asia and throughout the former Soviet Union. We discuss the results of an archaeological survey based on these maps and show how they can be used to evaluate the destruction of archaeological mounds during the last 50 years, by contrasting them with modern satellite imagery^[1-3].

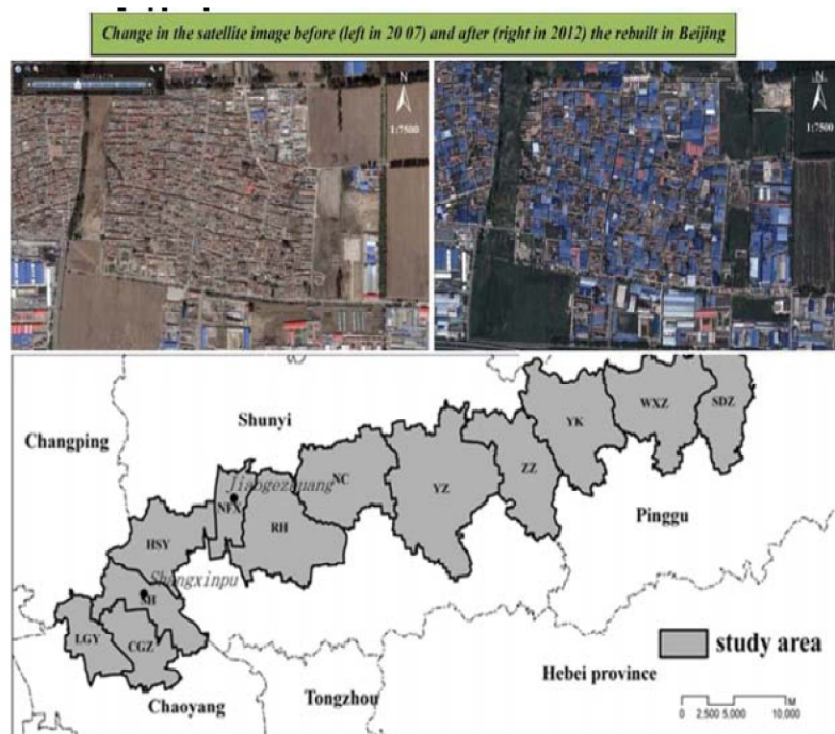


Figure 3: Change in the satellite image before (left in 2007) and after (right in 2012) the rebuilt in Beijing

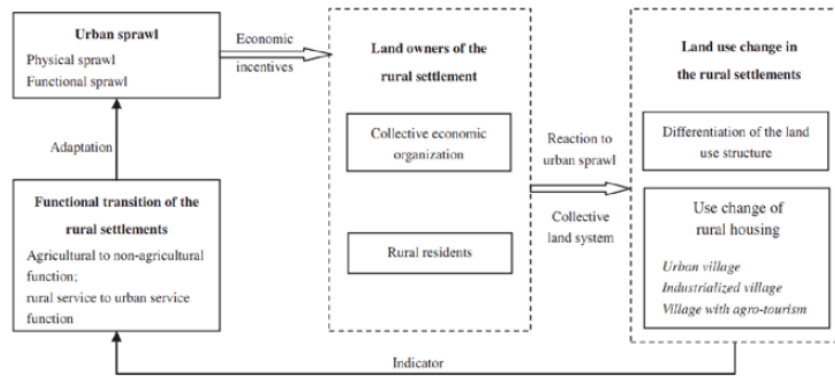


Figure 4: Relations hip between functional transition and land use of the rural settlement

The Figure 3 shows that the change in the satellite image before (left in 2007) and after (right in 2012) the rebuilt in Beijing. Regional differentiation of the land use of the rural settlement was found in the transect of Beijing. This was observed both in the land-use structure and the use of rural housing, which can be recognized as different reactions to the urban sprawl from the ‘collective’ and its members. From these reactions, functional transition of the rural settlement can be concluded as an adaptation to the urban sprawl. Functional transition of the rural settlements tends to become more general under the regional disparities in China’s rural area. In the light of these dramatic findings, we believe that our analysis may contribute to a more comprehensive and systematic under-standing of the functional differentiation of the rural settlement. And the Figure 4 shows relations hip between functional transition and land use of the rural settlement. We also suppose the findings to be helpful for policy planning of the rural settlement, which is a key point to the urban erural integration development. The objective understanding of its characteristics would be the first step for the guidance and control of the rural development and land use. In addition to the land-use pattern, attentions are needed to find out the dynamic and effects of the functional change of the rural settlement, such as the diversity of people, economic activity (industrial structure), products (not only the industrial products, but also the agricultural products) and life style. Future work will try to figure out the spatiotemporal correlation between these factors by means of quantitative approach [4-5].

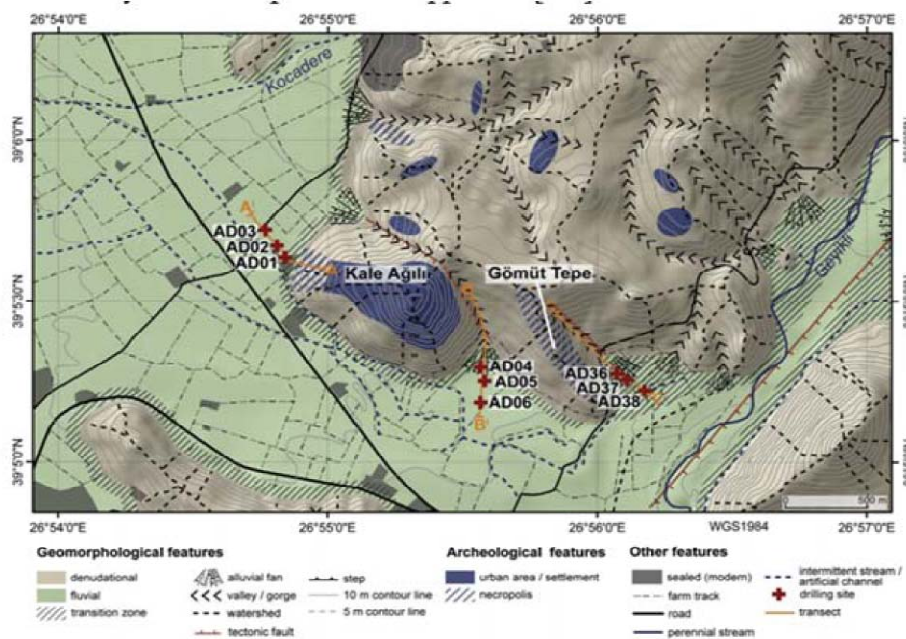


Figure 5: Geomorphological map of kale and its environs including archaeological features and drilling sites

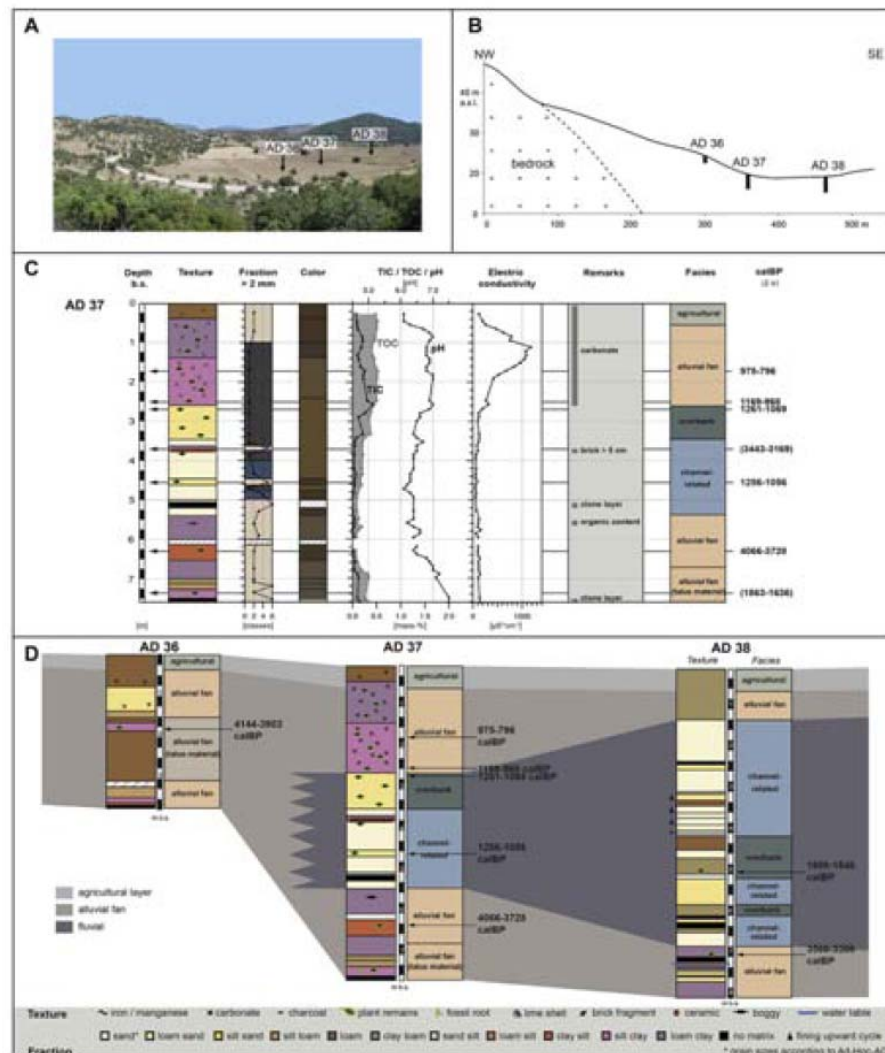


Figure 6: Transect. (A) Photo. (B) Cross section. (C) Stratigraphy and geochemical parameters of profile AD37. (D) Facies distribution.

In the Figure 5 and Figure 6, interactions between settlement history and landscape evolution of a hill-top settlement on the West Anatolian Coast near ancient modern Bergama were studied by a combination of archaeological and geography investigations. Ceramics, ancient literary and epigraphic texts, numismatics and architectural remains show that the hill-top had been populated since late Bronze Age times. From the sixth century BC until the change of the eras, the hill was occupied by a Greek abandoned afterwards. It was newly populated in the second half of the twelfth and the first half of the thirteenth century AD. The lathes of nine drilling cores, arranged in three transects and dated by AMS radiocarbon dating, shows that during the past 4000 years the sedimentary plains surrounding the settlement hill were aggraded by braided and meandering rivers, while collimation and alluvial fan deposition occurred at the foot-slopes. Sedimentation totaled about 5e7 m in the past 4000 years, evidencing a “drowning” of the landscape in terrestrial sediments^[6-9].

XINPINGBU SPATIAL PATTERN

Siting factors

As shown in Figure 7, Xinpingbu as Military Fortresses, is an important part of the Great Wall of military defense system, leaving the Great Wall, xinpingbu lost the meaning of existence, and the Great Wall to leave like this xinpingbu military settlements, cannot constitute a complete defense system.

Xinpingbu tight north-west banks of the Great Wall, in the city of wait and see, stretches of the Great Wall, it seems, according to the foot. Xinpingbu Great location and close, not only to protect the Mongolian and Chinese trade port city in the horse stuff, but also strengthened the frontline of defense.

Military Fortresses along the Great Wall surrounding the primary strategy is due to the layout of the system risks. Xinpingbu located between two mountains, ridges and mountains become blocked foreign enemy after another natural barrier for the tactical strategy provides the best natural environment. In addition, the military has always been the alluvial plain of the mountain troops stationed as a massive advantage lot, but just in xinpingbu gentle slope on the western riverbank, drinking water is not only convenient, but also in the river as an important part of the strategic plan.

Great constrained by its location form, in order to achieve a good defense effect, the need to deploy Wall defense segment, generally every 30-40 years set up a Fortresses. Xinping Road area, fan-shaped turn uniformly distributed Pingyuan Fort xinpingbu, Paul Fort and Fort birch flat door. Four Fort occupy their respective favorable terrain, xinpingbu Fort peace across something far, far fort located flat smooth, while the highest hilltop fort birch doors, Yaokan global.



Figure 7: Military fortresses schematic

Space layout



Figure 8: Space and Pattern of Xinping Bao

In the Figure 8, "Settlements are residents based on their concept of space and the creation of space." Military Fortresses this particular settlement, due to the larger political and military factors, and

not as a natural development of the village general growth, the greater its original spatial layout depends on the macroscopic level of those in power, and in the subsequent shift in social functions, local space have a more casual adjusted. From a macro perspective, xipingbu rigorous layout, is a strict square city, east, north to have Urn, introduced moat river from the north western river strengthen protection. Cross the street to the center of the city as the main road skeleton and extends out sixteen times intertwined street alleys, roads neat pattern will be divided into several patches Baonei to live. Xipingbu existing historic buildings in order to cross the street to guide the whole intersection of Yuhuangge Fort, North Avenue and East Main Street is bustling Commercial Street, lined with shops retain some old, most of the residential houses in the south of East Main Street.

Based on field research xipingbu analysis, we can roughly be summarized as four stages of its development, including the late Ming and early Qing Dynasty, the founding and reforms opening period. Based architecture from different historical periods and castle morphology, we found xipingbu still maintained a relatively stable development of the state, only after the reform and opening up, due to the eastern city wall damaged and exhausted, coupled with rapid population growth and rapid economic development, the city of Fort some eastern outward expansion and new construction, but the pattern of this part of the road also will be changed.

Space defense features

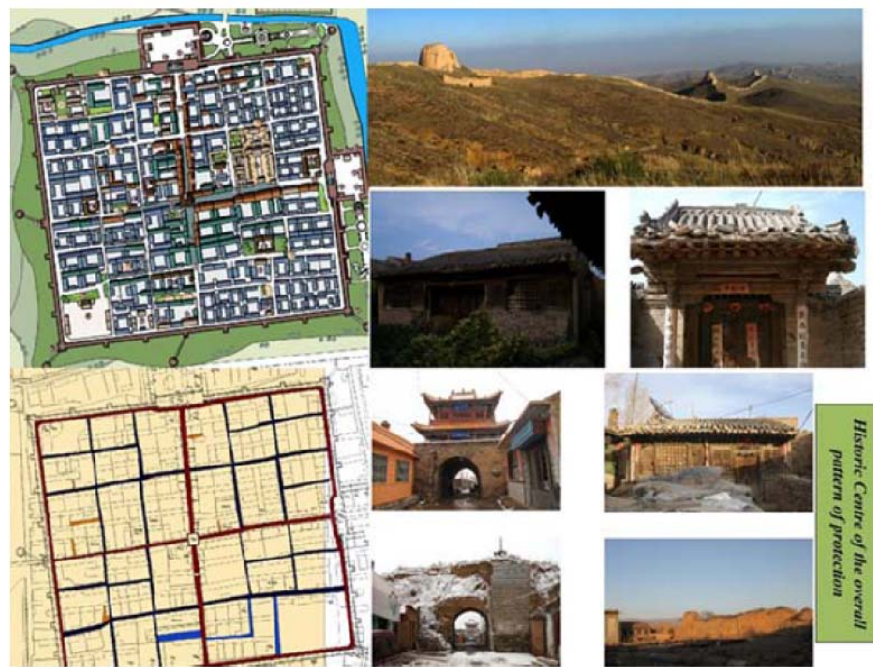


Figure 9: Historic Centre of the overall pattern of protection

Historic Centre of the overall pattern of protection was show in Figure 9. Inside: hierarchical distribution of military defense embodied in the specific levels of the city's layout, xipingbu internal military defense system also has a launch-like characteristics. New Ping Road to xipingbu guide the overall xipingbu lonely north-west, the north is the new flat Seoul frontier, occupy an important military location, the castle three surrounding low-level, namely Ping Yuan fort, Bao-Ping Fort and Fort birch door. Among them, Ping Yuan Fort eagerly East, Paul Fort and Fort flat birch door straight turn south, Fort horns fanned four mutually arranged, formed the core of xipingbu internal dispersion defense system.

Military Settlement concentric reflect on two points: First, there is the city or outside the city peripherals pier, two is the heart of the city to the layout. Xipingbu pier fortification walls outside the

circle, were distributed in the turret and the South City outside wall, they keep in touch with the city through a ladder or tunnel form concentric fortifications, is another protective layer outside the city walls. Radial layout xipingbu reflected in the city's central pavilion, which is the commanding heights of the city, but also the authority, command and spiritual beliefs to the core.

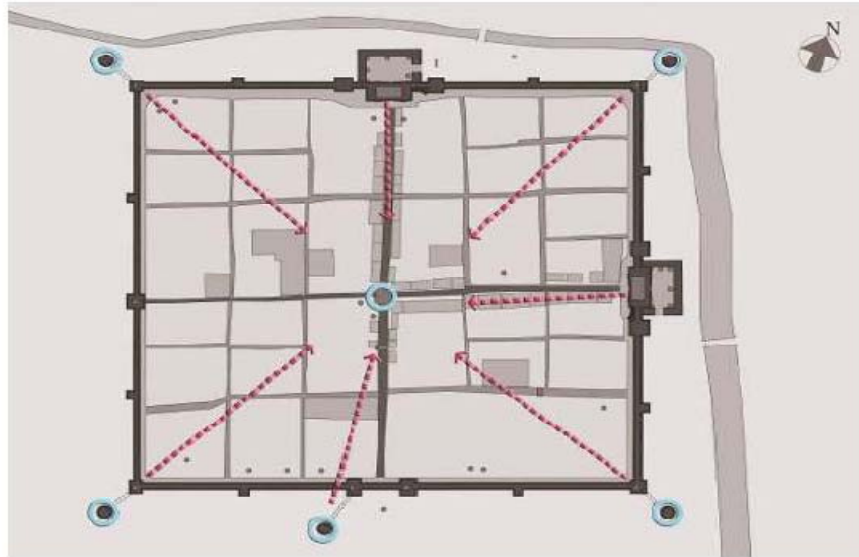


Figure 10: Concentric defensive characteristics of Xinping Bao

A concentric defensive characteristic of Xinping Bao was shown in Figure 10. Defense Military Fortresses along the border to form the theme of the city, no matter what the shape of the city, have shown for the closed walls, prominent horse surface and laws gates interval within which the outer wall separating the divided entirely different. Xinpingbu total height of 11.7 meters of walls, earthen consolidate internal and external Huizhuan package City, perimeter 500 meters, east, north Urn, closed strong sense.

DEFENSE CONSTITUTES

To establish defense system, the hierarchical classification of the building reflects the thinking of the Great Wall of military planning in defense and attack capabilities. Military, military general stress reached "into the attack, retreat and defend" the ideal state, in order to "climate, geography, and" ultimately benefit the deployment of military strategy and conduct. Specifically, it is considered in the overall distribution of the entire theater of various joint military stronghold and defense architecture, followed by consideration of each of the Military Fortresses and structures of defense effect, while also forming a complete defense from a psychological and spiritual level of consciousness, so that a comprehensive defense architecture both comprehensive and detailed. Army fort defense system architecture is composed of a plurality of monomer units combined defense complex, because of its long front, in-depth features large, the entire defense system presents a large space of collusion and cooperation from the frontier to the core hinterland need to go through a number of nodes to be linked. We found that the Great Wall of military defense system is distributed in accordance with a certain level up, including: a castle perimeter defense, 2, Castle Defense, 3, city defense.

Perimeter defense

Perimeter defense is the core of the Great Wall, watchtowers, beacon towers, piers around the defensive front together form the Great Wall, is the first layer outside the military defense of the castle, is the first battlefield Mongolian and crossfire. Great as a bare ribbon structures, do covert war crossfire points, and ranked within the Great Wall, there is a sense of commanding, is the advantage of the war

zone. Watchtowers, also known as a watchtower on the Great Wall located some distance from a watch tower, "beneficial side hit" to wait and see war, dictating every use. Independent building in flames piers along the Great Wall, generally located in the higher terrain or road turning point, the use of fireworks to deliver the message.

Fort military self-defense

Wall as a product of the military struggle, is the carrier of all defensive measures, so the outbuildings on the walls reflects this idea of war service. Gates, Urn, City Desk (horse face), turrets and other ancillary buildings from different angles to form a complete offensive and defensive system.

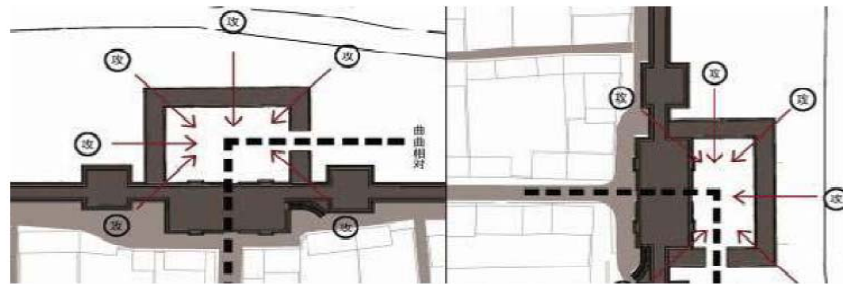


Figure 11: Schematic of defense about north and east urn in Xiping Bao

City pattern defense

In the Figure 11, the site of the castle is on the potential for environmental, walls, gates system for the purpose of maximizing military, which all belong to passive defense, while the city's planning embodies an active defense posture. Among them, the road system around the city of communication between the control forces supply route and city defense confused, courtyard defense is defense initiative reflects the residents, the "live", "defense" unity, but also allows people the spirit of defense divine aid, encouragement morale.

BUILDING TYPE ANALYSIS

Fort in Shanxi Province is the main function of military defense based, so it is not the same as other Imperial has the core public buildings, public buildings, its functional requirements based on the actual spread distribution, each building as a separate subject, but echoed each other but also from the spatial composition in terms of the formation of a distribution of point-like.



Figure 12: Distribution of public buildings and Commercial street

As show in Figure 12, after AD 1571, in addition to the Liaodong original horse along the Great Wall outside the city, nine towns and opened 11 side horse market. Khanh five years (1571) Ming court victory in Datong mouth, new flat, open Ma Sanbao Moriguchi City; xipingbu has provided the city of East Malaysia (flat head away) and West Malaysia City (old village) cities. Here not only the Ming court fight with the Mongol tribe's battlefield, but also the Han people frontier trade with northern nomadic Mongolia and other places, it is known as the horse market.

The rise xipingbu business, thanks to horse market opened, but also inseparable xipingbu efforts and smart businessman, not much variety though operating scale nor Jin giants like envy, but very good. Xipingbu commercial development also affected city planning, specifically, east, north entrance gate determines two prosperous link between East and North Avenue flow of people and trade, both sides of the street lined with shops into row and set up, and Yuliang, booming Chang, Yong Cheng, Lu Ziming, dry goods shop, the source Wing, Glorious spring, Zhang clinic, Miaoshouhuichun, Jia dozen clinics and other various types of shops are concentrated, forming a new flat Baonei commercial Street. Today, although at that time the contents of the store management have changed, but that the two blocks are still busy, noisy voices.

In the construction of Fort in the beginning, people are more in order to meet the military offensive and defensive effects and supreme leadership of the ruling class, so when the construction of Fort in the city, first enclosure siege, then good location in the city government office building, temples, ancestral halls and other public buildings, after which the remaining areas began to consider housing needs, so it is not structured to form a large area, but can form a surface domain.



Figure 13: Protection of historic buildings

In the Figure 13, Xipingbu business downtown, creating a Baonei luxury residential buildings, mostly courtyard layout, welcome door screen wall, the building has a hard top, Juanpeng style and other styles, as well as beautiful brick, solid tissue walls body, a rare stenciling windows and doors, all of which are described in the xipingbu ancient history. Baonei around the king, waiting, Wu Hao, Yin Jia Deng, Joe, white, Guo, Gu, Zhang, Han, Sun and other three more than at the house. Existing Royal partial hospital, Jia house, house Hao Wu family house at saving more than a dozen original.

SUMMARY

This paper constitutes siting and defense, analyzes of depth and layering xipingbu military defense system, but also on xipingbu settlement road space and organizational characteristics were

studied in detail, and based on the form of settlement constitute its building type into point, line and area, the overall grasp xinningbu historical heritage institutions and as Jinbei military Fortresses characteristics. Xinningbu as a military settlement, is produced in a particular historical context, it was adapted to the traditional form of farming economy, turbulent social environment, limited scientific and technological level. However, due to advances in modern economy and technology, regardless of military combat mode, economic expansion and population size requirements of the modern town, the traditional development model Fortresses cannot continue inherent, plus the popularization of scientific knowledge on behalf of the traditional concept of the temple shrine or traditional spiritual culture has become weak, these changes are forcing people to think and to increase research on traditional heritage Defensive Settlement historical context, in order to find a way out of a sustainable development.

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