# The Military Geographical Characteristics of the Planning and Layout of Military Settlements in Liaodong Town during the Ming Dynasty

#### Xixuan Fan

School of Architecture and Art, Dalian University of Technology, Dalian 116024, China

ABSTRACT. The military settlement of Liaodong Town in the Ming Dynasty was an important part of the Great Wall's military defense system on the north side of the Ming Dynasty. The military environment in which it was located was very complicated. The existing researches mostly started from the aspects of geography, politics, and military systems, and analyzed its planning and layout. From the perspective of military geography, the analysis of the influence of the military geographical environment of Liaodong Town on the settlement planning and layout is relatively inadequate. Therefore, focusing on the geographical environment inside and outside the Great Wall, it analyzes its influence on military strategy, offensive route, and defense line layout, and then studies the layout and location characteristics of military settlements in Liaodong Town, and reveals the military and geographical characteristics of the planning and layout of the defense system in Liaodong Town.

KEYWORDS: Military settlement, Military geography, Liaodong town, Layout plan, Selected site

#### 1. Introduction

The Liaodong Township of the Ming Dynasty was the easternmost point of the entire Ming Great Wall military defense system, and was an important line of defense for defending the Northeast Territory of the Ming Dynasty. It is separated from the Yalu River and the North River by the east, the Jizhen Township Customs in the west, the Lvshun Haikou in the south, and the old Guiren County outside Kaiyuan in the north. It extends 1, 575 miles (approximately 800 kilometers) from east to west, and north to south. Nine hundred and eighty miles (490 km) [(Ming) Liu Xiaozu. Four Towns Sanguanzhi. See: Literature[2]: Volume 2. Liaodong Town has Mongolia in the west, Jurchen in the north, Jurchen in the east, North Korea, etc. The military geography environment is very complicated. Under such conditions, the military settlements are tailored to local conditions in terms of layout and location, and are congested due to dangers. They have obvious military geographical features.

## 2. The Location and Environment of Liaodong Town

Liaodong Town is located on the plain of Liaohe River, "the mountains and seas are negative, and the potential is overwhelming", "the fish and rice are rich enough to be self-sufficient" [(Ming) Liu Xiaozu. Four Towns and Three Passes". See: Literature[2]: Volume 2. ]. The geographical features of the jurisdiction can be summarized as "two belts and one field". Mountains and hills are distributed on both east and west sides. The eastern mountain range is larger, with an average altitude of about 800 meters, and the western mountain area is smaller, with an average altitude of about 500 meters. In the middle is the fertile Liaohe Plain, with an average elevation of about 200 meters. Its topography runs from north to south, from the mountains on the east and west to the central plain, and it slopes like a horseshoe toward the Bohai Sea. The narrow coastal plain area along the western Bohai Bay is the only way to the east of Liaodong Town, and it is also the main place of throat.

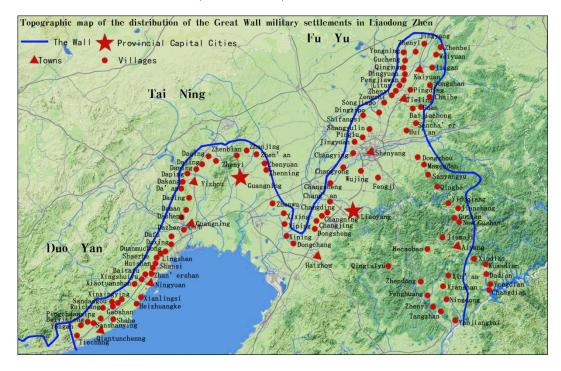


Fig. 1 Topographic Map of Military Settlements in the Great Wall of Liaodong Town

Source of basemap: Google map Source of data: Research team's research results

The eastern mountain range is mainly a continuation of the branch veins of the Changbai Mountain. It consists of two parallel mountains in the northern Hada Ridge, Longgang Mountain, and Qianshan Mountain in the south. Longgang Mountain, Laoren Laozi Mountain, Huaren Mountain, Kuandian Sifang Dingzi Mountain, Fengcheng Phoenix Mountain, Anshan Qiandu Lotus Mountain, and Lushun Laotie Mountain. The western mountain range is the Yanshan-Taihang Mountain system that transitions from the Inner Mongolia Plateau to the Liaohe Plain, and is mainly composed of Nurur Tiger Mountain, Songling Mountain, Heishan Mountain, and Yiwu Mountain, which extend from the southwest to the northeast.

There are more than 300 large and small rivers in Liaodong Town, including Liao River, Hun River, Daling River, Prince River, Ring River, and Yalu River. The Liaohe River is the largest river in Liaodong Town, with a large drainage area. The West Liaohe River originates between Huluer Tiger Mountain and the southern Yugan Mountains in the Greater Xing'an Mountains, and the Eastern Liaohe River originates in the western Longgang Mountains. Most of the rivers merge into the Liaohe River. After converging, they travel from north to south and reach the sea in the south of Liaodong Bay. Other rivers converge into the ocean from the east, west, and north to the south-central. It is the combined impact of large and small rivers that created the alluvial plains in the middle.

#### 3. The Military Geographic Pattern of Liaodong Town

Liaodong Town is facing important areas on three sides and blocking the sea on one side. It is an important defense area for joint defense of sea and land. The central plain area is flat and open, with roads extending in all directions, and "wide as a wire ear". After the battle of jeopardy, Ming Chengzu Zhu Xi also awarded Daning Wei the land to Wuliangha, so that the three guards gradually moved south, causing the heartland of the Liaohe Plain to bow to others, so the Great Wall's side wall became the only barrier against external diseases.

According to the basic situation of the distribution of military settlements in Figure 1, combined with historical records, we can find the four main enemy areas and ten important defensive cities in Liaodong Town, as shown in Figure 2.

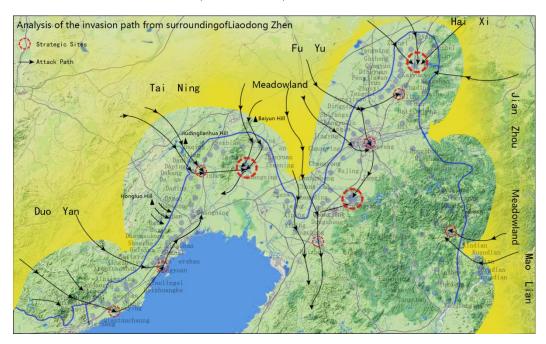


Fig.2 Defensive city map

#### 3. 1 Western Liaoxi Corridor Area

From the distribution of the settlements in the west of Liaodong Town, it can be seen that the Ning Yuanwei and Qiantun camps are the main throats of Liaodong Town, with the mountains and the sea on the back, forming a long and narrow linear enemy area. Historical materials record that there are scattered Mongolians in the Gaoqiaopu and Twin Towers in Daxingpu, Tochigi, and other areas. However, if the Mongolian army wants to invade Ningyuan Qiantun, Dongguan, Ningyuanwei and other important cities, it must be entered from the Sanshan Camp, Xianling Temple, and Xiaotuan Mountain in the southwest. Therefore, the main point of receiving enemy forces in the western Liaoxi Corridor area is the two ends. Strengthening the defense at both ends is not only conducive to the layout of the special settlement system brought by the "horizontal" terrain, but also the necessary guarantee to control the throat of the eastern part of the town of Erliao.

#### 3.2 Midwest Plain

There are nineteen fortresses in the areas of Guangning, Jinzhou, and Yizhou, which are located in the midwestern plain of Liaodong Town. The terrain here is flat and leads directly to the Wuliangha Three Guards station. There are several very important mountains in the plain beyond the side walls. From east to west, they are Baiyun Mountain, Jiuding Lianhua Mountain, and Hongluo Mountain. Each mountain is forty to fifty miles (about 2, 000 to 2500 meters) from the Great Wall, and it is the gathering place of Mongolia. If the troops are gathered in Baiyun Mountain, the attack target is usually Zhen'an, Calm and other fortresses, and thus attack the Guangning area; if they are gathered in Jiuding Lotus Mountain, the attack target is mainly the eastern fortress of Yizhou Road; In Hongluo Mountain, he must commit crimes such as Dafu, Dazhen, and then into Jinzhou Songshan, Xingshan, and Guangning Youtun. It can be seen that the Midwest has many enemy points along the front wall of the Great Wall, and its strategic position is very important.

#### 3.3 The Two Major Grazing Areas in the Middle East

The town of Liaoyang can be said to be the heart of Liaodong Town. There are side wall guards on the east and west sides of the area, and the west side wall is the pastoral office of Taining and Fuyu two guards of Wuliangha Three Guards, while the east side The wall runs from Hoi An, Fushun to Liyang, etc. Outside the side wall and up to the bank of the Yalu River, there is Mao Lian and Jianzhou Nuzhen. The river outside the western side wall is plentiful and the tributaries are comprehensively interlaced. Although there are natural barriers such as the Prince River and Hunhe River, the beach is shallow and can be waded across. At that time, intrusions were

more frequent. If Wuliang Ha came down south, he would attack Dongchang, Dongsheng and other fortresses, and then attack Haizhou, Gaizhou, Fuzhou, Jinzhou. If he went east, he would mostly go to Tiger Forest and the old Liaoyang City. The soldiers were attacked by Shifang Temple, Changying Fort, and Huangniwa, and then attacked the central defender of Shenyang. The eastern side wall is Jurchen land. Before the Wanli Period of Ming Dynasty, the Jurchen land had not yet risen. This area is relatively stable. The eastern terrain is mainly mountainous and the terrain is complex. The surrounding area of Liyang is the resident land of Jianzhou. In order to prevent continuous invasion after the rise of Jurchen, another six fort in Xinjiang was added. In short, the pastoral area is relatively important because it is away from the border and the terrain is flat. It is an important gathering place for foreign invasion and an important area for defense along the border.

#### 3.4 Kaiyuan Road At the North End

Kaiyuan Road is located at the northernmost end of eastern Liaoning, and it is also the solitary northeast of the Ming Dynasty. It is affected by enemy on three sides. There is a blessing in the west, Haixi in the north, Jianzhou in the east, and ethnic minorities living in the same northeast. Surrounded by foreign groups, the road is the most "dangerous" fortress in Liaodong Town. The demise of Ming Dynasty began in Liaodong, and the demise of Liaodong began in Kaiyuan. Kaiyuan's failure was undoubtedly the umbilical pain for the impending Ming court.

#### 4. Characteristics of the Layout of Military Settlements in Liaodong Town

#### 4.1 The Two Strategic Places

The most special feature of the layout of Liaodong Town is that the entire settlement system is distributed in an "M" shape. On the one hand, it is related to the terrain features mentioned above. On the other hand, the "M" -shaped layout forms two regions, each of which is the two most important cities in Liaodong Town-Liaoyang City and Guangning City. Both cities are extreme places. Once a large-scale military invasion occurs, the two cities are the first offensive targets. The enclosing military layout is not only conducive to the military command of the two cities, but also to the surrounding fortresses to guard the center.

# 4. 2 Other "Extreme Rush" Main Road Fortification

Liaodong Town is divided into South Road, West Road, Middle Road, East Road, Liaoyang West, North Road, East Road, Liaoyang East and Liubao Seven Road in Xinjiang. The road is guarded not only by the long wall of the Great Wall, but also a strategic place for guarding. Regardless of whether they are "extremely rushed" rushed", all the important places belong to different roads, and the density of the fortresses in each road also shows the density of the important places in the area to some extent. For example, there are relatively many "Gongchong" places in South Road and North Road, and the density of Yanbian Fortresses on these two roads is also significantly higher.

## 4. 3 Deep Fortification, "Rush" is Often in the Belly

The Great Wall military settlement system of the Ming Dynasty did not have a non-linear layout, but a progressive defense system in layers. In order to ensure the security of the important place, the side wall is often a distance away from it, and a side fortress is set up. It is necessary to live inside and outside the side fortress, which is a fan-shaped arch guard. This method of fortification is very common across the Great Wall.

## 4. 4 Rushing Along the Edge, Leading the Periphery

Not all rushes are in the belly, and there are also "extreme rush" and "secondary rush" in the fortresses along the border. In this case, the city garrison will be higher than other general fortresses. For example, Liubao, Zhenbian, Zhen'an, Zhen'an, Zhenyuan, and Zhenning on the middle road are six-sided fortresses under the jurisdiction of Guangning, while Zhenwu and calm fortresses are the main points, while the other four fortresses were former officers For about five hundred, there have been no changes in the garrison. It can be seen that the relief of military terrain was also formed during the course of military confrontation and war. The fortress was the first line of defense in the side wall of the Great Wall and the first enemy face. The strategy of

the inner city guard alone cannot meet its defense. For the purpose, multiple forts must be united to support each other, and the military status of frontier fortresses is not absolutely consistent. There will be a linear layout of a border fortress over several neighboring fortresses.

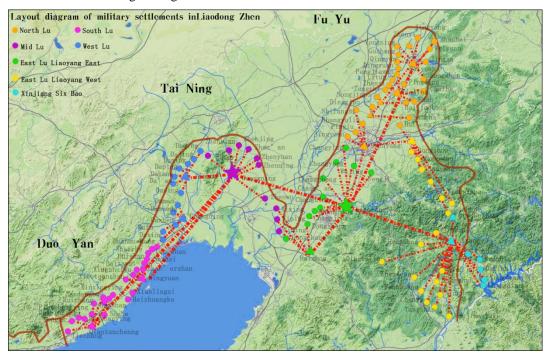


Fig. 3 Layout of Military Settlements in Liaodong Town

Basemap source: Google map author repainted

#### 5. Summary

The military geographical environment of Liaodong Town has an important impact on the layout and location of military settlements: mountains are important barriers for settlements, and the breaks between mountains or river valleys cut by rivers are important transportation channels; rivers It is an important source of water, and also has a certain capacity for circulation and transportation. It can also be used as a barrier in the wide area of the river. Although the plain is flat and the view is wide, it is not dangerous. Because of grasping the core characteristics of geographical factors, the commonality is also reflected in the planning and layout of the defense system: military settlements are often located in traffic corridors and important crossings; towns are usually in the belly, guards, and other troops The cities of Tuntian are also far away from the side walls; all cities have as much water control as possible. In the most important places frequently attacked by the enemy, the density of military settlements is relatively large. In general, the towns, roads, guards, and fortresses at all levels have maintained a progressive layout pattern in the middle of the geographical distribution.

#### Acknowledgments

Fund Project: National Natural Science Foundation of China (Youth) (51708083): Study on the Integrated Protection Strategy of the Land-sea Cooperative Military Settlement of the Great Wall of Liaodong Town in the Ming Dynasty.

Humanities and Social Science Fund of the Ministry of Education (General) (16YJCZH017): Study on the Layout of the Land-sea Cooperative Military Settlement of the Great Wall of Liaodong Town in the Ming Dynasty.

#### References

# The Frontiers of Society, Science and Technology

ISSN 2616-7433 Vol. 2, Issue 6: 71-76, DOI: 10.25236/FSST.2020.020616

- Liu Xiaozu. Sanguanzhi of Four Towns. See: Literature [2], vol.2, pp.12-13.
  Liu Xiaozu. Sanguanzhi of the Four Towns. See: Literature [2], vol.2, pp.34-35.