Research Paper

Value Extraction and Cultural Landmark Construction of the Guiling Fortress Site in Fuling, China[1]

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Abstract

This paper takes the Guiling Fortress Site in Fuling District, Chongqing City as the research object. Based on the grand background of the Song and Yuan mountain fortress defense system, it comprehensively employs methods such as literature analysis, GIS spatial analysis, and knowledge mapping to systematically extract and explain its multi-dimensional value as a military stronghold in the southwestern Sichuan region during the Southern Song Dynasty. The study reveals the strategic pivot position of Guiling Fortress in the regional defense network and constructs a complete heritage value system from four perspectives. On this basis, the paper further explores the transformation path of Guiling Fortress from historical relics to contemporary cultural landmarks, and innovatively proposes cross-scale revitalization strategies from the perspectives of region, urban community, and other levels. This research not only provides theoretical basis and practical blueprint for the protection and utilization of Guiling Fortress, but also offers a reference model for the sustainable revitalization and value transformation of similar military cultural heritage.

Keywords

Guiling Fortress; Military Heritage; Value Elements; Heritage Corridor; Cultural Landmark

1. Introduction

1.1. Background

Military cultural heritage is a product of history, and its historical value reflects its essence. It is the relics and artifacts formed by people of all dynasties in military activities and the entire process of their historical development. At present, the international community's protection of historical and cultural heritage has shown a trend of emphasizing integrity and integration, and the scope of protection is constantly expanding. In this process, military heritage, as a unique category, is attracting more and more attention from experts in the field. It not only carries the weighty history, but also demonstrates an irreplaceable and profound significance in building national cultural identity and preserving the historical memory of the nation.

1.2. Literature Review

Research on the Song and Yuan Dynasty mountain fortress ruins in the Sichuan-Chongqing region of China has long been underway and has gradually come into the public eye with the recent joint application for World Heritage status of the Song and Yuan mountain fortresses in this area. For instance, Peng Feng's

[1] National Natural Science Foundation of China : Wang Yan, 52208051,Formation mechanism, feature identification and value system of cultural routes in Taihu Lake Basin based on Historical Information Atlas

"*Building Fortresses for Defense and Mutual Support between Jing and Shu: The Adjustment of the Southern Song's Defense Policy in Sichuan and Its Impact*" analyzed the adjustments in the Southern Song's defense policy before and after the Battle of Diaoyu Fortress and explored the far-reaching influence of these policies on the overall defense pattern in Sichuan and Chongqing. Wang Zhejun's "*Research on the Administrative and Economic Operations of the Mountain Fortress System in Sichuan during the Song-Mongol (Yuan) Wars*" explored the economic and political characteristics of the Sichuan-Chongqing region during the Song-Mongol (Yuan) Wars. Li Zhen's "*Research on the Characteristics of the Southern Song's Anti-Yuan Mountain Fortress Defense System in the Upper Reaches of the Yangtze River from the Perspective of Cultural Landscape*" analyzed the correlation between the layout of the mountain fortress system and the distribution of major transportation networks from two aspects: the overall pattern of the mountain fortress system and the selection of key defense points.

With the development of the world's social economy, the construction of cultural spaces and cultural landmarks plays an increasingly important role in enhancing the quality of cities and promoting their sustainable development. Research on the construction of urban cultural landmarks and cultural spaces has also been carried out. Wei Wei's "*International Experience and Implications of Shaping Urban Cultural Spaces: A Case Study of London, New York, Paris and Tokyo*" explores how leading international cities shape their cultural spaces, with the aim of providing strategies and paths for the cultural-led development of Chinese cities in the transition period. Ai Wenjing's "*The Construction of Communicability in Urban Historical Spaces: A Study on the Construction Strategies of the Communication Images of Urban Cultural Landmarks*" approaches from the perspective of communication studies, discussing how urban cultural landmarks can achieve the "communicability" between history and the present through landscape shaping and image communication, thereby exploring feasible paths for cities to build internal citizen identity and convey their cultural images externally. Bo Gao's "*The Effect of Memory Construction of Cultural Landmarks on Urban Development*" takes Chinese cities as examples to explore how cultural landmarks influence urban development through memory construction, and argues that cultural landmarks are not only physical existences of cities but also core carriers that carry urban memories, shape spiritual identities, and drive economic development.

At present, research on the Song and Yuan Dynasty mountain fortress ruins in the Sichuan-Chongqing region has initially formed a system. Scholars have revealed the historical role and spatial characteristics of these mountain fortresses in the wars of the Song and Yuan Dynasties from the perspectives of policy adjustments, economic operations, and defense patterns. However, existing achievements mostly focus on core sites such as the "Eight Pillars of Sichuan", and there is still a lack of in-depth exploration of the regional overall defense network and some peripheral mountain fortresses. Meanwhile, against the backdrop of the global cultural turn, scholars at home and abroad are increasingly emphasizing the role of cultural landmarks and urban spaces in shaping urban identity and promoting sustainable development. Relevant research, from the dimensions of memory construction, image dissemination, and spatial shaping, provides theoretical support and practical paths for the contemporary transformation of historical heritage. Against this background, how to place the Song and Yuan Dynasty mountain fortress ruins outside the "Eight Pillars of Sichuan" within the perspective of cultural landmark construction and achieve their transformation from war remnants to urban cultural resources has become a direction worthy of further exploration.

2. Methodology

2.1. Research Object

(1) The Song-Yuan Mountain Fortress System

At the end of the Southern Song Dynasty, with the Mongol army advancing southward and occupying half of the territory including Chengdu, the capital of Sichuan Province, the defense system that the Song

Dynasty had built along the mountainous areas around the Sichuan Basin collapsed. The Southern Song Dynasty's ruling area in Sichuan was left with no natural barriers to defend. To safeguard Sichuan, which served as the upstream barrier of the Southern Song territory, the Southern Song Dynasty stepped up its defense deployment in Sichuan. It began to build fortified cities and water forts by taking advantage of the natural barriers of mountains and rivers. Along the three major rivers running from north to south in Sichuan (the Jialing River, the Tuo River and the Min River), as well as the strategic locations along the Yangtze River, which flows from west to east after the confluence of the three rivers, the Southern Song Dynasty constructed mountain cities and water forts. It moved the state and county seats that had no natural barriers to these mountain cities and water forts to curb the advantage of the Mongol cavalry. Thus, a defense system was established, which combined mountain and water cities as points and rivers as lines, with the points and lines supporting each other.

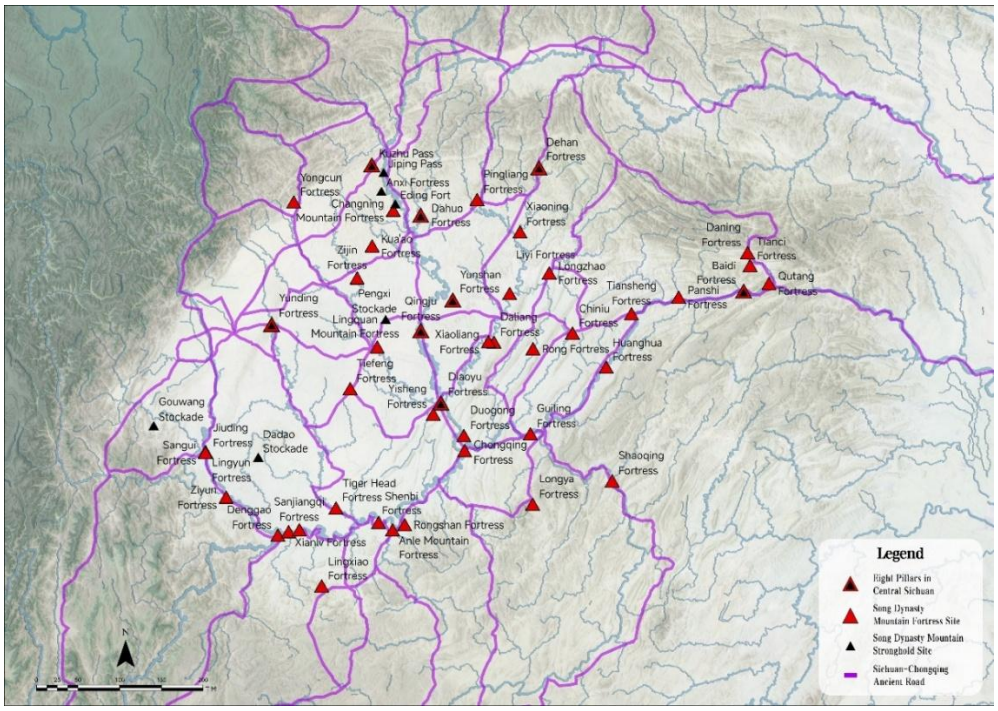


Figure 1. Distribution Map of Mountain Fortresses Built by the Song Military in Different Periods. Source: Author.

During the Song-Yuan Wars, the mountain fortresses in Sichuan Province could be classified into four administrative levels: provincial administrative commissions, circuits, prefectures, and counties. According to the on-site research by archaeologists, there are still over twenty mountain fortresses built by the Song army in Sichuan Province with clear remains. Almost all the mountain fortresses in Sichuan during the Southern Song Dynasty were constructed on perilous mountains. After the Song-Yuan Wars, they were all relocated to the old cities on plains and low hills, thus not being occupied by later cities and largely preserved in their entirety. Many sections of the Song Dynasty fortress walls still remain on the surface, and nine Song Dynasty fortress gates have been preserved, providing physical evidence for modern research on the history of the Song-Yuan Wars, urban history, fortification history, and the local history of the regions where these mountain fortresses were located.

(2) The Guiling Fortress Site

The ruins of Guiling Fortress (also known as Santai Fortress or Santai Fort) in Fuling District, Chongqing, are located on Santai Mountain on the north bank of the Yangtze River. It was an important military stronghold built by Yang Li, the governor of Fuzhou, in 1266 (the second year of the Xianchun era of the Southern Song Dynasty), upon imperial order. The same year, the administrative center of Fuzhou was also moved here, making it an integral part of the mountain fortress defense system during the Song-Mongol (Yuan) War

and the military and political command center of the Fuzhou battlefield until it was captured by the Yuan army around 1280.

The ruins are built along the mountain terrain, forming a multi-layered fortress wall layout consisting of a ring wall on the mountain top and four outer walls in the east, south, west and north. It features a step-by-step defense system. Archaeological discoveries include fortress walls, fortress gates, gun platforms, leishi (ancient "cannonballs" used in warfare), the foundation of the government office, drainage ditches, and other relics from the Song and Yuan periods. The overall preservation is relatively good.



Figure 2. On-site photos of the Guiling Fortress Ruins in Fuling District, Chongqing, China. Source: Partially compiled by the authors; partially acquired from the Fuling Municipal Archives.

2.2. Research Methods

This research is based on archaeological literature, contemporary studies, and field investigations. The selected materials include the History of the Song Dynasty, the History of the Yuan Dynasty, local chronicles, etc. The History of the Song Dynasty, the History of the Yuan Dynasty, and the Chronological Records of the Song Dynasty are taken as the key research materials, with local chronicles, books related to Chinese military history, and relevant research papers serving as supplementary materials. Through the method of literature analysis, the historical context of the Song-Yuan wars in the Sichuan-Chongqing region and the development stages of the Song army's mountain fortress system are grasped, laying the foundation for GIS analysis and the construction of a knowledge graph.

The Geographic Information System (GIS) is a comprehensive information technology that integrates disciplines from various fields, including geography, cartography (or geomatics), and computer science. It functions as a technological system, supported by computer hardware and software, designed to acquire, store, manage, process, analyze, display, and describe geographically distributed data concerning all or part of the Earth's surface (including the atmosphere). In the realm of cultural heritage in China, GIS applications primarily concentrate on three areas: platforms for cultural relics information management and protection, visualization research for archaeological data, and disaster risk assessment of cultural heritage sites. Leveraging the spatial analysis capacity of GIS, this study aims to elucidate the proximity and connectivity among key geographical entities, thereby thoroughly investigating the spatial distribution patterns of the Song-Yuan mountain fortress sites across the Sichuan-Chongqing region.

3. Discussion

3.1. GIS-Based Analysis of Mountain Fortress Defense Priorities

The strategic significance of the Sichuan region became increasingly pronounced after the Qin and Han dynasties. Subsequent periods, including the Three Kingdoms, Wei-Jin, Northern and Southern Dynasties, and particularly the Sui and Tang Dynasties, featured sustained development that ultimately laid the foundation for the transport routes utilized during the Song Dynasty. Consistent with this history, Song-Yuan mountain fortress sites were all situated adjacent to Sichuan's main water and land transport lines. Those fortresses situated along land routes served a crucial supplementary role, with all sites collectively underpinning the effectiveness of the anti-Yuan fortification system.

Statistical analysis of extant, representative Song-Yuan mountain fortresses reveals that the construction of anti-Yuan defenses in the Upper Yangtze River region was closely correlated with three key factors: the natural environment, the characteristics of warfare, and the evolution of fortification construction technology. This strategic alignment demonstrates the integration of culture and nature inherent in the cultural landscape. Furthermore, in direct response to the formidable Mongol-Yuan cavalry, the Southern Song military and populace leveraged the region's unique topography and geomorphology, utilizing locally sourced building materials to create an advanced, adaptive defense system.

Concurrently, the regional defense capacity of an individual mountain fortress within the entire Song-Yuan mountain fortress system is collectively determined by three interdependent factors: the defensive profile jointly constituted by its fortification facilities and the local topography and geomorphology; the administrative functions relocated onto the mountain fortress during the wartime period; and the inherent convenience of water and land transportation routes afforded by the fortress's location.

No.	Name	Landform & Terrain	Relationship with Rivers	Wall Type	Wharf	Battery	One-line Wall	Barbican / Bailey	Quarry	Watchtower	Secret Passage	Pond / Well	Temples & Inscriptions
1	Baidi Fortress	Karst, undulating summit, steep body, ~70m relative height	Adjacent to Yangtze River, convex bank, water on three sides	Inner & Outer Double Walls	—	—	Yes	Yes	—	Yes	—	Unknown	Baidi Temple
2	Kuzhu Pass	Danxia, undulating summit, steep body, ~90m relative height	Not adjacent to rivers	Single Wall	—	—	—	—	—	—	—	Spring present	Unknown
3	Dehan Fortress	Danxia, flat summit, steep body, gentle foot, ~300m relative height	Adjacent to Datong River (upstream Qujiang), convex bank, water on three sides	Inner & Outer Double Walls	—	—	—	—	—	—	—	Water well present	Guandi Temple, Inscriptions
4	Chongqing Fortress	Red bed hills, flat summit, steep body, gentle foot, ~180m relative height	Confluence of Jialing & Yangtze Rivers, convex bank, water on three sides	Single Wall	Yes	Yes	—	Yes	—	—	—	Abundant water sources	Zhiping Temple
5	Pingliang Fortress	Danxia, flat summit, steep body, ~200m relative height	Adjacent to Ba River (upstream Qujiang), water on one side	Single Wall	—	—	—	—	—	—	—	Well & Horse-watering pond	Pingliang Cave, Cliff statues
6	Rongshan Fortress	Red bed hills, undulating summit, steep body, gentle foot, ~310m relative height	Adjacent to Yangtze River, river bend concave bank, water on one side	Single Wall	—	—	—	—	—	—	—	Pond present	Unknown
7	Diaoyu Fortress	Pseudo-Danxia, flat summit, steep body, gentle foot, ~190m relative height	Confluence of Qujiang, Fu, & Jialing Rivers, convex bank, water on three sides	Inner & Outer Double Walls	Yes	Yes	Yes	—	—	Yes	Yes	Wells & Ponds	Huguo Temple, Cliff carvings
8	Huanghua Fortress	Pseudo-Danxia, flat summit, steep body, ~120m relative height	Island in Yangtze River, surrounded by water	Inner & Outer Double Walls	—	—	Yes	—	Yes	Yes	—	Ponds & Wells	Temples, Cliff carvings
9	Qingju Fortress	Pseudo-Danxia, flat summit, steep body, gentle foot, ~120m relative height	Adjacent to Jialing River, convex bank, water on three sides	Inner & Outer Double Walls	—	—	—	—	—	Yes	—	Well present	Grottos/Niches, Stele inscriptions
10	Dahuó Fortress	Danxia, flat summit, steep body, gentle foot, ~220m relative height	Adjacent to Donghe River (upstream Jialing), convex bank, water on three sides	Single Wall	—	Yes	—	—	—	—	—	Pond present	Xuanmiao Temple, Grottos
11	Yunding Fortress	Danxia, gently sloping summit, steep body, gentle foot, ~150m relative height	Adjacent to Tuo River, concave bank, water on one side	Inner & Outer Double Walls	—	Yes	Yes	Yes	—	Yes	Yes	Well & Ponds (7 spots)	Wannian Temple, Ciyun Temple, etc.; Statues, Inscriptions
12	Daliang Fortress	Pseudo-Danxia, flat summit, steep body, gentle foot, ~90m relative height	Adjacent to Qujiang River, water on one side	Single Wall	—	—	—	—	—	—	—	Ponds (10 spots)	Zushi Hall, Nanfang Temple, etc., Cliff statues
13	Shenbi Fortress	Danxia, flat summit, steep body, gentle foot, ~90m relative height	Adjacent to Yangtze River, convex bank, water on three sides	Single Wall	—	Yes	Yes	Yes	—	Yes	Yes	Ponds & Wells	Cliff statues
14	Tianci Fortress	Pseudo-Danxia, flat summit, steep body, gentle foot, ~140m relative height	Adjacent to Daning River (Yangtze tributary), water on one side	Single Wall	—	—	—	—	—	—	—	Unknown	Qixing (Seven Star) Temple
15	Ziyun Fortress	Danxia, undulating summit, steep body, gentle foot, ~140m relative height	Adjacent to Min River, water on one side	Unknown	—	—	—	—	—	—	—	Well present	Ziyun Temple
16	Xiaoning Fortress	Danxia, flat summit, steep body, gentle foot, ~90m relative height	Adjacent to Tongjiang River (upstream Qujiang), convex bank, water on three sides	Inner & Outer Double Walls	—	Yes	Yes	—	Yes	Yes	—	Ponds & Wells	Temples inside the fortress
17	Hailongdun (Fort)	Danxia, undulating summit, steep body, gentle foot, ~190m relative height	Adjacent to Baishashui (upstream Xiang River tributary), convex bank, water on three sides	Single Wall	—	—	—	Yes	—	—	—	Well present	Presumed to have temples
18	Yangma Fortress	Danxia, intermontane basin, intermontane depression	Adjacent to Baishashui (upstream Xiang River tributary), water on one side	Single Wall	—	—	—	Yes	Yes	—	—	Unknown	Unknown
19	Yunshan Fortress	Pseudo-Danxia, flat summit, steep body, gentle foot, ~180m relative height	Adjacent to Qingxi River (Jialing tributary), water on one side	Inner & Outer Double Walls	—	—	—	—	Yes	Yes	—	Ponds & Wells	Fengxian Temple, Grottos
20	Duogong Fortress	Red bed hills, flat summit, steep body, gentle foot, ~70m relative height	Adjacent to Jialing River, convex bank, water on one side (?)	Single Wall	—	—	—	—	Yes	—	—	Pond present	Cuiyun Temple
21	Longyan Fortress	Karst, flat summit, steep body, gentle foot, ~400m relative height	Adjacent to Longyan River (Wujiang tributary), water on one side	Single Wall	—	—	—	—	—	—	—	Pond present	Unknown

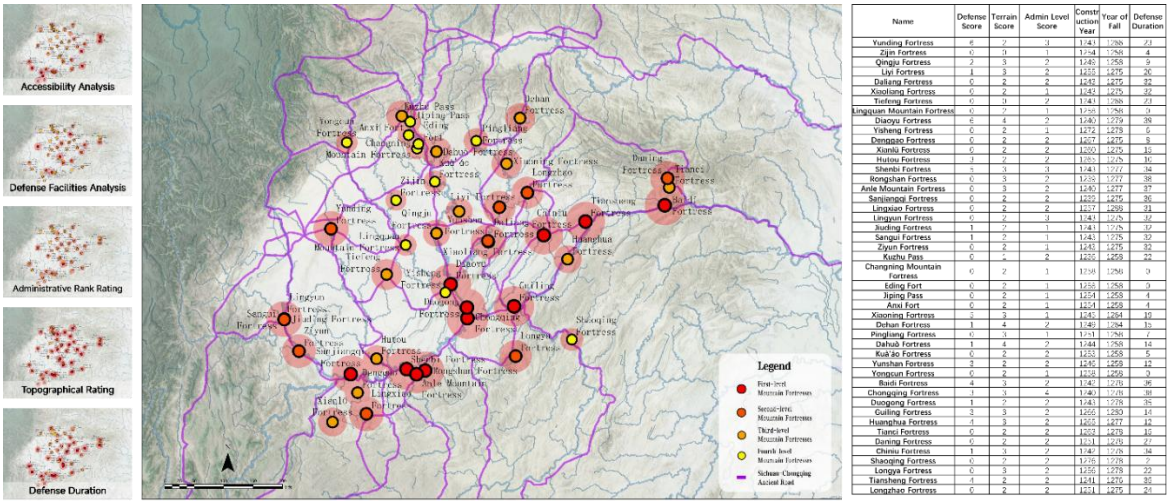
Table 1. Layout of Defensive Facilities in the Song-Yuan Mountain Fortress System of the Sichuan-Chongqing Region, China. Source: Author.

The Analytic Hierarchy Process (AHP) is an objective analytical method that effectively organizes and synthesizes subjective human judgments. It functions as a systematic and hierarchical analytical tool capable of efficiently integrating subjective and objective, as well as qualitative and quantitative analysis. Scores are assigned to mountain fortresses based on criteria including accessibility, defense capability, administrative rank, and topography/terrain. The Analytic Hierarchy Process is subsequently applied to ascertain the relative degree of importance of each evaluation criterion. By comparing the significance of these criteria, the study determines the evaluation factor weights (w) for accessibility (B1), defense capability (B2), administrative rank (B3), topography/terrain (B4), and holding duration (B5), thereby constructing the evaluation matrix shown in the figure.

	B1	B2	B3	B4	B5	w
B1	1	5	3	5	5	0.50357
B2	1/5	1	1/3	1	1	0.08954
B3	1/3	3	1	3	2	0.22023
B4	1/5	1	1/3	1	1	0.08954
B4	1/5	1	1/2	1	1	0.09711

Table 2. Mountain Fortresses Defense Priority Judgment Matrix Table. Source: Author.

To verify matrix consistency, the consistency index $CI = \frac{\lambda_{max}-n}{n}$ was calculated (n=5, CI=0.010569). Referencing Saaty's random consistency index (RI) table derived from 1,000 simulations, RI=1.12 for a 5th-order matrix yielded a consistency ratio $CR = \frac{CI}{RI} = \frac{0.010569}{1.12} = 0.009437 < 0.1$, confirming matrix validity.



Name	Defense Score	Terrain Score	Admin Level Score	Construction Year	Year of Fall	Defense Duration
Yunding Fortress	4	2	3	1241	1288	23
Zijin Fortress	0	0	1	1254	1258	4
Qingju Fortress	2	3	2	1249	1258	9
Liyi Fortress	1	3	2	1263	1275	26
Daliang Fortress	0	2	2	1243	1275	32
Xiaoliang Fortress	0	2	1	1243	1275	32
Tiefeng Fortress	0	0	2	1241	1288	23
Lingquan Mountain Fortress	0	2	1	1259	1260	0
Diaoyu Fortress	4	4	2	1240	1279	39
Yisheng Fortress	0	2	1	1272	1278	6
Dengpao Fortress	0	2	2	1267	1275	9
Xiaoliang Fortress	0	2	2	1260	1275	15
Hutou Fortress	3	2	2	1263	1275	10
Shenbi Fortress	3	3	3	1241	1277	34
Rongshan Fortress	0	3	2	1238	1277	38
Anle Mountain Fortress	0	3	2	1240	1277	37
Sanjiangqi Fortress	0	2	2	1239	1275	36
Lingxiao Fortress	0	2	2	1217	1259	33
Lingyun Fortress	0	2	3	1241	1275	32
Jiuding Fortress	1	2	1	1241	1275	32
Sangui Fortress	1	2	1	1243	1275	32
Ziyun Fortress	0	2	1	1243	1275	32
Kuzhu Pass	0	2	2	1236	1259	23
Changning Mountain Fortress	0	2	1	1259	1268	9
Eding Fort	0	2	1	1258	1258	0
Jiping Pass	0	2	1	1254	1258	4
Anxi Fort	0	2	1	1254	1258	4
Xiaoning Fortress	2	3	1	1242	1264	19
Dehan Fortress	1	4	2	1249	1264	15
Pingliang Fortress	0	1	1	1251	1258	7
Dahuo Fortress	1	4	2	1244	1258	14
Kuai'ao Fortress	0	2	2	1253	1258	5
Yumshan Fortress	3	2	2	1242	1259	17
Yongsun Fortress	0	2	1	1238	1259	21
Baidi Fortress	4	3	2	1240	1278	38
Chongqing Fortress	1	3	2	1240	1278	38
Duogong Fortress	1	2	2	1243	1278	35
Guiling Fortress	3	3	2	1266	1280	14
Huanghua Fortress	4	3	2	1262	1277	15
Tianzi Fortress	0	2	2	1262	1278	16
Daning Fortress	0	2	2	1251	1278	27
Chiniu Fortress	1	3	2	1240	1278	38
Shaoqing Fortress	0	2	2	1278	1278	0
Longya Fortress	0	3	2	1256	1278	22
Tiansheng Fortress	4	2	2	1241	1279	38
Longzhao Fortress	0	2	2	1251	1275	24

Figure 3. Evaluation of Regional Defense Levels for Song and Yuan Mountain Fortresses in the Sichuan-Chongqing Region. Source: Author.

The OD Cost Matrix function within GIS was utilized to analyze the transport accessibility of the mountain fortresses. By referencing the ancient military marching speed of 30 li per day (approximately 530 meters per li during the Song Dynasty), a sample of representative Song-Yuan mountain fortresses was selected to generate the accessibility analysis map shown in the figure above. Integrating this data with the evaluation results of the Song military mountain fortresses in the Sichuan-Chongqing region—specifically defense capability, administrative rank, topography/terrain, and holding duration—and applying the factor weights derived from the Analytic Hierarchy Process (AHP), the regional defense grade evaluation map of the Song-Yuan mountain fortresses was generated. Overall, this analysis revealed a defense hierarchy structured into three tiers: the first tier consisting of Chongqing Fortress and its surrounding mountain fortresses; the second tier comprising fortresses situated near the major road and water network systems throughout the Sichuan-Chongqing region; and the third and fourth tiers acting as foundational support fortresses.

Based on these integrated analysis results, Guiling Fortress demonstrates a comprehensive defensive construction. Its commanding mountain position controls the Yangtze River system and governs both the water and land transport and logistical supply lines between Chongqing and the Jinghu region. With its complete defensive establishment, Guiling Fortress is affirmed as a vital pillar of the Sichuan mountain fortress defense system.

3.2. Analysis of Guiling Fortress Defense Characteristics

Among the extant mountain fortress sites dating from the late Song-Yuan War, Guiling Fortress retains a significantly comprehensive and intact fortification system. Its extant features—such as fortress gates, inner and outer double walls, barricade walls, battery emplacements, quarries, bastions, and wells—alongside the remains of Huanghua Fortress, collectively demonstrate the characteristics of mountain fortress construction during the late-war emergency preparedness phase, which heavily prioritized defense.

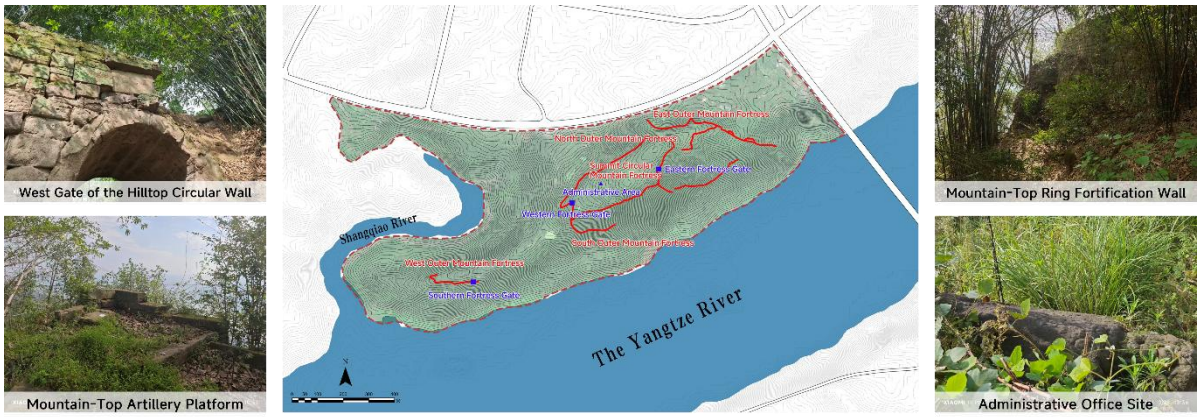


Figure 4. Present Condition of the Guiling Fortress Site, Fuling District, Chongqing, and the Layout of its Walls. Source: Author.

The site selection for the Song-Yuan mountain fortress system strategically leveraged the natural environment, its layout corresponded to the topographical setting, and its functionality extended beyond military needs to incorporate daily living. Building upon precedents from previous dynasties, these fortresses utilized advanced fortification construction techniques, such as the use of tamped earth and stone masonry, with Guiling Fortress serving as one of the key archetypes. Guiling Fortress was constructed based on the three-tiered topography of Santai Mountain, adapting its form to the terrain and encircling the mountain. It comprises the hilltop circuit wall, along with the North, East, South, and West outer walls. The fortress walls were laid out following the edges of the terraces and the mountain ridges, with barricade walls constructed along the river. The entire fortress site, in both its location and planning, distinctly embodies the defensive concepts of the Song Dynasty and is classified as a flat-top mountain fortress type within the Song-Yuan system.

The core architectural zone of the Guiling Fortress site, designated the Prince Peak (Wangzi Ding) foundation area, is situated on the west side of the hilltop circuit wall. Backed by Prince Peak itself (elevation 308 meters), the highest point within the fortress, the terrain is characterized by a gentle and open topography, which significantly facilitated the planning and layout of large-scale structures. Archaeological investigations and exploration indicate that the foundation area spans over 3,000 square meters, revealing three distinct complexes of superimposed construction dating from the late Southern Song to the early Ming Dynasty.

3.3. Extraction of Value Elements

Overall, the value elements of the Guiling Fortress Ruins in Fuling District, Chongqing can be summarized from four aspects:

(1) Constructing a Natural Ecological Barrier and a Crucial Eastern Sichuan Military Stronghold in a Precipitous Terrain

The ruins of Guiling Fortress, with its perilous terrain at the confluence of the Yangtze River and the Laitan River on Santai Mountain, have built a natural ecological barrier and a strategic military stronghold in eastern Sichuan. Its mountain body guards the throat of the Yangtze River, like a huge turtle crouching in

the river, controlling the water and land transportation and logistics routes between Chongqing and Jinghu area, and holds an extremely important strategic position. The phrase "Controlling the upper reaches of the Qutang River and meeting all the rivers in Sichuan" in "Fangyu Shenglan - Fuzhou" further affirms its pivotal position as a key passage to block Chongqing and maintain the connection between the two regions. Guiling Fortress has a complete defense system. Its mountains control the Yangtze River water system, manage the water and land transportation and logistics between Chongqing and Jinghu area, and its own defense system is also complete. It is an important support for the defense system of mountain cities in Sichuan.

(2) Chronicling the Battle for Fuzhou and Analyzing Mountain Fortress Defense

The ruins of Guiling Fortress vividly record the long and fierce struggle between the Song and Mongol dynasties over Fuzhou from the reign of Ogedei Khan to that of Kublai Khan, serving as a historical witness to the years of continuous warfare. When the Mongol army began to march southward, Fuzhou, a strategic military location, became the focus of the battle between the Song and Mongol sides, and the two sides engaged in a long and fierce struggle here. Among the late fortress sites of the Song and Yuan Wars, Guiling Fortress has preserved an extremely rich and complete fortress defense system from the late Southern Song Dynasty. These physical objects jointly analyze how the mountain fortress system of the Song and Yuan Dynasties prioritized defense functions under the state of emergency combat readiness, and collectively demonstrate the typical characteristics and military wisdom of building cities along mountains and rivers in the Sichuan-Chongqing region of China during the late Song and Yuan Wars.

(3) Demonstrating Construction and Stratigraphic Succession Under Dynastic Transition

The ruins of Guiling Fortress are a typical representative of the construction of fortress sites and the layering and iteration of cultural relics in the mountain fortress system of the Song and Yuan Dynasties. The site of the fortress makes full use of the three-tiered terrain of Santai Mountain. With advanced technologies such as rammed earth and stones, it has constructed a three-dimensional fortress defense pattern featuring multiple fortress walls and tiered defenses. The layout perfectly echoes the terrain and also serves both military and living functions. What is even more precious is that the foundation of the Wangzi Ding building in the core area of the site clearly overlaps with three phases of remains from the Southern Song government office, large public buildings of the Yuan Dynasty to temples of the Ming Dynasty. This continuous "stratigraphic accumulation" vividly witnesses the continuation and transformation of the functions of the fortress site after the rise and fall of the Song and Yuan dynasties, and is a valuable physical specimen for studying the evolution and historical stratification of ancient mountain cities.

(4) Reflecting the Spiritual Monument of National Integration and Resilience Amidst Social Turmoil

The ruins of Guiling Fortress are a monument that showcases the tenacious spirit and patriotic sentiments of the Chinese nation during the transition from the Song to the Yuan Dynasties. During the long-term siege, the defending general organized the military and civilians to cultivate land, dig Wells and jointly build fortress defences, integrating military struggle, economic production and cultural preservation, thus forming a vivid practice that "the military and civilians are the foundation of victory". The military and civilians of Guiling, using the isolated fortress as a fulcrum, engaged in a prolonged resistance. This not only exhausted the enemy's strength but also safeguarded the cultural heritage of the Central Plains. Their model of "accumulating small victories into a major one and trading space for time" in the war of resistance profoundly demonstrated the collectivist spirit of "the rise and fall of the country concerns every individual" in Chinese civilization and the powerful vitality of being indomitable and advancing together in the face of danger.

3.4. Framework for Cultural Landmark Construction

The value extraction and the construction of a heritage park for the Fuling Guiling Fortress Ruins not only represent a significant practice in the revitalization and utilization of military heritage, providing scientific

support for the protection of Song and Yuan era mountain fortresses in Sichuan and Chongqing, and promoting the holistic protection and historical vitality regeneration of the regional ruins complex, but also serve as a key practice for coordinating the relationship between urban ruins protection and urban development under the background of new era urban and rural planning, and driving urban transformation through cultural means. Generally speaking, the construction of the cultural landmark of the Fuling Guiling Fortress Ruins can be carried out from the following three aspects:

(1) Construction of the Song-Yuan Mountain Fortress System Heritage Corridor in the Sichuan-Chongqing Region

Based on the grand historical background of the mountain fortress defense system of the Song and Yuan Dynasties, building a group of mountain fortress heritage parks with Guiling Fortress as the core node is a key path to achieve the overall protection and revitalization of regional heritage. By integrating Guiling Fortress with other mountain fortress heritage sites such as Diaoyu Fortress, Baidi Fortress, and Huanghua Fortress, a distinctive and valuable "Cultural Route of the Song and Yuan Resistance Sites" can be formed. This move not only breaks through the limitations of protecting individual sites but also enables mutual assistance and sharing of archaeological resources, research forces, and exhibition platforms. Moreover, it can leverage collective advantages to lay a solid material and cultural foundation for the joint application of mountain cities in Sichuan and Chongqing for World Cultural Heritage status.

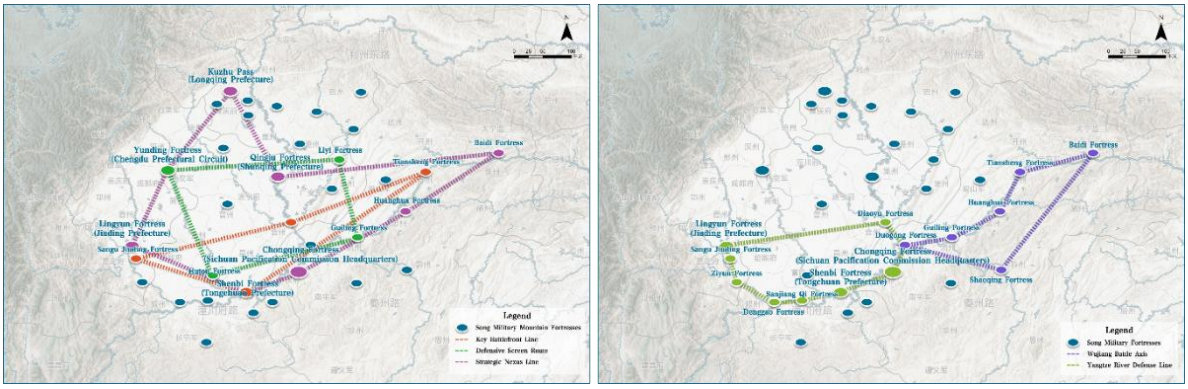


Figure 5. Construction of the Song-Yuan Mountain Fortress Heritage Corridor. Source: Author.

In specific practice, efforts should be made to "connect the dots into a line", focusing on building a "cultural convergence zone" and "thematic route" that runs through Sichuan and Chongqing. This corridor will go beyond the traditional listing of scenic spots, and through unified planning of the identification system, transportation connection and narrative interpretation, it will systematically undertake the dual functions of cultural display and tourist distribution. It is not only a positive response to the concept of the national cultural park system construction, but also, through the thematic linear space design, it can weave scattered heritage gems into a network, forming an open-air historical museum that is both visitable, perceptible and educational, thereby vividly interpreting the ancient military wisdom of "mountain and river defense and joint defense of multiple cities" during the Song and Yuan Dynasties. Through the leading role of cultural heritage, it will profoundly empower the integration of regional culture and tourism and the shaping of fortress brands, making this dormant history truly become an important cultural driving force for local areas to reach the world and achieve sustainable development.

(2) Serving as the Strategic Fulcrum for the Heritage Corridor within Fuling District

While Fuling boasts the significant historical site of Guiling Fortress, an important node in the mountain fortress system of the Song and Yuan Dynasties, it is also recognized by the archaeological community as the core area with the highest grade and richest historical information of Ba culture heritage in the country. Therefore, the protection and display of its cultural heritage urgently require an overall strategy. To this end, a centralized protection and a connected display and utilization approach should be implemented, and a clear-structured spatial framework of "one belt, three cores and multiple clusters" should be constructed.

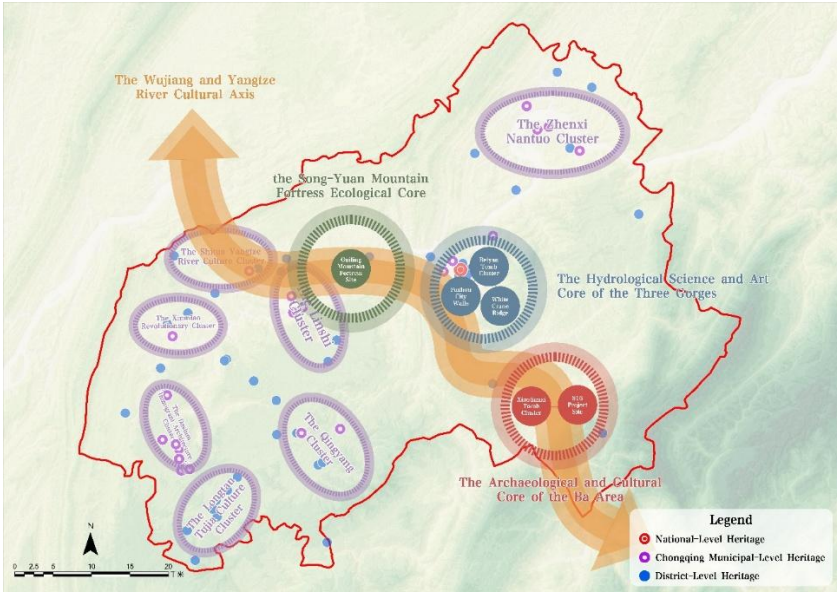


Figure 6. Map for the Integrated Protection and Utilization of Historical and Cultural Resources in Fuling District, Chongqing. Source: Author.

In this structure, "One Belt" refers to the thousand-year-old Ba cultural heritage belt along the Yangtze River and Wujiang River. It is like a time and space axis that organically integrates the landmark resources from the Baiheliang Inscriptions, the Xiaotianxi Ba King's Tomb Site to the 816 Project and the Wujiang River Scenic Area. "Three Nuclei" are the three pillars of this system: Xiaotianxi Ba King's Tomb Site as the archaeological core for exploring the origin of Ba culture, Baiheliang Inscriptions as the hydrological science core for interpreting ancient water conservancy technology and stone carving art, and Guiling Fortress Ruins as the ecological core of mountain fortress demonstrating ancient military wisdom and mountain-water defense concepts. Together, they form the value highland of Fuling's historical and cultural heritage.

Building upon this foundation, further efforts should focus on identifying the inherent spatial, cultural, historical, and functional connections among resource points within the Ba culture region to shape seven functionally complementary "Multiple Clusters" in Shitua, Xinmiao, Dashun, Longtan, Qingyang, Linshi, and Zhenxi Nantuo. These clusters will assume differentiated development responsibilities, ultimately forming a network-based pattern of preservation and utilization that integrates points, lines, and surfaces with clear primary and secondary distinctions, thereby ensuring the systemic inheritance and revitalization of Fuling's profound history.

(3) Radiating Influence as a Cultural Landmark on Fuling's New Urban Area

The scarcity of public service facilities within a 10–30 minute walking radius of the Guiling Fortress Site constitutes a challenge to development, yet it simultaneously reserves strategic space for promoting regional functional transformation through cultural landmark construction. Douglas Noonan argues in his research that landmark designation is dependent not only on the resource's inherent historical attributes but is also influenced by the socio-economic characteristics of its surrounding community and the external cultural environment. Furthermore, cultural landmarks are intrinsically linked to the city's cultural identity and image. Therefore, Guiling Fortress must establish its necessity and feasibility as a cultural landmark by achieving a balance between identifying community needs and implementing policy intervention.

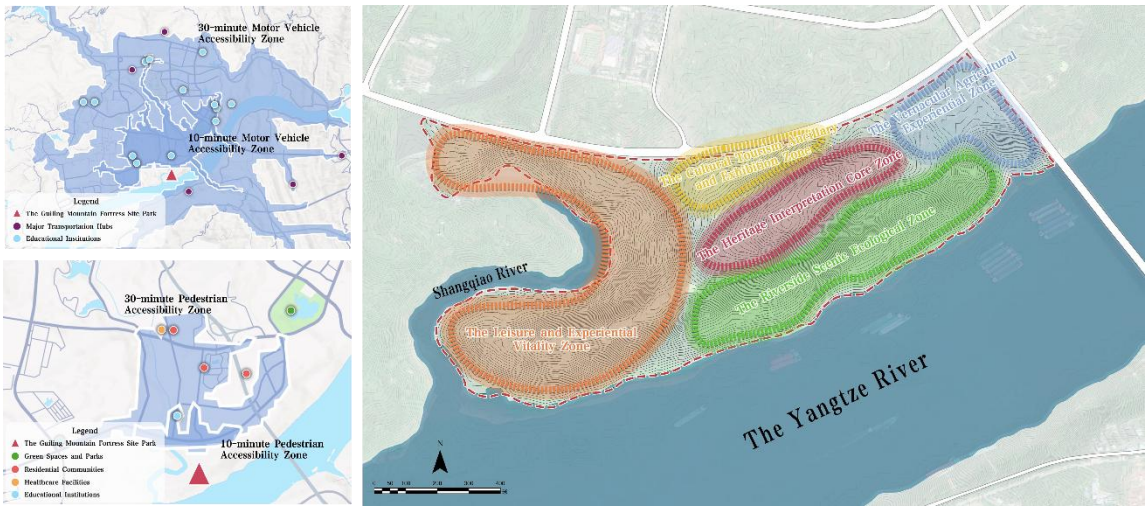


Figure 7. Preliminary Concept for Developing the Cultural Landmark at the Guiling Fortress Ruins Site in Fuling District, Chongqing. Source: Author.

To realize effective construction of cultural memory, the Guiling Fortress Site must transcend the traditional sightseeing model and implement a differentiated development strategy centered on "History—Culture—Experience." Research indicates that the cultural significance of architecture (such as nomenclature, style, and association with historical events) has a significant positive influence on landmark designation. As a critical node in the Song-Yuan Mountain fortress defense system, the site's unique military historical value and architectural remnants constitute the cultural capital essential for its nomination and recognition. Through formats such as immersive military experiences, archaeological workshops, and themed research courses, the site's cultural expression and public participation can be significantly enhanced, transforming historical resources into perceivable, communicable carriers of contemporary memory and thereby establishing a positive feedback loop between administrative recognition and public identity.

4. Conclusion

This paper systematically conducts research on value excavation and construction of cultural landmark based on the grand historical background of Song and Yuan Dynasties mountain fortress defense system. The strategic pillar position of Guiling Fortress in Song and Yuan Dynasty mountain fortress system in the whole region is established through a regional approach, by using GIS spatial analysis and the Analytic Hierarchy Process (AHP). Further, four-dimensional value elements of Fuling Guiling Fortress Ruins are extracted in this research. Based on these findings, the paper prospectively explores feasible paths to transform Guiling Fortress from a historical relic into a contemporary cultural landmark and proposes a series of strategies for its revitalization and utilization within planning frameworks at three different scales: the "Sichuan-Chongqing Song and Yuan Dynasty Mountain Fortress Heritage Corridor", "Fuling 'One Belt and Three Cores' Cultural Pattern", and "New Fortress Cultural Living Room". It provides a theoretical basis and practical blueprint for its transformation from war legacies to cultural resources that drive urban development.

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