

A Study on Spatial Demands and Spatial Responses of Anti-Japanese War Human-landscape Resource's Conservation and Utilization in Guilin

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Abstract

Survival of Anti-Japanese War human landscape resource in Guilin urgently demands certain space to carry it. 141 Anti-Japanese War human landscape resources are incorporated in to 9 fundamental types, 6 sub-types and 3 main types of "The Classification, Investigation and Evaluation of Tourism Resources"; as for the latter, it can be further subdivided into 11 types. By settling and complementing the existing classification results, "A Classified Catalog of Anti-Japanese War human landscape resources" was also formulated. Additionally, it was also found that the ontology of these resources was featured with a rich number, a full range of varieties and unique values; and, for them as a colony, an X-shaped radioactive structure that was formed by "One Center, Two Mainlines & Two Minor Lines" and distributed against mountains or along the river was presented. According to such characteristics and analysis on issues related to the ontology space and Colony space, it is deemed in this study that: 1) there exist some ontology of construction expansion, original feature exhibition, fusion & extension, and reconstruction & preservation and reuse, and 2) spatial demands including distance-based combination and event-based correlation as far as such resources as a colony are concerned; 2) there are 3 spot spatial response modes that cover the construction of individual and composite space as well as the activation of the original space, and 2 syntagmatic space response modes of bond correlation and historical context. As for individual space, it consists of site protected space, site presented space, site memorial space and bell-type protection space, while the composite space is associated with original feature exhibition + venue space and original feature exhibition + park space, and the original space activation is involved with space function continuation and transformation; 3) a conservation and utilization structure system of "1 Museum of the War of Resistance, 5 Cultural Lines of the War of Resistance and 44 Key Construction Spots" can be established. Research achievements of this paper not only lay a foundation for compiling the planning of Anti-Japanese War human landscape resource conservation and utilization in Guilin, but also facilitate further sustainable development of these resources.

Keywords: anti-Japanese war, human landscape resources, conservation and utilization, spatial demands, spatial responses, Guilin

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INTRODUCTION

Cultural heritage of the War of Resistance (*WR*) is the human landscape resource formed in a particular historical context, the materialized carrier of national history and collective memory, and the living material of patriotism education. Under a historical background of Guilin as a City of *WR* culture and the "War of Defending Guilin", numerous valuable cultural heritages of *WR* have been reserved in Guilin. They are important windows to perceive the history of *WR* and critical elements of historical culture cumulating in Guilin.

At present, some experts and scholars have studied conservation and utilization of Anti-Japanese War Human Landscape Resources (*AJWLRs*) in Guilin. Their research points of breakthrough mainly focus on history, the study of cultural resources and tourism science fields. Wen (2007, 2014) analyzes distribution of historic sites and relics of *WR* in Guilin and presents the corresponding conservation measures and suggestions on utilization specific to their current preservation situations and values in use. For Wu (2014), advantages and positive significances of *AJWLRs* in the development process of red tourism in Guilin are

Table 1. Fundamental Type Subdivision Table of *AJWLRs* in Guilin

Main Class	Sub-type	Fundamental Type	Type after Subdivision
E Sites & Relics	EB Sites & Relics of Social Economy & Culture Activities	EBA Sites of Historical Events	EBA1 Historical Event Sites of the War of Resistance
		EBB Military Sites & Ancient Battlefields	EBB1 Commanding and Battlefield Sites of the War of Resistance ; EBB2 Political and Military Cultural Organization Activity Sites of the War of Resistance
F Architecture & Facilities	FC Landscape Architecture & Affiliated Buildings	FCG Calligraphy and Painting in Cliff	FCG 1 Slogans of the War of Resistance & inscriptions on Precipices
	FD Residences & Communities	FDD Former Residences of Celebrities & Historical Memorial Buildings	FDD1 Former Residences of Celebrities of the War of Resistance
		FDZ Anti-Japanese War Culture Education Architecture	FDZ1 Anti-Japanese War Culture Education Architecture
FE Burial Places	FEB Tombs (Tomb Cluster)	FEB1 Tombs and Memorial Facilities of Martyrs and Celebrities Deceased in the War of Resistance	
H Human Activities	HA Personnel Records	HAA Figures	HAA1 Figures of the War of Resistance
		HAB Events	HAB1 Events of the War of Resistance
	HB Art	HBB Literary & Artistic Works	HBB1 Literary & Artistic Works Related to the War of Resistance

Sources: Supplemented and subdivided based on the *Classification, Investigation and Evaluation of Tourism Resources* (An 2005)

studied. Specific contexts during *WR* in which *AJWLRs* are formed are explored by Li (2011). From the perspective of the construction of the Heritage Museum of War of Resistance, Hong (2011) studies site selection and exhibition ideas related to Guilin Heritage Museum of the War of Resistance. Deng (2010) not only studies classification of *WR* culture heritages in Guilin, but also comes up with resource development and utilization concepts. Meng (2010) mainly elaborates problems associated with conservation and utilization of *WR* human landscape in Guilin. Liu (2005) studies the importance of *WR* culture’s impacts on Guilin Culture. Additionally, Xi et al. (2011) propose the *WR* culture heritage exploitation and conservation schemes within the entire regional scope of Guangxi Province, including some heritages of *WR* in Guilin. To sum up, although areas of such studies are rather broad, those carried out from a viewpoint of urban-rural planning are rather weak and the existing classification standard lacks of significant specificity to resource conservation and utilization (Findikli et al. 2017).

Landscape resources survive depending on individual space that acts as a carrier of conservation and utilization. Absence of individual space can make it rather difficult for such resources to survive. In addition, individual space is also a basic component unit of space structure the construction of which has a direct effect on people recognizing history. In this paper, demands and responses of resource conservation and utilization are studied from the perspective of space (Küçükzeybek et al. 2017).

In the first part of this paper, not only were feature analysis and study on classifications carried out, but classified catalog of conservation and utilization was defined. Conservation and utilization related issues

were analyzed and the corresponding space demands are also brought forward in the second part. Regarding the third part, a response mode of “spot space + syntagmatic space” was presented for resource conservation and utilization with an aim to construct a global integrated conservation and utilization system for Guilin.

CLASSIFICATION AND CHARACTERISTICS

Classification

As a national regulation, the *Classification, Investigation and Evaluation of Tourism Resources* covers 3 main types, 6 sub-types and 9 fundamental types of *AJWLRs* in Guilin. Specific to the problem of less specific *AJWLR* classifications, such 9 fundamental types were further subdivided into 11 categories by using research achievements of Li (2015), Deng (2010), Meng (2010) and Wen (2007) as references. In detail, “Military Sites & Ancient Battlefields” were further divided into “Commanding and Battlefield Sites of the War of Resistance & Political and Military Cultural Organization Activity Sites of the War of Resistance”, and, “Former Residences of Celebrities & Historical Memorial Buildings” according to the facts that they were involved with the War of Resistance in a direct or indirect manner. Moreover, depending on use functions of the building, they were further classified as “Former Residences of Celebrities during the War of Resistance & Historical Memorial Buildings of the War of Resistance”. Besides, a subclass and fundamental type of “Anti-Japanese War Culture Education Architecture” were newly added (for details, please see **Table 1**).

Based on the *Schedule of Culture Relic Protection Sites in Guilin and Its Counties*, a Classified Catalog of *AJWLRs* (**Table 2**) was formulated by virtue of

Table 2. Classified Catalog of *AJWLRs* in Guilin

Types	Landscape Resources
EBA1	Mao'er Mountain Site of U.S. Military Airplane Crash; "Blood & Tear Cave" in Lincun Village; Prison of General Ye Ting; Yanyan Massacre Site in Mabujiang Village; "Comfort Women Center" in Maling; Former Site of 3rd Intensified Student Army Training; Site of a Cavern for Temporary Teaching Activities of Hanmin Middle School; Site of a Cavern as Temporary Guilin Library; Site of a Cavern as Temporary Medical College Of Guilin; Former Wharf of Yangshuo; Site of Yellow Mudstone Massacre in Wangjia Village of Zhemu; Site of Daji Cliff Massacre in Wutang Village of Yanshan Town; Site of "White Bone Cave" Massacre in Hongmiashan; Site of "Blood & Tear Rock" in Guazishan Village; Site of "Blood & Tear Rock" in Daoshishan; Site of "Blood & Tear Rock" in Chuanshan
EBB1	Former Site of Flying Squad Command Post on Yangtang Airport; Site for the War of Defending Guilin
EBB2	Former Site of Youth Service Squad during Xingping Battle in Yangshuo (Linyang Wing of the People's Anti-Japanese Guerrilla Column in Northeastern Guangxi); Site for the Southwestern Branch of Anti-war Alliance formed by Japanese People in China; Site for Guilin General Office of the National Military Council; Former Site of a Cave for Xin'an Touring Troupe Education; Former Site of Ta-Kung Daily (Guilin); Former Site of Jiuwang Daily Office; Piled Silk Hill Office of Li Jishen; Former Site of Stand-by Radio Station of "Eighth Route Army's Office for Other Provinces" on Fubo Hill; Former Site of Farmers' Anti-Japanese Self-defense Force in Shanlang Village on the South of Lingui County; Former Residence on Xi'shan Hill for an Advisory Group of China Aid Anti-Japanese USSR Army
FCG1	Stone Inscription of "Fort of the Southwest"; Stone Inscription of Recalling Conflagration in Guilin from Lai Shaoqi; Stone Inscription of Anti-Japanese Behaviors of Zhang Zhuangfei; Slogan of "Head North to Fight Against the Japanese" carried by the Red Army in Guanyang County; Slogan of "We Study during Japanese Bombings" carried by Xin'an Touring Troupe on Seven Star Cave
FDD1	Former Residence of Li Zongren; Official Residence of Li Zongren; Former Home of Ho Zhi Ming in Lumo Village; Former Residence of Chiang Kai-shek in Guilin; Former Home of Li Xiuwen; Former Residence of Ye Jianying in Guilin; Former Home of XuBeihong; Former Residence of Li Jishen; Former Residence and Site of Activity of Zhou Enlai in Guilin; Former Residence of HeXiangning; Former Residence of BaiChongxi; Former Residence of Huang Xuchu; Former Home of Huang Qixiang; Former Residence of Li Renren; Former Home of Li Renren; Former Home of Yang Dongchun; Former Home of Wang Luyan; Former Home of FengZikai; Former Home of Liu Yazhi; Colony of Cultural Workers from the Culture Supply Agency on Lijun Road; Colony of Cultural Workers on Guanyin Mountain
FDD2	Former Site of Guilin Office of the Eighth Route Army; Former Site of Printing House of the Jiuwang Daily; Former Site of Xi'an Hospital; Former Site of Guilin Municipal Government; Former Site of Jiuwang Daily Office; Military Material Forwarding Station of "Eighth Route Army's Office for Other Provinces" in Lumo Village; Former Guesthouse Site of "Eighth Route Army's Office for Other Provinces" in Guilin; Site of Activities of Zhou Enlai in Lumo Village; Former Site of Guangxi Provincial Government; Former Site of CPC Guilin Urban Work Council; Former Site of Guangxi Construction Research Society; Former Site of China's Rural Economy Research Society; Former Site of a Field Hospital During the War of Resistance; Former Site of KMT Anti-Japanese Communications Battalion Building
FDZ1	Former Site of Guilin (Liangjiang) Normal School; Former Site of Guangxi Provincial Normal Training College; Relics of Guangxi University; Relics of Liangfeng Institute of Geology in Yanshan; Former Site of the Branch School of Xin'an Touring Troupe; Guangxi Provincial Museum of Art; Former Site of the 1st Library in Guangxi; Former Site of Southwest Branch of KMT Infantry School; Former Site of Local Construction Cadre School in Guangxi; Former Site of Salesroom of Culture Supply Agency
FEB1	Tomb of Babushkin (Lieutenant Colonel of Soviet Army); Tomb of 3 Generals and 800 Heroes; Tomb of HeXin (Hero of Air Force); Tomb of Mo Xiu (Hero of Air Force); Tomb of Ma Yuxin (Hero of Air Force); Tomb of Martyr Zhao Zhiguang; Tomb of Ma Junwu; Tomb of Zhang Shu; Tomb of Zhong Yi; Tomb of BaiPengfei; Tomb of Liang Shuming; Tomb of Zhang Yaru; Tomb of Jiang Shengyou; Monument of Qin Lin; Monument of FengYunshan; Monument of Martyrs Killed in Yigan Village Battle in Lipu; Memorial Tower of Zhou Yuan; Monument of People's Armed Fights in Lingchuan of Northern Guangxi; Monument of the Daxu War of Resistance; Monument of Soldiers Killed in the Pingle War of Resistance; Monument of Deceased Compatriots (Soldiers Killed) in the Ziyuan War of Resistance; Site where General Chen Jiheng Died for China in Houshan Col in the Western Suburbs; Site where LvZhanmeng from Dezhi Middle School in the Western Suburbs Died; Monument of the Anti-Japanese War of Linyang Wing in Enemy Rear; Site where Three Martyrs from Yixian Middle School Died; Monument of 3 Martyrs from Yaoshan; Site where Zhang Shu (a musician) Died
HAA1	Leaders of the War of Resistance; Martyrs of the War of Resistance; Cultural Celebrities
HAB1	Southwest Drama Exhibition; Xin'an Touring Troupe in Guilin; Guangxi Student Army; Flying Squad; Self-defense Corps of Peasants; Anti-Japanese Armed Force of Guilin
HBB1	Engraving of Lin Banjue's Anti-Japanese War Seal; Anti-Japanese War Songs; Literary Works; and, drama; etc.

Sources: Settled up and supplemented by virtue of survey according to the Schedule of Culture Relic Protection Sites in Guilin and Its Counties (General Administration of Quality Supervision, ... 2003)

supplementation, collection, field survey, type subdivision and classification settling.

Characteristics

1) Ontology characteristics are involved with a rich number, a full range and a unique value. Totally, there are 141 sites incorporated into 3 of the 4 main types of human landscapes, 6 of 14 sub-types and 9 of the 84 fundamental types presented in the Classification, Investigation and Evaluation of Tourism Resources. Among them, 2 culture relic protection sites fall into a category of national protection, while 7 of

provincial protection, 34 of city-level protection and 12 of county-level protection. In subtotal, 55 sites have been incorporated.

2) Colony characteristics. There exist 2 features. One is "Against Mountain & along the River"; the other X-shaped radioactive distribution formed by "One Center, Two Main lines & Two Minor Lines", which centers around the city proper where such resources are distributed in forms of high density and concentration. Northeastwardly, Lingchuan-Xing'an-Quanzhou is the main line distributed along the Hu'nan-Guangxi

Corridor; but, southeastwardly, the other main line is Yangshuo-Pingle-Lipu. Moreover, the line to Longsheng along China National High Way 321 on the northwest is minor, and that to Yongfu on southwest is the other minor line.

PROBLEM ANALYSIS AND SPATIAL DEMANDS

Problem Analysis

1) Analysis on ontology-related problems. At present, the people are still poorly aware of *WR* culture in Guilin and their consciousness of *AJWLR* protection is weak as well. Consequently, these resources have been neglected or abandoned so that natural damages are caused to them occasionally. Additionally, not only is planning of conservation and utilization not yet perfect, but protective measures are rather monotonous and renovation activities are not standard. Locally, the people excessively pursue economic benefits; and, “blind” renovation for the existing space has given rise to serious constructive destruction.

2) Analysis on space-related problems. In terms of space, resource conservation and utilization involve 2 problems. First, from the perspective of individual space, the corresponding problems include spatial fabric aberrance, isolated protection (Li 2015), types being less specific and blindness of utilization, etc.; Second, as far as the global space is concerned, corresponding problems are spatial structure disequilibrium, fragmentation of protection, poor cognition on cultural entirety and out-of-order utilization, etc.

Ontology Demands of Living Space

Ontology is the core for historic culture of the War of Resistance; and, living space demand of it plays a role in directly controlling and affecting conservation and utilization activities performed for such culture. In total, 4 ontology demands are put forward.

1) Demand of Space Construction and Expansion. As for literary and artistic works of the War of Resistance, Southwest Drama Exhibition, Stone Inscription of “Fort of the Southwest” and the Tomb of Babushkin (Lieutenant Colonel of Soviet Army), etc., living space of a certain form and scale should be constructed in an urgent manner to protect remains due to the absence or inadequacy of living space.

2) Demand of Original Space Feature Exhibition. Regarding Mao'er Mountain Site of U.S. Military Airplane Crash and Former Site of Flying Squad Command Post on Yangtang Airport, etc. with unique

values and broad range, they should be exhibited with their original features directly. On this basis, type space should be added correspondingly to deepen and enhance utilization effects of exhibitions.

3) Demand of Space Integration and Extension. With regard to the Former Site of Guilin (Liangjiang) Normal School, etc., original space stills functions as before. By properly renovating the original space and protecting remains in it, space scale should be appropriately extended according to a current demand of complete functions to make it continue to play a role, such as.

4) Demand of Space Reconstruction and Deduction. For the Former Site of Guilin Office of the Eighth Route Army, functions of the existing living space have failed to adapt to the present survival and development environment. Therefore, by comprehensively analyzing locations, transportation and surrounding lands, the original space can be renovated and reconstructed to strive to deduce and shape its functions on the premise of not affecting the original features. In this way, new directions of space function regeneration are explored and vigor of the present space is stimulated, so as to acclimatize themselves to development needs of the age.

Space Linkage Demand of Colony Distribution

For space in a municipal administrative area, *AJWLR* conservation and utilization of Guilin have exhibited some phenomena of “Isolation” (http://www.glswxgj.gov.cn/wwwbhgz/sjwwbhdw/201507/t20150716_519623.htm) and “fragmentation”. Therefore, the colony in the global space should be linked and combined together, which generates 2 demands below.

1) Demand of “Distance” Based Combination. For individuals rather close to each other, they can be combined together in terms of space according to a principle of geographical proximity. Actual situations signify that although some individuals of these resources in Guilin are very close in space, necessary spatial correlation is absent between them. In most cases, a phenomenon of closed island can be formed. Together with the lack of systematicness, spatial correlation demand of *AJWLRs* should be linked. In addition, landscape effects of *AJWLRs* with large differences in individual functions can be enhanced by means of combination. Considering this, adjacent and complementary *AJWLRs* should be combined together to improve conservation and utilization efficiencies and further improve their attractiveness.

2) Demand of “Event” Based Correlation. For *AJWLRs* handed down from relevant events taking place during the War of Resistance, associated protection can be carried out from a view point of space. Emphasis of resource conservation and utilization is laid on historical event and activity cognition. In essence, they have a basic attribute of “being eventful” (On Phenomenon of Urban Heritages Being Islanded in West Historic 2005). Therefore, global protection performed by adopting “relevant events and activities” as themes (i.e., global space based correlated conservation of utilization of “Events of the War of Resistance”) achieves purposes of pursuing process and truthfulness of such events as well as accurately corresponding the space to related events.

SPATIAL RESPONSES

According to “authenticity” (Shen et al. 2006) and “integrity” (Ruan and Lin 2003) principles of resource conservation and utilization, two kinds of response modes were proposed. One is spot space specific to ontology types; and, the other is syntagmatic space directed against colony distribution. Eventually, a general integrated conservation and utilization system was established for conservation and utilization.

Response Mode of Spot Space

Construction of single space

1) Site protected space. By means of constructing space such as *WR* culture exhibition halls, museums and art galleries, etc., the culture of the War of Resistance can be displayed. With the progress of science and technology, history of the War of Resistance is visualized and historical information is contextualized by virtue of 3D virtual imaging technology in the future venue. In this way, the audience is able to personally experience the history of this war. This mode is suitable for figures, events and literary & artistic works of the War of Resistance falling into a main type of human activities.

2) Site presented space. In combination with local folk activities and spatial environment in Guilin, the corresponding inheritance space or special demonstration venues should be provided to play classic productions about the War of Resistance and reappear historical scenes where the people in Guilin fight against Japan heroically, such as movie theatres, opera houses and public stages, etc.. Such a mode is suitable for cultural activities falling into the category of Anti-Japanese Events and these activities should be continued up to now from the period of the War of Resistance, such as war mobilization, publicity and inspiration at

that time. These activities, including the Southwest Drama Exhibition, are able to stimulate the people’s awareness of resistance.

3) Site memorial space. With the help of isolation and containment measures including handrails and vegetations, etc., these resources are combined together with surrounding natural scenery to build memorial places and cemetery space of a reasonable size. In this way, a preferable space-convergent environment can be created for the public to mourn over, pay respect to and commemorate martyrs of the War of Resistance. Furthermore, positive emotional experiences are also generated. Such a mode is applicable to a subdivided type of Tombs and Memorial Facilities of Martyrs and Celebrities Deceased in the War of Resistance. For example, the Tomb of Babushkin (Lieutenant Colonel of Soviet Army) is surrounded by cypress trees; in this sense, a place that can be used by people to mourn over and commemorate Babushkin is forged in a form of enclosure. Year after year, people get together on the square before the tomb to perform education activities of patriotism and internationalism.

4) Bell-type protection space. Within a proper scope of resource point protection, semi-closed or closed transparent covers can be constructed at the top to slow down weathering and erosion processes of stone inscriptions; moreover, illustration plates should be also erected at proper locations selected to introduce both history and values of corresponding landscape resources in detail. As for slogans of the War of Resistance and inscriptions on precipices with high artistic and research values, not only should carved impression be taken, but archives should be stored by means of high speed laser scanning. Cover protection and collections strengthen conservation and preservation of *AJWLRs* in this type from both sides. This mode is suitable for the type of Slogans of the War of Resistance & inscriptions on Precipices. For example, 3-D digital archiving was carried out for the Stone Inscription of “Fort of the Southwest” situated at a stony cliff on the north side of Xiangshan Hill inside Xiangshan Park of Guilin; additionally, a semi-closed transparent glass cover was set up at its top together with the erection of an illustration plate.

Construction of composite space

1) Original feature exhibition + venue space. Provided that security of sites and relics can be guaranteed, space of former sites can be equipped with marks such as vegetations, broken stones and monuments, etc. and land of special purpose can be also

developed around the original sites to construct memorial exhibition and display venues in addition to “Living Museums” set up on them. In this way, a form of composite space comes into being to reasonably exhibit *AJWLRs* of the corresponding type and realize effective cognition on them. This mode is suitable for types of Historical Event Sites of the War of Resistance and Political and Military Cultural Organization Activity Sites of the War of Resistance. For example, on the Mao'er Mountain Site of U.S. Military Airplane Crash, a stele has been erected at site and memorial statues have been also built for soldiers who died in this crash. Around the site, an exhibition hall which uses “Flying Tigers Homing — Documentation of crashed plane searching in joint efforts of America and China” as its theme to display wreckages including wings and the radar of this plane as well as remains of deceased soldiers. In a form of composite space that combines original feature exhibition by marking with venue space, the occurrence of historical events is recorded truthfully and conveyed validly.

2) Original feature exhibition + park space. By renovating components of local space, historical feelings and sense of vicissitudes of its original features can be shown. Furthermore, in association with historical space of the site and the current surroundings, relics parks are built to construct a composite space form that can be perceived by the public. This mode is suitable for a type of Commanding and Battlefield Sites of the War of Resistance. For example, regarding the Former Site of Flying Squad Command Post on Yangtang Airport, only a cave command post, aircraft shelters of the air force and a stone on which General Chen Nade watched the battle have been left over. In addition to renovating and reinforcing the existing relics, identifications should be also erected at the original sites to exhibit their initial features. In detail, relics parks can be established targeted at the War of Resistance memorial, scenario sculptures and command post facilities of soldiers from the air force, monuments and relief walls, etc. of the War of Resistance heroes, etc. Furthermore, demonstration route is designed to restore historical facts about Flying Tigers' heroic anti-Japanese behaviors in Guilin and form composite space in which the public is able to observe and perceive such behaviors to stimulate later generations to commemorate and respect and admire them.

Activating the original space

1) Space function continuation. While the pattern of original space remains unchanged, initial functions of it are extended to properly renovate it and expand the

relevant functional space. In this way, present application demands for initial functions are satisfied. It is suitable for a type of Anti-Japanese War Culture Education Architecture. For example, accommodating and teaching functions of former Guilin (Liangjiang) Normal School known as Liangjiang Middle School at present are continued. In addition, spatial pattern of the school house on its original site is well preserved basically; therefore, student accommodation and office functions of it are also continued. In order to meet demands of complete functions and a proper scale presented for the Liangjiang Middle School as a modern secondary school, appearance of its original site is preserved, while relevant functional space including teaching and offices, etc. has been expanded to meet modern teaching requirements and extend its teaching function.

2) Space function transformation. For resources with space reconstruction and deduction demands, new regeneration direction of space functions should be explored to adapt to new development demands of the era. Their original space can be transformed into public utilities such as exhibition halls and business offices, etc.. For example, provided that security of resources can be ensured, residential buildings of a low protection class are transformed into tourism service facility space (e.g., hotels and book stores, etc.). It is suitable for types of Former Residences of Celebrities of the War of Resistance and Historical Memorial Buildings of the War of Resistance, such as the Former Site of Guilin Office of the Eighth Route Army. Additionally, military and political functions of the original space are converted into functions of commemoration and exhibition to make the existing space vigorous again. On the east, a historical relics exhibition complex building adjacent to the former site has been newly constructed with an aim to expand display scale of the original space and play a part in assisting with effective activation and utilization of the original space of former site.

Response Mode of Syntagmatic Space

Spatial response mode of adjacency-based “bond correlation”

AJWLRs in the city center of Guilin cluster together, which is rather convenient for correlation and combination among individuals. By means of bonds such as roads, water systems and greenbelts, etc., protection based on correlation and utilization based on combination can be performed to strengthen the “bonded correlation” of such resources in conjunction with spatial organization. For example, a spatial response structure of “One Core & Multiple Branches”

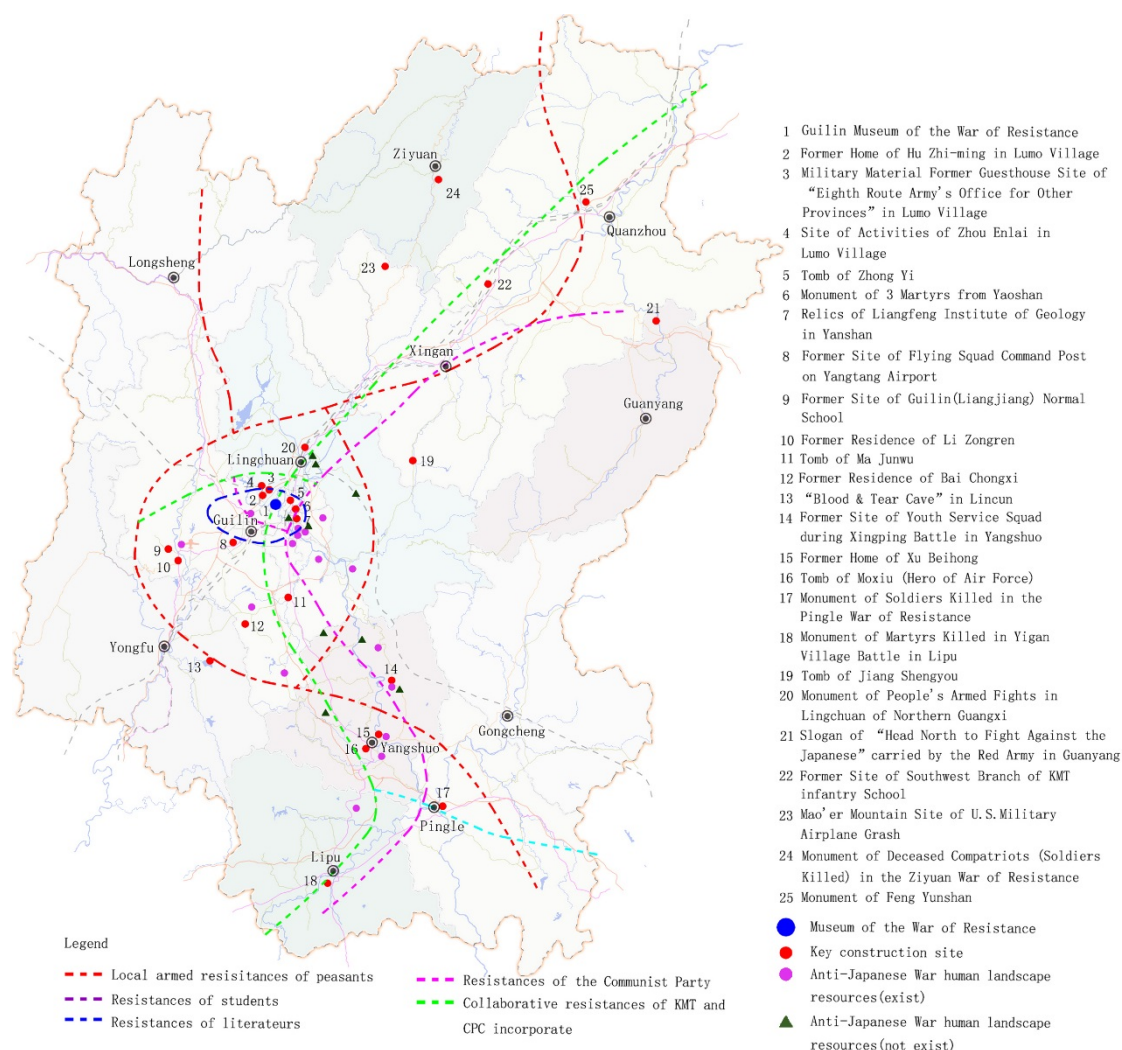


Fig. 1. Spatial Structure System of *AJWLR* Conservation and Utilization in Guilin

takes form in city center. To be specific, one core refers to the Former Site of Guilin Office of the Eighth Route Army; multiple branches represent historic sites and relics of the War of Resistance, including Guangxi Provincial Museum of Art, Former Site of the 1st Library in Guangxi and Former Site of Jiuwang Daily Office, which are linked together according to time-honored city streets or internal roads of communities to form a radioactive branch-shaped space structure.

Spatial response mode of event-based "historical context"

During the War of Resistance, there were more than 60 battles of various scales in the administrative region of Guilin in addition to the War of Defending Guilin as the most important battle of the largest scale within the scope of the entire city, such as Lingui-Linyang Wing fighting against Japanese troops, Lingui-Wantian siege of Japanese troops, Lipu-Chaxiang Battle and Lipu-Bicun Village Battle, etc.. Using events of the War of Resistance as clues, while the most crucial occurrence places as centers to extend such resources to certain

surrounding areas within a certain scope of space, *AJWLRs* discovered unceasingly in the future can be linked together organically by constructing or renovating the present spatial connection links. Hopefully, collaborative conservation and overall utilization of *AJWLRs* around or related to events of the War of Resistance can be facilitated. Hopefully, an effect of overall extension can be acquired.

CONCSTRUCTING A GLOBAL SPATIAL STRUCTURE SYSTEM OF INTEGRATED CONSERVATION AND UTILIZATION IN GUILIN

According to a X-shaped spatial distribution structure of *AJWLRs* as well as their modes of spatial demand and spatial response, a conservation and utilization system of "1 museum of the War of Resistance, 5 lines of Anti-Japanese culture and 44 key construction sites" is established (**Fig. 1**).

1 museum of the War of Resistance. *AJWLRs* in the city center of Guilin are distributed in a rather concentrative manner; however, it is short of space that can be used to concentratively and comprehensively exhibit the history of the War of Resistance in Guilin at present. According to demands of *WR* culture exploration, conservation and utilization in Guilin, concentrative display centers should be established urgently to intensify outstanding values of the War of Resistance in Guilin. Dependent on a principle of concentratively displaying *AJWLRs*, a “Guilin Museum of the War of Resistance” should be built.

5 lines of Anti-Japanese culture. During the War of Resistance, Anti-Japanese activities such as armed forces voluntarily organized by peasants, education on *WR* organized by student groups, dramas written/played by litterateurs to publicize culture of the War, anti-Japanese fights conducted by the Communist Party and collaboration of *WR* between KMT and CPC, etc. took place and jointly formed a line of *WR* culture in Guilin. According to a principle that global space of historical events taking place during the War of Resistance can be correlated with or superimposed onto *AJWLRs*, the following 5 lines of *WR* culture have been set.

1) Local armed resistances of peasants. They are the former site of Linyang Wing, Monument of People’s Armed Fights in Lingchuan of Northern Guangxi, Monument of Martyrs Killed in Yigan Village Battle in Lipu and Slogan of “Head North to Fight Against the Japanese” carried by the Red Army in Guanyang County and Yanyan Massacre Site in Mabujiang Village, etc.

2) Resistances of students. They cover the Former Site of the Branch School of Xin’an Touring Troupe, the Former Site of a Cave for Xin’an Touring Troupe Education, the Former Site of 3rd Intensified Student Army Training and the Site of a Cavern for Temporary Teaching Activities of Hanmin Middle School, etc.

3) Resistances of litterateurs. They include the Former Site of Guilin (Liangjiang) Normal School, the Former Site of Ta-Kung Daily (Guilin), the Guangxi Provincial Museum of Art, the Tomb of Zhang Shu and the Stone Inscription of Anti-Japanese Behaviors of Zhang Zhuangfei, etc.

4) Resistances of the Communist Party. They consist of the Former Site of Guilin Office of the Eighth Route Army, Military Material Forwarding Station of “Eighth Route Army’s Office for Other Provinces” in

Lumo Village, the Former Residence of Li Jishen and the Former Wharf of Yangshuo, etc.

5) Collaborative resistances of KMT and CPC incorporate Former Site of Flying Squad Command Post on Yangtang Airport, Site for the War of Defending Guilin, Former Residence of Li Zongren and the Former Site of KMT Anti-Japanese Communications Battalion Building, etc.

44 key construction sites. According to spatial characteristics of *AJWLRs* of Guilin and spatial attributes of the *WR* culture, and further considering that all counties and cities of Guilin can accept education in patriotism nearby, spatial locations of such resources should observe a principle of balance. In its city center and 7 counties, 44 key construction sites were established. In detail, there were 7 including the Former Site of Guilin Office of the Eighth Route Army in Diecai District, 3 including the Official Residence of Li Zongren in Xiangshan District, 2 including the Tomb of Ma Junwu in Yanshan District, 4 including the Former Residence of Li Zongren in Lingui District, 3 including the Former Residence of XuBeihong in Yangshuo County, 5 including the Military Material Forwarding Station of “Eighth Route Army’s Office for Other Provinces” in Lumo Village in Lingchuan County, 2 including the Mao’er Mountain Site of U.S. Military Airplane Crash in Xing’an County, 2 including the Monument of FengYunshan in Quanzhou County, and 1 for Lipu County, Yongfu County and Ziyuan County respectively.

CONCLUSIONS & SUGGESTIONS

1) 11 fundamental types of *AJWLRs*. Classification-based conservation and utilization of 141 *AJWLRs* in Guilin was studied here from a viewpoint of urban-rural planning for the first time. These resources were subdivide into 11 fundamental types, e.g., Historical Event Sites of the War of Resistance, Commanding and Battlefield Sites of the War of Resistance, Political and Military Cultural Organization Activity Sites of the War of Resistance, Slogans of the War of Resistance & inscriptions on Precipices, Former Residences of Celebrities of the War of Resistance, Historical Memorial Buildings of the War of Resistance, Anti-Japanese War Culture Education Architecture, Tombs and Memorial Facilities of Martyrs and Celebrities Deceased in the War of Resistance, Figures of the War of Resistance, Events of the War of Resistance, and Literary & Artistic Works Related to the War of Resistance. In addition, a Classified Catalog of *AJWLRs* was also defined.

2) There are 2 categories of ontology and colony spatial demands presented for *AJWLRs* in Guilin. While the ontology of these resources is featured with a rich number, a full range of varieties and unique values, they as a colony show an X-shaped radioactive distribution characteristic formed by “One Center, Two Mainlines & Two Minor Lines” formed as they are against mountains or along the river. Based on these features and analysis on problems related to resource conservation and utilization, it was found that the ontology has 4 demands of space construction & expansion, original feature exhibition for space, space integration and extension and space reconstruction and deduction, and the distribution of such a colony has two demands that were combinations based on spatial “distance” and correlations based on “events”.

3) *AJWLRs* of Guilin have two spatial response modes such as spot space and syntagmatic space. Specific to spatial demands of 11 subdivided fundamental types, it is deemed that spot space response modes are involved with the construction of individual space, composite space and were both constructed for them in addition to activating their original space. In detail, concerning the single space, they consist of site protected space, site presented space, site memorial space and bell-type protection space; with regard to the composite space, original feature exhibition + venue space, and original feature exhibition + park space were covered. In the end, their original space was activated from perspectives of 3 spot space responses that

incorporate space function continuation and space function transformation and 2 syntagmatic space responses including adjacency-based bond correlation and event-based historical context.

4) A conservation and utilization system of “one museum of the War of Resistance, 5 lines of *WR* culture & 45 key construction sites” was constructed. According to analysis on superposition between global distribution of historical occurrences of the War of Resistance and the existing *AJWLRs* and an equilibrium principle followed by spatial locations of conservation and utilization, a conservation and utilization system was constructed by taking the present space characteristics of these resources, spatial attributes of the *WR* culture and convenience for education in patriotism into account to achieve a purpose of sustainably protecting and utilizing *AJWLRs*.

However, classification-based conservation and utilization of Anti-Japanese human landscape resources need to be further studied. Detailed design for the interior of single space is a follow-up research subject of the author.

As for this study, it intends to make sure that historic culture carried by *AJWLRs* of Guilin can be positively cognized and concentratively manifest its regional and historically periodical *WR* culture. As a result, a foundation can be laid for resource conservation and utilization planning formulation.

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