# ZESZYTYNAUKOWEPOLITECHNIKIPOZNAŃSKIEJNr 16Architektura, Urbanistyka, Architektura Wnętrz2023DOI: 10.21008/j.2658-2619.2023.16.9

# Quan WEN\*, Mo ZHOU\*\*, Awais SHAH\*

# CONTEMPORARY ARCHITECTURE DESING IN MOUNTAIN CITY WALKWAYS – A CASE STUDY FROM CHONG QING CITY IN CHINA

As the largest mountainous city in the world, Chong Qing boasts of amounts of mountain city walkways in historical areas. Rendered by Ba-Yu culture, immigrant culture, origin of revolution, the mountain city walkway not only becomes the non-motorized system with the most distinctive characteristics of Chongqing, but also a demonstration of urban growth rings, and inheritance of urban culture. It is an important carrier for citizen's travel, enriching citizens' lives, and showcasing the characteristics of mountains and rivers, recording nostalgia and city culture, etc. It is now become Chongqing's name card and attracts architects to attempt to create contemporary architecture in a historic context. Based on the three projects of Chongqing's mountain city walkways conservation and development, this paper sorts out characteristic and elements of mountain city walkways, and analyzes the spatial paths of historical heritages and traditional streets under the natural conditions of mountains and two rivers, to clarify the threads and clues in contemporary architectures construction in a historical context. Plug-in is an innovative form in old context to stimulate the vitality of old communities. Space – darning refers to using a pointwise micro technique to complete the historical fabrics, advocating for "preservation, repair, and continuation"; emphasize starting from its own system and conducting functional repair and weaving from bottom to top. Landscape simulation means taking full use of the original courtyard, flat roof, caves and terrace, connecting and organizing the circulation and function to fit the original topography in a modest attitude.

Keywords: Mountain city; walkways; local construction; contemporary architecture, heritage

<sup>\*</sup> School of architecture, Chongqing Jiatong University, China.

<sup>\*\*</sup> Poznan University of Technology, Faculty of Architecture. ORCID: 0000-0002-2903-6379.

## 1. BACKGROUND OF TRADITIONAL ARCHITECTURE BASED ON MOUNTAIN AREA AND INNOVATIVE CONTEMPERARAY ARCHITECTURE TECHNICK IN CHONGQING AREA

Chongqing's urban transportation system may be one of the most diverse in the world. In addition to roads rails cable ways and ferries The Mountain City Walkway has been an important way for Chongqing citizens to live and travel since ancient times. Its twists and turns go up and down which traces the hilly geographic landscape. The huge mountains in southwest China were always barriers isolating this region. In old days, these walkways played significant roles for transportation. At that time the only way of transporting goods was porters and caravans. Huang'ge Ancient Trail, one of the oldest city walks began during the Tang dynasty is where the ancient merchants brought their goods up. As a resting spot and the roads ancient merchants delivered the goods down the roads by horseback. For their convenience a relay station was set up here. The Huang Ge Ancient Trail is a logistic channel and the main commodities are living essentials such as tea and medical herbs from Yunnan and Guizhou and silk Shu embroidery, bronze ware and porcelain from Sichuan and Chongqing. Gone are the days of the caravans and the vendors who used to walk down these roads. Now it's here to welcome local tourists and soon open up to the international market.

In downtown there exit numerous urban city walks that are mainly for daily travel for convenient life. They are mainly located in urban areas with high population density large terrain height difference insufficient road network density and inconvenient bus connections. The steps the ramps and the alleys in the old city connect the blocks to a network and forms an urban experience route. They connect the hustle and bustle of the Central Business District and effectively relieves the congestion of the commercial area. There are 31 Urban City Trails in Chongqing 467 kilometers in total.

Rendered by Ba-Yu culture, immigrant culture, origin of revolution, the mountain city walkway not only becomes the non-motorized system with the most distinctive characteristics of Chongqing, but also a demonstration of urban growth rings, and inheritance of urban culture. It is an important carrier for citizen's travel, enriching citizens' lives, and showcasing the characteristics of mountains and rivers, recording nostalgia and city culture, etc. It is now become Chongqing's name card and attracts architects to attempt to create contemporary architecture in a historic context. It emphasizes the need of humanity and experiences the natural and cultural landscapes of Chongqing from the perspective of people. It improves its green transportation by bringing people so close to nature. It symbolizes the tenacity and the positive spirit of Chongqing people to succeed.

Chongqing mountain city walkways in historical area displays various threedimensional green public spaces, diverse characteristics of green ecology, multidimensional, rich levels, and diverse experiences, creating an aesthetic atmosphere. The characteristics of Chongqing mountain city walkways are summarized from the four aspects of "people, land, landscape and production", which are the inspiration and motivation. Historical heritage and its' place, composing as an intact system, reflect the historical politics and economy, science and technique, religion and belief, folk and custom so on so forth. In the process of its' existing and evolving process, historic place reflects variety of information, such as site selecting, Fengshui theory, living backgrounds, etc. Focusing on place construction in the process of historical heritage, but also the demand of appreciation of historical value of the heritage. There are three strategies of contemporary architectures design in historical city walkways context.

## 2. THE SPECIAL FORM OF INTRODUCING CONTEMPERORAY ARCHITECTURE 'PLUG IN

This is an innovative form in old context to stimulate the vitality of old communities. The architect views history as a continuous and constantly overlapping process, with newly introduced elements maintaining respect for the existing environment while avoiding attachment and adhesion to it in a clear and recognizable way, forming a comparative juxtaposition relationship with it. The purpose of architecture is not only to encompass the past, but also to turn these past into the future. Based on the understanding of the site conditions of Shuitu Old Street, the design team makes the Shuitu Old Street Rock Hand Climbing Rock Café root in the old street with a modest attitude by means of local construction and low-tech tactics. The design aims to create a public place that can serve visitors and be shared by residents. Therefore, the external and internal space exchanges and interactions of will imperceptibly promote the sustainable and gradual development of the old street.



Fig. 1. The Shuitu Old Street Rock Hand Climbing Rock Café Source:taken from the authors

In the current practice of micro-renewal in old cities, design teams are faced with dilemma whether to display a contemporary building distinctively or to blend it into the environment, which is the most important decision at the beginning of the design process. Since Shuitu Old Street is located at the edge of Chongqing's main city center, micro-regeneration and gradual transformation is a realistic means to promote the revitalization of the old city. Micro-renewal of old cities is usually based on "acupuncture-type mediation". However, it should be noted that local construction activities exist in the macro-environment, and the replacement and accumulation of any local elements should be placed in the context of the overall framework. The relationship between the local and the whole in this practice needs to be treated with caution. So, under the many constraints, it becomes a breakthrough for the design to find a way for the architecture and the environment to coexist. Also in order to stimulate the old community vitality as well as create some open space in the crowded old mountain trail, the architect choose this almost abandoned house yet situated in a special position of the whole street, aiming to make something new plugging in (Fig. 1). Technology and low-cost construction conditions need to adopt strategies.

The site and the neighboring multi-story houses imply the low-rise form of the building. The cafe's function is limited to a single-story volume of only 120 m<sup>2</sup>. Therefore, how to utilize the limited space to create a multilayered experience was the challenge of this design. The building is precisely divided into two spaces: the large-scale space accommodates the cafe with a free layout, including operation counters, auxiliary spaces, seating areas and the small-scale space houses a 20 m<sup>2</sup> meeting room (Fig. 2).



Fig. 2. Café and its' environment drawn from the authors

The building chooses to sacrifice part of the indoor area to give way to the square at the corner of the entrance, so as to eliminate the sense of constriction at the entrance by positively opening up the area (Fig. 3). In order to maximize the landscape value, the building adopts floor-to-ceiling glass windows on the river side. The interiors are superimposed with the physical space, pushing the view further into the distance and creating a unique visual experience for the cafe creates a unique visual experience. Reinterpreting and translating traditions from a contemporary perspective, which is a major demand for the continuation of regional culture is a major demand for the continuation of regional culture. The subtle differences between the contemporary and the traditional tend to make the architecture more cohesive. The building adopts two single-slope roofs of contrasting sizes in the interlocking and overlapping, the building outlines a contemporary and localized sloped roof, which is modestly inclined roof – a slope that modestly avoids the walkway in front of the site.

The mountainous terrain does not support too much intervention by modern industry. During the construction process, all building materials had to be carried by hand. The construction team even brought in mules for transportation. Therefore, the design takes full account of the realities of the old street, adopting a low tech strategy, taking inspiration from local building materials and construction techniques, and exploring their potential for shaping the space so that it can serve as the design takes full account of the real conditions of the old street, adopting a low tech strategy, taking inspiration from local building materials and construction techniques, and exploring their potential to shape the space so that they can be used to serve new spaces. The designer collected the old ceiling wood board dissembled from the old houses of the neibourhood and then used them as ceilings and curtain wall in the new context. The warm and historic texture are displayed and when sitting in the cozy coffee the neighberhood can feel a sense of belonging (Fig. 4).



Fig. 3. Entrance of the Café (taken by the authors)



Fig. 4. Combination of modern and local materials by the authors

Plug-in methodology for the activation of the old street, creating an open and inclusive public space that attracts tourists and residents alike tourists and residents alike, serving both visitors and it serves the visitors and is shared by the local residents, thus injecting a constant flow of vitality into the old street. The author's team believes that the café will be a good place for visitors and residents to come and enjoy the café and there will be many more public spaces in ShuiTu Old Street.

### 3. THE SPECIAL FORM OF INTRODUCING CONTEMPERORAY ARCHITECTURE "SPACE DARNING"

This is a methodology using a pointwise micro technique to complete the historical fabrics, advocating for "preservation, repair, and continuation"; emphasizing starting from its own system and conducting functional repair and weaving from bottom to top. As one of the main preservation sites for the cultural relics of the Palace Museum relocated to the south in the 1930s, the historical complex of Anderson & Co. was now set up as the "Palace Museum Cultural Relics Relocation South Memorial" and the Forbidden City College (Chongqing). Architect Yonghe Zhang completed the protective renovation of a total of 8 buildings. For different historical buildings of different grades, various ways such as thorough restoration, original basement reconstruction, and reconstruction on the original site have been adopted respectively to stitch the gaps in history. A new structural form is introduced into the new functions such buildings' interior where the new functions such as exhibition, workshop, education are included. The dialogue between old and the new and the organic renewal process are both realized with respect, implicit and rational innovative attitude, and clear construction logic. The renovated complex has established original historical city walks context and its extraordinary role in the changing time and urban space, adding a contemporary cultural place with profound architectural significance to Chongqing.

In 1891, the Andersen Trading Company, located on the south bank of the Yangtze River in Chongqing, was built through different batches of construction and was originally used as an office and warehouse for a Swedish trading company. During the Anti Japanese War, the cultural relics of the Forbidden City were relocated to the south and stored and protected here. Although it has been in disrepair for a long time, it basically retains the original architectural features. There are currently eight individual buildings, divided into three categories based on the level of cultural heritage protection. There are four cultural heritage protection buildings that need to maintain their original structure, materials, and craftsmanship; One excellent historical building and three traditional style buildings. One of the challenges of this project is to handle the relationship between old and new, and stitch together buildings of different eras and styles (Fig. 5).



Fig. 5. Bird view of the site (from the authors)



Fig. 6. new structure employed (from the authors)

The selection of patchwork fragments in this project mainly determines the cultural core (8 historical buildings) within the region, and activates it by optimizing its external space, functional replacement, and other methods, thereby forming patchwork points; The "weaving skeleton overlap" is based on the cultural weaving points mentioned above, and is extended within the system through linear elements such as roads, structural green spaces, and visual corridors to construct the weaving skeleton; At the same time as forming the internal cultural fabric network of the system, the fabric skeleton is extended to achieve the overlap between the cultural space system and the external space system of the city. Through the radial roads on the periphery, the "fabric network coupling" is achieved. Ultimately, a cultural space weaving system of "core activation, skeleton overlap, and external coupling" will be formed.

The design first continues and updates the style of the building complex. There are various types of original building materials and usage methods: the structure consists of a mixed structure of wood and brick wood, the walls consist of clear brick walls, hollow brick walls, and rammed earth walls. The doors and windows are made of wood, the roof is made of small green tiles, and the building base is made of stone. The design continues the characteristics of diverse materials. For buildings with a cultural relic protection level, blue brick walls and green tile roofs have been restored, and rammed earth walls have been reconstructed using modern technology. For excellent historical grade buildings, restore small green tile roofs, retain blue brick hollow walls and red brick structural columns, and transform the walls facing the square and entrance into more transparent floor to ceiling glass doors. A new glued wood truss structure has been introduced in the design, which uses multi-stage braces to ensure uniform and reasonable force distribution and reduce component size. The interior of Building 1 and the collapsed part of Building 3 and Building 5 both use this new structural system, maintaining the original appearance. Inside Building 3 and Building 5 the new wooden structure can form a contrast with the rebuilt traditional wooden structure. Building 6, 7 and 8 use a steel curved column beam to realize the shape of its round ridge roof. The Chongqing Branch of the Palace Museum College and the South Relocation Cultural Relics Memorial Hall will be settled here. Relevant exhibition activities, cultural lectures, children's education, cultural and creative product displays, and workshop experiences will all be held here. The old buildings themselves also possess the nature of exhibits due to their accompanying cultural attributes and stylistic features (Fig. 6).

In order to better connect the future display function with the surrounding environment, the design creates a harmonious transition with the urban external space system through transportation spaces such as walkways, transportation stairs, squares, and parking lots in the overall planning. In the streamline design of the site, it also considered the perspective of viewing the building and created an observation platform. The eaves of the building protrude greatly, forming multiple semi outdoor eaves spaces, providing shelter for transportation routes and outdoor activities. Remaining cable car tracks and stones on site. The conservation of blocks' space pattern is well integrated to the surroundings. Oringinaly those buildings were scattered at different level. To integrate the groups the designer well organized the circulation and utilize the platforms as "darning tools" for circulation and functional zoning. The context of the traditional space such as step lane, mountain trails, and the existing street are remained (Fig. 7).



Fig. 7. Section of the buildings (drawn by the authors)

It is obvious that different types of construction structure are employed in the project. From conservation observation aspect, separation of old and new, maintaining the necessary authenticity of historical heritage authenticity, enabling new additions to be clearly 'identified' for reconstruction purposes was achieved; also integration of form and structure, overall production of structure and space structures are not only hidden skeletons that support buildings and transmit forces, but also becoming a part of spatial construction. The architect furthermore continues construction logic and new design inheritance. Here time is used as a darining tool allowing the integration of old and new to be traced back to time.

The original path and paving, the retaining walls and the ancient trees are preserved. These scenes setting remind people a sense of time and space and historical life. Although the existing image is already evolved, but through the sketch of the setting, the internalization of the cognitive image of the environment and deeply engraved in the memory of the public. The landscape design of mountain trails and based on the concept of "behavioral scene". This space and according to certain rules of distribution of the elements that together form the physical environment, support specific behavioral patterns, for the mountain people provide in place of leisure, communication, commerce, and trade. Places like the stage of social life, in one of the activities of people like playing the roles of the corresponding actor, despite the actors continue to replace, but a fixed pattern of behavior within a period of repeated, actress and performing and place characteristics in ecological constitute interdependent whole, forming a vivid scene of scenes. Design and analysis of the environmental characteristics of the site, through the setting of the sketch to create the space atmosphere. Old folks, old neighbors gather together again, searching for signs of past legacy, or is chatting and dinner, found that although there is a great change in the building, but the original place of residence and pleasant living environment has not changed.



Fig. 8-10. Buildings and steps integrated to surrounding (drawn by the authors)

Moutain trails are carefully preserve and organize to increase node retention space. The new path with distinct angles coexists with the old path that has been polished and rounded by time formed a compact and dense yet connected threedimensional walking system. Observators can choose different up and down paths to reach a destination of different functional areas (from bottom to top, including the Palace Museum Corner Cafe and Digital Classroom, the Palace Museum Bookstore, the Forbidden Academy, and the Annals of Cultural Relics). Due to the opening of both ends of the gable walls in some buildings, it is becoming a visual corridor, looking directly into today's city (Fig. 8-10).

## 4. LANDSCAPE SIMULATION BASED ON THE MOUNTAIN CITY WALKWAYS PLACE COMBING THE CONTEMPARARY ARCHITECTURE

The strategy refers to taking full use of the original courtyard, flat roof, caves and terrace, connecting and organizing the circulation and function to fit the original topography in a modest attitude. Landscape in mountain city walkways place an important role in displaying the historical and cultural value of heritage. Influenced by intact value concept in Chinese historical heritage, it accounts a lot in site selecting, utilizing and consturction. The integrity of traditional architecture, landscape and its' surroundings, make decisive factor in focusing on place construction. It points to the natural context and social backgrounds. Otherwise, landscape inviting is also an alternative to acquire the heritage's historical and cultural values. According to phenomenology, the sensory to place and environment can be transferred to life experience and historical memories. Thus, in the process of historic conservation, place can be experienced by reappearance of living factors, simulation of life context, and aesthetical and technical value can also be understood.

The "Zao" space is in the historical area of Shancheng Lane, Yuzhong District, Chongqing, and was completed in July 2021. Shancheng Lane known as Chongqing's "Architecture Museum" has a typical mountain city space and traditional Ba Yu style, which is a microcosm of Chongqing's historical culture and landscape characteristics. Shancheng Lane was once prosperous with "thousands of people bowing in the daytime and ten thousand bright lights at night". The main street carries the honor and disgrace of the ancient town, still maintains its original appearance. The slopes around the steps accommodate unevenly distributed suspended building clusters and nurture a system of slope and ridge streets and alleys. Worn by times, they are still full of vigor. In this section representative of the lower half, commerce was very active. As a residential mountain region featuring folk life, it is a typical carrier of the traditional Bayu culture of Chongqing.

The designer fully utilizes the geographical characteristics of traditional mountainous streets and alleys, inheriting the living wisdom of residents in striving to use space in high-density historical street and alley environments, utilizing characteristic spaces such as rooftop platforms, air raid shelters, and step (Fig. 11). Because of uneven topography conditions, the local habitants once use all kinds of construction methods to settle here and strive for more lingving space, such as building on stilts, platform, caving, etc. The existing remains displayed as a coexisting setting with nature. The architect perceived that there may not be a need for a building here, but rather for three-dimensional site that can change the spatial structure of the entire site, allowing the site to be connected with surroundings, allowing people to walk off the ground, observe the sites of different eras and the cities outside the site in the air, and achieve a synchronicity that connects the present and old through the gaze of different eras. The architect repaired the house, preserved the imprint of the times, and reinforced the structure. He also implanted new interfaces, integrated new functions, and built new spaces. The combination of new and old not only respects the historical memory coordinates of the site, but also endows the region with new vitality. The courtyard meets the functional requirements of serving as a city living room, public exhibition hall, and cultural interaction and creativity (Fig. 12).



Fig. 11. Bird view of Zao space in Shancheng Lane (from the authors)

Fig. 12. Layout of the buildings (from the authors)

The two blocks of the house have good landscape resources and cultural heritage, but in the unidirectional urbanization process, they are gradually forgotten. Based on the successful model of transforming the house into a "Service and tourism integration" project, the house is designed to provide a unique experience based on the air-raid shelter hidden in the house. The design of this public space will activate the endogenous potential of the old city walkways and create possibilities for the next stage of micro-renewal. Its location is kind of microscope of typical mountain street with undulating heights, narrow alleys, deep air-raid shelter, and steep slopes. Such memory places a are not only the characteristics of the cityscape, but also an important carrier of the city's culture. The rebirth of the house has naturally become an opportunity for its development. The remodeling of public nature and the reconstruction of community (social space) are the core values of community building. Planning, spatial empowerment, and even business guidance and promotional Program need to be considered in advance. The designers aimed to create a public exhibition space to show the development and change of the Shancheng Lane to the public, and to meet the needs of the public.

The site is located on a three-meter-high cliff made of stones. The area of the site is only about 150 m<sup>2</sup>, but it needs to fulfill the diversity of spatial composites. In the face of the constraints of the site and the complexity of the terrain and elevation difference, how to respond to the topography of the site? This is an issue that needs to be considered repeatedly in the early stage of design. The projected volumes form a number of gray spaces, enriching the spatial hierarchy and façade composition. Glass maximizes the viewpoint overlooking the river (Fig. 13).

A curved glasswall played as a connection with two houses and also an entrance to the air-raid shelter. The building envelope is mainly made of cement fiber boards, and part of the walls are made of traditional green bricks. Materials and colors of the surrounding buildings, and the hollowed out parts not only ensure the internal The hollowed out parts not only ensure the lighting inside the building, but also create a unique light and shadow effect.



Fig. 13. Building section



Fig. 14. Terrace at different levels



Fig. 15. Vivid activities [source: pictures were taken by the authors]

The design also aims to recreate the experience of climbing uphill in the mountainous areas of Chongqing through "walking", and at the same time to gradually realize the architecture through the process of changing scenery. The roof of an old house is renovated and used as the balcony of the public center. Also some "wooden theater seats" are launched near the house to facilitate public activities (Fig. 14). The Zao space has begun to be reborn under the impetus of the Shancheng Lane renovation. Many people come to visit this characteristic building and experience the various landscape of mountainous city walkways (Fig. 15).

#### **5. CONCLUSION**

Mountain city walkways plays the drama of a splendid rebirth and attaches the profound cultural vision of the new Chongqing to the historic cultural bloodlines of the cradle of the city. Special memory sites are revived by protecting the original topography; the essence of Bayu is replayed by inheriting traditional layout of streets and alleys: and comfortable and convenient urban spaces and architectural spaces are developed to reinvigorate diverse cultural activities.

The contemporary architecture design in historical context is actually the protection and construction of its natural environment and social environment. The environment in fact is a variety of historical elements in organization and can accurately express the historical heritage value and the place atmosphere. The methodology plug-in, space-darning and landscape simulation, in order to emphasize the space perception, and to shape historical environment, or reflect the historical context, are crucial to express historical value and emotional value. Heritage is not only a static material remains, but also contains the relevant social life system. The construction of these may help to reflect the cultural connotation of the built heritage, on the other hand, it may also have a variety of effects on the maintenance and preservation of the physical form of the heritage. This requires appropriate policies and measures to incorporate these intangible and dynamic factors into the general framework of the protection of the heritage, and guide the direction of heritage conservation to the direction of sustainable development.

#### LITERATURE

- Chu D., Yang R.. 2020, *Line-so: Spatio-temporal paths and practical characteristics of urban micro-renewal in Chongqing*, "Journal of Architecture", vol. 10, pp. 72-79.
- Han D., 2014, *How Building on the Ground Becomes a Problem*, "New Architecture", vol. 1, pp. 34-35.
- He Y., 2017, Exploration of Village Renewal Based on the Construction of Public Facilities and the Sorting of Public Space – The Practice of Zhejiang Placebo Village, "Architectural Techniques", vol. 1, pp. 68-71.
- He Y., 2019, Talking about Basic Architecture Again Analysis of Three Works of Architect Meng Fanhao, "Times Architecture", vol. 4, pp. 84-95.

- Li J., Tian Q., Lin L., 2020, An Exploration of Rural Micro-Renewal beyond the Ontology of Construction Taking the Public Space Creation of Chongqing Sanhe Village as an Example 2020. New Architecture, vol. 2, pp. 76-81.
- Li X., Hou X., 2020, Stone House in Wanfeng Forest: Xingyi Luna Camping Service Center, Guizhou, "Times Architecture, TongJi University", vol. 3, pp. 82-91.
- Ling S., Sun J., 2014, Pan Y., On-site architecture: the intervention and anchoring of architectural anchoring – A Case Study of Regeneration of Traditional Commercial Space in Shapaowei Sheltered Dock, "Chinese and Foreign Architecture", vol. 6, pp. 95-99.
- Tian Q., Wang C., 2022, New Life and Prosperity: Practice and Thoughts on Architectural Renewal in Urban Fringe Areas. Practice and Reflection in Urban Fringe Areas, "Contemporary Architecture", vol. 2, pp. 49-53.
- Tian Q., Weng Y., 2021, Standing on the Riverbank, Melting in the City: Chongqing Beibei Sansheng Chongqing Beibei Sansheng Chedu Service Station, "New Architecture", vol. 4, pp. 62-65.
- Zheng L., Wu J., 2020, The Production of Community Public Space Taking Big Fish Community Creation Development Center's Community Creation Practice on Xinhua Road in Shanghai as an Example, "New Architecture", vol. 4, pp. 81-85.

#### WSPÓŁCZESNE ARCHITEKTONICZNE PASAŻE MIEJSKIE JAKO ELEMENT KRAJOBRAZU KULTUROWEGO GÓRSKIEGO MIASTA CHONG QING W CHINACH

#### Streszczenie

Chong Qing to miasto położone na terenie współczesnych Chin. Charakteryzuje się ciekawym ukształtowaniem krajobrazu zabudowanego za pomocą licznych kamiennych pasaży, które dostosowują się kształtem do otoczenia. Ich historia jest elementem bogatej przeszłości terenu, m.in. działań kultury Ba-Yu. Historyczna tkanka miasta stała się polem działań, na którym starano się stworzyć nowe obiekty architektoniczne w odniesieniu do historycznego kontekstu miasta. Przedstawione w artykule badania odnoszą się do trzech projektów, których celem było ponowne wykorzystanie górzystych terenów miasta na cle działań przestrzennych, które miały pomóc w procesie rewitalizacji. Wykorzystanie narzędzi cyfrowych do symulacji powiazań pomiędzy istniejącymi dziedzińcami, uliczkami, placami, jaskiniami i przestrzeniami publicznymi stało się przyczynkiem do rozważań, w jaki sposób można ponownie wykorzystać historyczne dziedzictwo na potrzeby nowych użytkowników.

Słowa kluczowe: górskie pasaże, budownictwo lokalne, współczesna architektura, dziedzictwo historii