**ICOA1600: REVIVAL AND REGENERATION STRATEGIES IN COMMUNITY PARTICIPATION PERSPECTIVE OF XI'AN SANXUE HISTORIC DISTRICT, CHINA**

**Subtheme 01: Integrating Heritage and Sustainable Urban Development by engaging diverse Communities for Heritage Management**

**Session 1:** Sustainable Development and Community Engagement  
**Location:** Gulmohar Hall, India Habitat Centre  
**Time:** December 13, 2017, 16:45 – 17:00

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**Abstract:** Xi’an Sanxue Street historic district was the most prestigious Education Centre in the northwest China for more than a thousand years, from the time of the Song Dynasty to the Republic of China. It is now one of the most important historical districts in Xi'an. It has this distinction for both important heritage sites like the Beilin Museum (a former Confucian Temple), Guanzhong Academy, Wolong Temple and the Kuixing Tower, and its collection of important historic residential properties, formerly home to many famous people. The rapid urbanization of the past 30 years, the dramatic growth in the area’s population and the ad hoc adaptation and expansion of the existing buildings has had a negative effect on the area.

Soaring building density, inadequate and congested traffic conditions, and substandard infrastructure, have created a worsening living environment that is destroying the historical scene in many areas in the district. At the same time, improvements to the famous cultural heritage designed to create a more attractive historic, cultural environment have brought prosperity to local tourism businesses.

Utilizing community participation and other analytical techniques, this paper focuses on understanding the historical area in the memories of local residents and the architectural heritage reflected in the existing built environment. The attitudes of different users, including local inhabitants, commercial tenants and tourists, along with analytical mapping including space-syntax theory, land use interaction, site circulation flows and space structure, are combined to generate a picture of the existing environment. Based on this analysis, strategies for the revival and regeneration of this historical district are projected to protect and renew the inherited cultural landscape, improve community functions, stimulate spatial vitality, and promote environmental quality.

**Key words:** Xi’an Sanxue Street historic community, community participation, cultural heritage, revival and regeneration
1 Historical evolution and spatial development

For more than ten centuries, the Sanxue Historic District has experienced dynastic rule and changing times. The District was founded initially in the Northern-Song Dynasty, became firmly established in the Ming Dynasty and flourished in the Qing Dynasty as the centre for cultural education, painting and calligraphy. The district was defined by the ‘one academy, two temples and three schools’ located there. The Xi'an Confucius Temple at the core is flanked by the Guanzhong Academy and Wolong Temple with three schools in-between. Today the three compounds and the three school axis remain, but the schools were demolished about 100 years ago. The District is broadly defined by two east-west roads, and divided by three north-south streets. The area has seen an increase in dwellings and infill construction (Fig. 1). Inside this circulation grid, a tangled collection of historic and recent infill construction surrounds the three major sites.

Since 1980’s, when many of the original structures were destroyed, accelerated urbanization and population growth has led to ad hoc and unplanned development in the District. This unregulated construction has disrupted most of the old texture of the area, except for the traces left by old property divisions. Fortunately, a collection of original courtyard houses has managed to escape demolition. The development pattern of these historic houses serves as an important legacy for future renewal of the area (Fig. 2).
2 Culture environment of Sanxue Historic District

2.1 Architecture Heritage
There are three groups of heritage structures remaining in the Sanxue Historic District: public buildings, former residences of celebrities, and traditional dwellings (Fig. 3). The majority of the public buildings are located in the three core heritage compounds. The four former celebrity residences and twenty-one traditional dwellings, in various states of preservation, are also scattered across the district. However, this collection of heritage structures, while significant, are currently too disconnected from each other to form a coherent heritage fabric.

2.2 Culture Heritage
In addition to the architectural legacy of the area, the District is home to three different important expressions of culture; Confucianism, Buddhism and the local community. The Confucius Temple (now the Beilin Museum), Guangzhong Academy, Xi’An Fu School, Changan County School and Xianning County School were institutions where Confucianism was taught in ancient times. The Confucius Temple has a long history of collecting stelae documenting the thoughts and work of Chinese thinkers, most of whom reflected Confucian thought, since Song Dynasty. The teaching of painting and calligraphy was a basic practice in these academies generating a commercial industry which survives today in the district.
Established in the Han Dynasty, the Wolong Temple today serves as an important working Buddhist monastery in Shaanxi Province, attracting many visitors from Xi’an and beyond. Appreciating its cohesion and spiritual appeal, 10% to the surrounding residents currently practice the Buddhist faith. The culture and traditional practices of the local community are displayed in the public areas of the district. These activities are manifest around the ancient trees, central water supply points, and long established restaurants. The maintenance of continuity in the local community was identified as an important goal of this project.

3 Renewal Strategy for Sanxue Historic District

3.1 General Intention
As one of the two best conserved historic districts in Xi’an, the Sanxue District is an important cultural, social and economic asset to the city. Unfortunately, after years of population growth and poor infill construction, the area now faces many serious problems. Confusing and disjointed circulation, inadequate infrastructure, deteriorating building stock and substandard community service facilities, collectively create a poor living environment and a shrinking sense of community for local residents. This negative trajectory is also detracting from the attractiveness of the area to tourists.

3.2 Renewal Goals
Given the important cultural assets present in the District, it is critical a renewal plan develop that supports both the needs of the residents and frames the existing cultural landscape in an appropriate and positive manner. The primary goals are protection of the existing architectural heritage, enhancement of the tourist experience and development of a healthy community, all in service to the creation of an improved social and cultural landscape for this District. The linkage between the cultural landscape and the social environment is essential to the success of the renewal effort. The integration of daily life amongst the extraordinary cultural heritage present at the site will create an important, living cultural landscape. Environmental renewal will be achieved through the greening of the area, improvement of the site circulation systems and a combination of restoration and appropriate new development of its architecture. Community renewal will be achieved through the establishment of new facilities that are attentive to the stated needs of the local people.

4 Improving the Physical Environment: Greening

4.1 Current Situation
The Sanxue District contains almost forty listed, ancient trees, located primarily around Beilin Museum, making it the largest gathering of heritage trees in Xi’an. The residential areas in the district with its growing density lack readily accessible green space. (Fig.4Aa) The resulting environment, without the important influence of nature, is less attractive to new residents and tourists. Further, judged by the local residents, it is an inhospitable environment, especially the elderly and youth.

4.2 Greening Strategy
The proposal opens up a new core Sanxue Park, develops an east-west green corridor, and plans mini parks in conjunction with new resident parking areas and other planned activity nodes. (Fig.4Ab).

The new ‘Sanxue Park’, created by protecting the nineteen heritage trees, opening up the space through the removal of non-historic buildings and landscape, will serve as an important gathering and activity space for tourists. Extending from this park space, the three axes that formerly organized the three demolished schools, ChangAn, Fuxue and Xianning Streets, are planned to be renovated into pedestrian corridors leading to three activity spaces programmed to provide unique and different tourist amenities.
The East West Green Corridor to be strategically cut through the existing dense fabric of the area just north of the Beilin Museum and Wulong Temple compounds and east of the Guangzhang Academy. This corridor will connect the residential areas around these complexes and provide green space and activity areas for residents.

Mini parks located inside residential areas in conjunction with new resident parking areas. Located on the roofs of the parking facilities, the mini parks provide additional programmed park spaces for residents.

5 Improving the Physical Environment: Circulation System

5.1 Existing Condition
Currently roads in the district can be divided into four grades - main roads, secondary roads, main branches and other branches (Fig.4Ba). These circulation corridors suffer from a range of deficiencies including insufficient width, illegally parked cars and inadequate pedestrian space (Fig.4Ca). Parking was identified as the most acute problem, with 84% of the surveyed residents and 93% of the tourists indicating parking to be a serious problem. Added to this problem, due to illegal construction, many dead-ends, and narrowing corridors, it is very difficult to access most of the residential areas.

5.2 Circulation Strategy

5.2 Cultural Landscape of Circulation
The smaller scaled circulation space commonly found in the Sanxue District is an important part of the cultural landscape of the area. The preservation of the scale of these spaces is an important design principle in the renewal plan. A more pedestrian based circulation system was developed together with the Greening effort. Four new circulation types were identified; ‘car’ ‘car/pedestrian’ ‘pedestrian/car’ and ‘pedestrian’ (Fig.4Bb). Each of them have a range of prescribed widths and characteristics that appropriately accommodate the circulation needs of the area, eliminate dead-ends and create mixed circulation spaces that preserve the scale of the existing cultural landscape.

5.3 Parking
Illegal parking was one of the major problems that negatively impacts circulation in the area. New parking facilities, for both tourists and residents, have been distributed throughout the district in appropriate locations (Fig.4Cb). The integration of park spaces on top of these facilities maximizes their benefit.

6 Improving the Human Environment: Service Facilities

6.1 Existing condition
The development of service facilities, for both residents and visitors, was identified by both groups to be important to any renewal plan. Based on interviews and questionnaires 83% of the residents (193 respondents) and 75% of the tourists (80 respondents) were dissatisfied with the existing facilities. The existing community facilities are poorly located in tourist areas and difficult for elderly to access. The surveys indicated there was a very strong desire for new, more convenient facilities, with the greatest need to accommodate elderly and youth in the area. The existing tourist center, located west of the entrance to the Beilin, was indicated by tourists to be inadequate for both information, security support and other expected support for a venue of this significance (Fig.4Da).

6.2 Proposed Community and Tourist Support Facilities
Although the physical improvement plan is the first step, the development of appropriate public service facilities is also required. New community facilities including new elderly service centre, youth centre
and kindergarten have been strategically located in relation to the new circulation and greening plan along with proposed development.

New tourist facilities, including a second information centre, first-aid station and police sub-station are located strategically in highly visible tourist locations to meet the deficiencies indicated in the survey results. The further development of appropriate hotel facilities and additional cultural venues are designed to broaden the appeal of the area as a tourist destination (Fig. 4Db).

7 Residential

7.1 Existing condition
Construction and reconstruction in the district since the 1980’s has been contrary to traditional styles and/or of poor quality with modern materials (large openings or glazed storefronts and poorly designed signage). Most of the new buildings are inconsistent with the historic fabric. The interior residential areas suffer from over building and haphazard construction making these areas dark and unhealthy. The layout inside many of the apartments is limited to one or two rooms per unit without toilet or kitchen. The lack of planning and proper oversight has also created inadequate drainage, heating, gas and fire protection. Residents choose to live in the area just due to the cheap rents and/or convenience to employment, but 70% of the residents are dissatisfied with the quality of life in the area.

7.2 Proposed Renovation and Reconstruction
The renewal plan proposes three principles for development in the heritage area. First, authentic heritage structures should be repaired and rehabilitated. Second, when feasible, buildings along main streets and adjacent to the major heritage compounds, should follow a courtyard development pattern (Fig.5). Finally, other new construction should be compatible with the traditional scale and texture of the heritage district.

Fig.5- An courtyard house example of the comparison between before and after renovate

Conclusion
The preservation of the cultural landscape of the Sanxue District is embedded in both its past and present. The ‘one academy, two temples and three schools’ framework provides a significant, tangible window into Xi’an City’s past. The renewal of community and the preservation of its historic fabric are essential to the revival of a living and sustainable Sanxue District. Blending the preservation of the past with the needs of the present will ensure the cultural landscape and community spirit of Xi’an is preserved.
ICOA1600: STRATÉGIES DE RELANCE ET DE RÉGÉNÉRATION DANS UNE PERSPECTIVE DE PARTICIPATION DES HABITANTS: LE QUARTIER HISTORIQUE DE LA RUE SANXUE À XI’AN, CHINE

Sous-thème 01: Intégrer le patrimoine et le développement urbain durable en engageant Diverses communautés pour la gestion du patrimoine

Session 1: Développement durable et engagement communautaire
Lieu: Hall Gulmohur, India Habitat Centre
Date et heure: 13 Décembre, 2017, 16:45 – 17:00

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Résumé: Le quartier historique de la rue Sanxue à Xi’an a été le centre d’enseignement le plus prestigieux du nord-ouest de la Chine pendant plus de mille ans, de la dynastie des Song à la République de Chine. C’est aujourd’hui l’un des quartiers historiques les plus importants de Xi’an. Il se distingue à la fois pour ses sites patrimoniaux importants – le Musée Beilin (un ancien temple confucéen), l’Académie Guanzhong, le Temple Wolong et la Tour Kuixing – et pour son ensemble d’importantes propriétés résidentielles historiques, autrefois demeures de nombreux personnages célèbres. L’urbanisation rapide des 30 dernières années, la croissance spectaculaire de la population de la région et l’adaptation et l’agrandissement des bâtiments existants ont eu un effet négatif sur ce secteur.

La densité croissante du bâti, les conditions de circulation inadéquates et encombrées et les infrastructures de pierre qualité ont dégradé le cadre de vie et détruit le cadre historique dans de nombreuses parties du quartier. Dans le même temps, l’amélioration du patrimoine culturel le plus connu afin de créer un environnement historique et culturel plus attrayant a apporté la prospérité aux entreprises touristiques locales.

Mots-clés: quartier historique de la rue Sanxue à Xi’an, participation des habitants, patrimoine culturel, rénovation, réhabilitation