With a World of Heritage So Rich

Lessons from Across the Globe for U.S. Historic Preservation in its Second 50 Years

Rebuilding Shangri-La: Public Participation in the Reconstruction of a Historic Town
By Dr. Ing. Huo Xiaowei

Saving historic towns requires professional commitment, but there is also a significant part for the public to play, thanks to the growing awareness of heritage conservation as well as extensive development of communication technologies. Indeed, both proved indispensable in the reconstruction of the historic town of Shangri-La after a disastrous fire.

Emergency Call
On Jan 11, 2014, Shangri-La, which has the largest group of Tibetan buildings in China, was struck by a fire that destroyed nearly one fifth of the core conservation area. 343 historic buildings around the central square, totaling nearly 60,000 square meters, were razed to the ground, as well as six historic streets. After the rescue, experts were immediately summoned by the local government for planning reconstruction.

In addition to the urgent need to rebuild many homes by March, a faithful reconstruction was also a necessary concern. The historic townscape, with unique local architectural and artistic features, not only constituted community identity but also sustained social and economic life in Shangri-La. Unfortunately, only a few photographs, drawings, and historic maps were available. For a successful reconstruction to occur, two questions had to be answered: 1. how do we collect historic documents as extensively and as quickly as possible?; and 2. how can the collated materials be used to inform reconstruction while preserving the true values of the place?
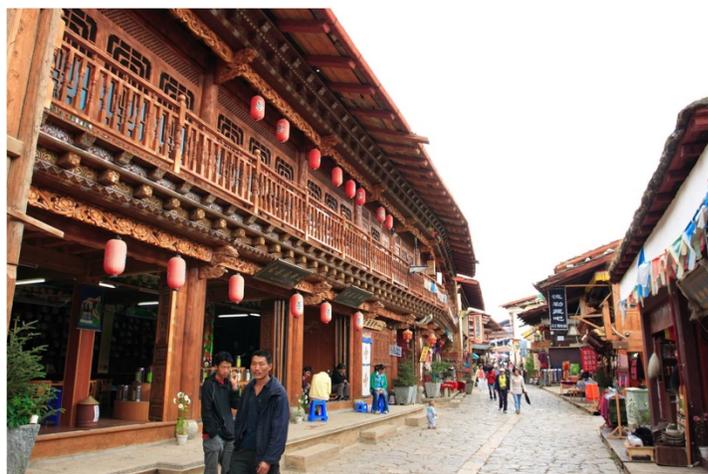
Figure 1: A traditional street in Shangri-La before the 2014 fire

Figure 2: The same street after the 2014 fire

Building the Platform
Limited time and resources made the first task seemingly impossible, but the team resorted to social networks for inspiration. Blog images brought about an idea: could there be an abundance of historic resources available from the public, which could be gathered to inform reconstruction? A quick survey showed a significant growth in tourist numbers to Shangri-La, from 0.52 million in 1994 to 4.27 million in 2012, and thus an undiscovered repository seemed highly probable. The key, however, was how to collect and manage the potential contributions, presumably scattered all over China. An effective documentation platform was called for. But how could this platform be implemented? Again, new media came to light that readily lent itself to mass user content contribution.

Surveys in Shangri-La showed that a majority of the population accessed the internet through a smart phone. With this in mind, the Shangri-La Historic Photos platform was created to facilitate document collection through free mobile apps that already had millions of active users. People could send both photographs and heritage information to the platform from a smart phone, and the platform would collect the documents using pre-designed interfaces.

Dissemination and Collection
For the Shangri-La platform to reach its target groups in the shortest amount of time, potential users needed to be found at both local and national levels. Different strategies were undertaken to reach these different users.

At the local level, it was hoped that partners with similar interests in conservation would promote dissemination. Thanks to wide coverage of the Shangri-La initiative over the network, a local grassroots cultural organization dedicated to Tibetan cultural conservation helped disseminate this critical message, which in turn created the first group of Tibetan contributors. Simply by tapping their smart phones, users uploaded a large number of historic photographs, some even dating back to 20 years old. At the national level, document collection was organized through various media including microblogs, BBS and other SNS platforms – even visitors from Beijing and scholars on Shangri-La contributed.

Images and drawings collected from multiple sources provided the design team a comprehensive archive, consisting of more than 1,000 photographs and drawings. Reconstruction design was almost ready to begin.

Figure 3: Shangri-La historic resource map including crowd-sourced images

Considerations of Reconstruction

One final question had to be answered before reconstruction design could proceed: how should the crowd-sourced materials be effectively used? First, some photographs of the same building showed different time periods, with different features from past transformations. Which photograph and time period should be chosen for the reconstruction design? Second, the quantity and quality of photos varied from structure to structure. For significant built heritage, there was a huge amount of material; there was less material for buildings in historic areas; and there was very little, if any, material for peripheral residences. It was a challenge to discern how the collected documents could effectively inform reconstruction design for all of the lost historic resources.

Closer examination of the question revealed that it was not simply a matter of interpretation, but of preserving the cultural values of Shangri-La. Indeed, reconstruction of lost structures is justified when it rightfully preserves the intangible aspects of a place, as the Principles for the Conservation of Heritage Sites in China states:

Reconstruction may be considered…when a structure has been destroyed in recent years and the public still has a strong memory and connection with it, and there exists reliable documentation. (13.3.1)

To maintain the memory and identity of the community, an emphasis was thus placed on the traditional local character, which was best demonstrated in the general townscape. The collected documents were critically synthesized to create a harmonious environment, rather than simply crediting the earliest evidence as authentic. Reconstruction design was therefore aimed at preserving the overall townscape instead of restoring specific architectural details that might be ungrounded or contradictory. For example, a historic change made to the façade of building without significantly altering the building's fabric—such as the conversion of a residence into a shop--was considered compatible and could be reconstructed into the later form, as this would be closer to the local Tibetans' living demand.

Luckily, the different quantity and quality of documents readily reflected the significance of the lost buildings. The more important a building was, the more documents there were. For structures with little evidence, it was reasonable that their reconstruction conformed to the general townscape.

Implementation and Instructions

Local Tibetans were given more freedom in rebuilding their homes, since reconstruction took a self-build approach based on general planning. It was decided that there would be no single blueprint for all but rather DIY designs tailored to individual needs. The team therefore prepared general instructions that could be flexibly applied.

The huge number of collected images was again useful in preparing the building instructions. Composed into an illustrated handbook, the images were used to identify traditional architectural features and provide knowledge about traditional construction techniques in Shangri-La. Included in the handbook were also suggested modernizations of traditional buildings, which technically improved living conditions, while preserving the architectural diversity in the townscape.

Figure 4: Guidelines for reconstruction

In comparison to the peripheral areas, the historic town of Shangri-La was characterized by its Tibetan structures in a harmonious townscape: the traditional streets were its shining jewels. Considering the significance of such features in terms of Historic Urban Landscape, the reconstructed streets were to restore the traditional character from careful analysis. Keeping these considerations in mind, the design team identified the traditional Tibetan architectural features from each building on the street by examining the collected images from different periods.

Guidelines were provided for street-wise reconstruction in terms of building height, relation to adjacent structures, ground level, bay width, facade features, windows and doors, etc. Based on these, inappropriate earlier transformation and additions to the traditional buildings as shown in the documents were removed in the reconstruction design according to historic images. Last but not least, satisfying modern commercial requirements was also critical for the successful reconstruction, which won recognition from both local residents and shop tenants.

Reflections and Experiences

Loss of heritage due to a sudden strike of disaster may be inevitable. A mere sight of what has survived over hundreds or thousands of years reminds us of the fortune that we possess today. It is nonetheless such vicissitudes that makes our heritage invaluable. Although disputed, post-disaster reconstruction is nothing less than a final remedy to prevent total loss. But, without sufficient documentation, such a rescue is doomed. Public documentation has shown a gleaming beam of hope. Discrete documents from various sources can be efficiently collected and managed, which, after careful analysis and interpretation, can inform reconstruction in an unprecedented manner. In this respect, the reconstruction of Shangri-La has yielded valuable experience and learnings.

I. Public documentation of cultural heritage is more than feasible by using social networks. Such a communicative measure can readily surface an extensive reserve of materials that transcend geographical boundaries. The efficiency in dissemination and data retrieval as well as user interaction is unfathomable.

II. Public documentation by means of new media can initiate extensive simultaneous social participation, which makes heritage reconstruction a literal social event. Supported by amassed documents that inform reconstruction design, the restored heritage is imbued with new cultural and social significance.

III. Public documentation plays an important role in heritage inventory. For Shangri-La, we were fortunate to acquire documents from public contributions as a first-aid measure. This has shown tremendous potential in public documentation that will complement the official inventory in the future. Faith in this promising approach sheds a light beyond the reaches of a single project.

Success of the project depends on technically-enabled user contribution. Immediate mobilization is critical to encourage public participation. The reconstruction of Shangri-La is a promising pilot initiative in public documentation to inform heritage reconstruction, and certainly it is with and for the people that the future of heritage conservation will be built.

As a Registered Urban Planner, Dr. Huo is Director of the Research Center for Heritage Conservation and Urban-Rural Development, THUPDI, and Deputy Secretary General of the Historic and Cultural City Committee of Urban Planning Society of China. In addition to historic city, town and village conservation planning projects, Dr. Huo is also a major contributor to historic development and innovation projects commissioned by the Ministry of Housing and Urban-Rural Development, National Natural Science Foundation, and State Administration of Cultural Heritage. Dr. Huo gained PhD at the University of Stuttgart in 2008 and became an MIT SPURS alumnus in 2015.