



## VIEWPOINTS

Discussion of topical issues  
in urban morphology

### Reconciling the theory of urban morphology and the practice of heritage conservation

**Feng Song, Ying Dai and Ningting Li**, Urban Morphology Research Group, World Heritage Research Centre, College of Urban and Environmental Sciences, Peking University, Beijing, 100871, China. Emails: [songfeng@urban.pku.edu.cn](mailto:songfeng@urban.pku.edu.cn), [daiying77@pku.edu.cn](mailto:daiying77@pku.edu.cn), [cuesliningting@pku.edu.cn](mailto:cuesliningting@pku.edu.cn)

Bridging the gap between theory and practice has long been striven for in urban morphology. This is particularly evident in the field of heritage conservation, and is currently engaging a number of us in the World Heritage Research Centre of Peking University. While many of the challenges we face in China are similar to those faced in the West, some have a Chinese dimension. In the ensuing discussion we set the Chinese aspects in a wider context.

#### World heritage and cultural landscape

In 1972, UNESCO ratified the *Convention Concerning the Protection of the World Cultural and Natural Heritage*. This was followed in 1992 by the inclusion of cultural landscape in its *Operational Guidelines for the Implementation of the World Heritage Convention*. However, appreciation of research on cultural landscapes has been slow to be incorporated.

With regard to cultural landscapes, academic research and practice have developed by separate routes, as Whitehand (2013) has pointed out. The borrowing of academic research by heritage practitioners has been minimal, despite the fact that academic research on cultural landscapes can be traced back to German geography in the late-nineteenth and early-twentieth century, and in some respects even earlier. Even as recently as 2007, one of the core discussions

at the conference on the historic urban landscape (HUL) held in St. Petersburg was on 'Are historic urban landscapes a type of cultural landscape?' The fact that such a question was being posed reflects the comparatively recent and very different origin of the terms cultural landscape and HUL in heritage conservation practice. Concerns about cultural landscape among heritage practitioners started with discussions on rural landscapes, such as the English Lake District, that did not fit neatly under either the cultural or natural headings and nor were they mixed sites. And HUL is closely related to the traditional protection of monuments and historic urban centres. It was discussion about the relationship between modern architecture and the historical context that led to the international conference on 'World Heritage and Contemporary Architecture' held in Vienna and the adoption of the Vienna Memorandum. This different historical path from the one that academic research has pursued calls for stronger efforts than hitherto to apply urban morphological research in supporting the practice of HUL conservation.

#### Urban morphological methods, heritage value and conservation practice

M. R. G. Conzen (1981) regarded landscape as the embodiment of human experience. For him the historicity of landscape enables a society to keep

its sense of continuity and its capacity to see things interconnected – a view emphasized by Whitehand (2013). From the perspective of academic research, the Conzenian school recognized the general value of the historical landscape to society. In contrast, from the standpoint of World Heritage, the exceptional value of certain features is stressed: hence the concern is with ‘historic’, rather than ‘historical’, landscapes, with the inherent risk of reverting to the past practice of protecting monuments and other historic elements in isolation. However, it is undeniable that cognition of the value of HUL is based on understanding the wider historical urban landscape, which is exactly the research object of urban morphologists, who have developed methods of analysing the historicity of urban landscape. To put it more generally, since the value and memory that constitute heritage accumulate in the formation and transformation process of landscape, the morphogenetic perspective is fundamental to cognition of the heritage value of the cultural landscape.

World Heritage practitioners seek to convey universal value, whereas the cultural landscape process varies between regions. Thus a world heritage must first be a national heritage that carries the collective memory and cultural identity of that nation (Song and Xiong, 2012). Recently, some branches of heritage conservation that draw worldwide attention, such as industrial heritage, have been mainly about the history of Western countries. By conserving related heritage, these countries can strengthen their cultural identity and self-confidence. However, what the same process brought to people in developing countries is quite different. Some Chinese researchers who follow the international trend and seek to boost industrial heritage may have become detached from the unique modernization process of China that generates such heritage. A case in point is the relative neglect of heritage formed after the establishment of the People’s Republic of China, when China tried to fulfill the revitalization of the nation in a unique socialist way. Adopting morphological thinking in the identification of heritage value may help to avoid such mistakes.

Delimiting landscape units based on urban morphological research provides a sound basis for heritage management (Whitehand, 2009). It has part of its foundation in the proposition that the urban landscape is a hierarchical system in which units exist at various levels, and this system relates in part at least to the differentially-distributed historicity of townscape. Adopting this method avoids

the risk of merely emphasizing detached noteworthy features in the landscape. However, the relationship between the hierarchical system of urban landscape and the practice of management have not been sufficiently discussed. From the perspective of urban organization, a town or city constitutes an integrated entity at different stages that maintains some kind of hierarchy. However, the townscape is made up of the accumulations of different periods in which there have been processes of selection. Elements are erased or preserved according to the social and economic requirements of the time. Hence the present townscape is not an intact specimen of a particular period with its hierarchical system. Moreover, the current conservation and management of townscapes can be viewed as attempts to reorganize present built environments. But co-ordination of this with the hierarchical system of units based on selected landscape survivals tends to be difficult to achieve. The bridging of this aspect of the gap between theory and practice in urban morphology would be particularly helpful.

### Research and practice in China

With the advice of J. W. R. Whitehand, the Urban Morphology Research Group at Peking University has carried out several morphological investigations in China, applying and assessing essentially Conzenian theory in the practice of heritage conservation.

Among these projects, one funded by UNESCO at the World Heritage site of Lushan, was an application of Conzenian morphological methods (Xiong *et al.*, 2014). The first step was to trace the process of development of the cultural landscape of Lushan as a whole, and then focus on the town of Kuling. Conservation and management units were delimited based on the Conzenian approach of identifying urban landscape units, and unit-based management guidelines were formulated. In light of local conditions some adjustments were made to the method, notably by attaching more importance to building fabric than to town plan and by considering the management scope of a particularly Chinese feature – the *danwei*. The results were presented at a Forum on World Heritage Cultural Landscapes in East Asia held in Lushan in 2013. A Statement of Intent was developed, which was the first document to focus on the conservation and management of World Heritage Cultural Landscape sites in East Asia (UNESCO

Beijing Office, and Lushan Scenic and Historic Area Administration Bureau, 2013).

Reconciling theory and practice calls for efforts on both sides. To support the conservation of HUL, practitioners should pay more attention to the academic heritage and recent progress of urban morphological research. Meanwhile in developing and testing theories, urban morphologists need to be more aware of the practice that attempts to shape the landscapes that they research.

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## The *li* concept and its potential use in urban planning in China

**Jeffrey Wenji He**, M. Arthur Gensler Jr. & Associates, Inc., Asia Regional Office, Corporation 222 Hubing Road, Huangpu District, Shanghai, China. E-mail: Jeffrey\_He@gensler.com, and **Mark Henwood**, BHI Architects, Shanghai Office, Building A, 100 Zhunyi Road, Hongqiao Shanghai Plaza, Shanghai, China. E-mail: mark.henwood@bhia.com.au

China is undergoing rapid urbanization and is creating urban landscapes that lack regional identity. The benefits of the country's rich urban history and planning concepts are being overlooked (Chen, 2008; He and Henwood, 2012; Sorkin, 2008). One such planning concept is that of the *li*, a traditional distance unit that was initially applied as part of the official *Jingtian*, the method of farmland distribution in the late Western Zhou dynasty (1046–770 BC) (Qiao, 2013, pp. 141–2). The *li* has also been used as a basic unit in the household management system of China's main urban centres, and has developed a deeper meaning associated with human settlement. Today *li* can also mean a small village, a home town, or a dwelling in a neighbourhood (Zhao, 2004). The link between the *li* as a unit and as a concept of urban organization is also shown in the heritage watertowns, and in Shanghai's *lilong* developments from 1870 to the

1940s, in the Jiangnan region of the Yangtze River Delta. It provides a valuable concept for consideration by decision makers involved in residential developments in China's urban centres, especially since the recently issued Thirteenth Five-Year Plan favours smaller scale residential developments, and better proportions for street blocks and road widths (Central Committee and State Council of the Communist Party, 2016).

The typomorphology of the surviving historical Jiangnan watertowns can be hypothesized using Conzenian plan analysis, but there is little support from limited surviving historical records (Whitehand and Gu, 2007). The heritage towns of Wuzhen and Zhouzhuang are worthy examples for investigation and show two different applications of the *li* concept. The use of regular dimensions based on a 416 m *li* for both of these watertowns suggests they were laid out prior to 618 AD (He