



Figure 2. Street frontage: the old and the new.

particular cases in different post-socialist societies, analysed plot by plot, could reveal varieties of conditions to which similar morphological units

have been exposed. Such studies will form part of the project on post-socialist urban form currently being undertaken with the support of Belgrade and Krakow universities and ISUF.

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The potential of the *li* and the *wangcheng* for contemporary urban design

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China's rapid urbanization over the past two decades has favoured high-density development, rather than drawing on the country's rich urban history and planning concepts (Chen, 2008). The result is too often urban landscapes devoid of local history and identity, designed for vehicles rather than pedestrians.

The number of cities in China grew from 193 in 1978 to 667 in 2003 (Song and Yu, 2005, p. 106), and these new cities are regularly overlooked in urban studies. One such city is Xuecheng, known as Lincheng until 1952, in south-west Shandong Province. It has grown from a rural town into a

significant urban centre over the past century. Its analysis using a Conzenian approach suggests the scope for design grounded in traditional urban form.

The history department of Xuecheng's city government has prepared diagrams that show the morphological changes during the first half of the twentieth century. Measured drawings of the contemporary city allow further analysis from the late-1970s to the mid-2010s. These can be compared with traditional Chinese planning concepts, such as the *li* and the *wangcheng*. This is timely because the Chinese central government is

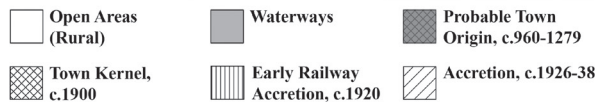
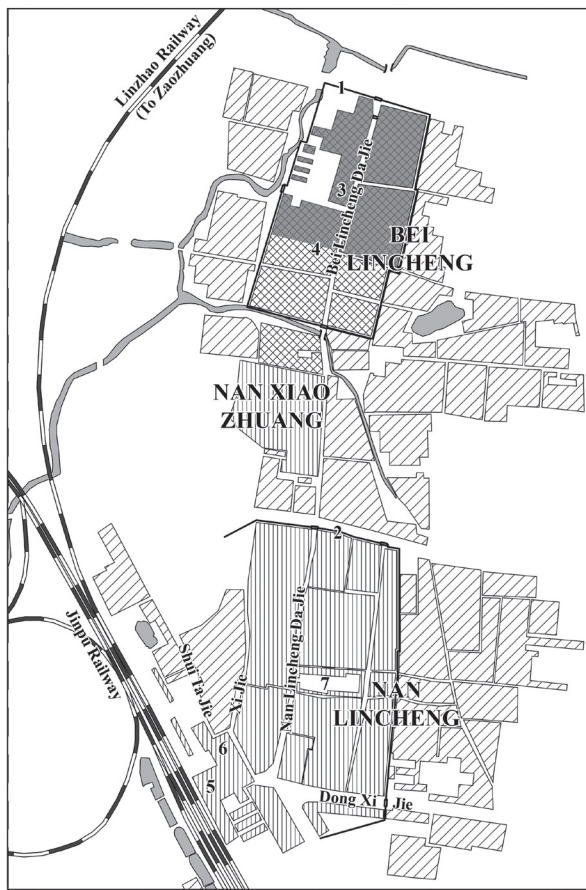
promoting regional and national design principles in its urban planning (Central Committee and State Council of the Communist Party, 2016), and there is increasing general interest in local urban culture (Chen, 2018).

Xuecheng developed from a dense kernel, protected by walls and moats, through two distinct morphological periods during the early-twentieth century (Figure 1). The modernization of transport and industry allowed the formation of Nan Lincheng to the south. Then the town spread beyond its walls and expanded along the

more significant east-west roads towards nearby towns. This new growth followed a less rigid and more opportunistic building pattern than earlier development.

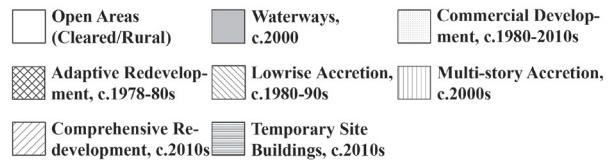
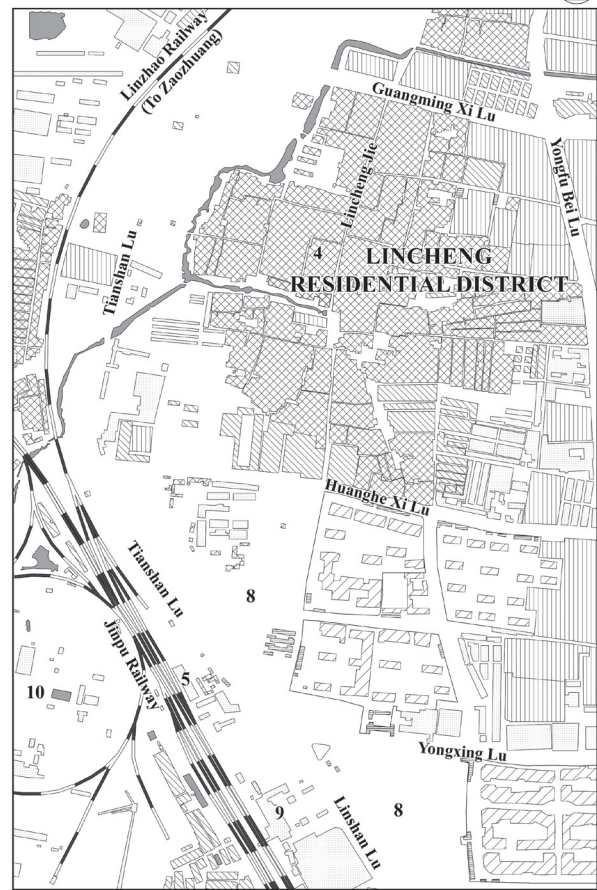
The plan of the 2010s comprises several distinct morphological regions. Political reforms in 1978 had major effects: the dilapidated dwellings of the early-twentieth century were rebuilt during a period of adaptive redevelopment (Dwyer, 1986, p. 479). In the early twenty-first century gated multi-storey residential developments were introduced to the east and south. These began to undermine the

1940s



1. Town Walls, strengthened c.1860s
2. Nan Lincheng Town Walls, c.1910-20s
3. Inn and Post Station, founded 1369
4. Catholic Cathedral & German Mission, constructed 1880-1911
5. Old Station & Railway Buildings, in operation from 1912

2010s



6. Zhongxing Mining Company Offices
7. Civic Square
8. Urban area cleared for Comprehensive Redevelopment in 2010s
9. Zaozhuang Xi Station, opened in early 2000s
10. Coking Plant, in operation from the 1950s

Figure 1. Generalized morphological regions of Xuecheng in the 1940s and 2010s.

network of pedestrian streets and lanes and reduce retail activity along the streets. Most recently, the older parts of Nan Lincheng, including some unique buildings from the 1920s and 1930s, have been demolished to provide land for gated high-rise apartments. Retail activity has been removed from the street frontages and included in shopping podiums. However, pedestrian elements of the previous network could be reintroduced as part of the design for this area.

The *li*, a traditional unit, was initially employed as part of the official *jingtian*, which was the method of farmland distribution in the late Western Zhou dynasty of 1046–770 BC (Qiao, 2013, pp.141–2). The town kernel was laid out in a square using a 323 m *li*, and appears to have been extended a further half-*li* to the south during an early period of growth. This suggests the town was laid out after the *li* was reduced from 416 m to 323 m during the Tang dynasty, 618–907 AD, and is consistent with the first mention of the town during the Song dynasty, 960–1279 AD. The enduring nature of this *li* arrangement is shown by its recurrence in the layout of Nan Lincheng centuries later around the railway station. The *li* plan still survives in the fixation line of the town walls in the north. To the south the *li* plan has been erased, although future development in this area might reinstate this.

The *wangcheng*, or ruler's city, is an idealized city plan of the Zhou Dynasty (1046–256 BC), best seen in the archaeological excavations of ancient Qufu (Liu, 2002, p. 24), 100 km to the north of Xuecheng. The *wangcheng* city plan has sides of 9 *li* (an area of approximately 3.75 km²), the centre being occupied by imperial palaces and government buildings representing the Emperor's position as centre of the world. The square town kernel of Xuecheng follows this idealized plan at a much smaller scale. The Inn and Post Station, built for government officials and messengers, was located at the central crossing of the main streets. This relationship is lost in the plan of the contemporary town. The streets in the town kernel no longer form the main intersection of the city, and the local government has moved to a recent city expansion to the south-east. However, this relationship could be reinstated if part of the local government occupied a more central position.

Urban morphological analysis provides an understanding of local urban culture in the emerging cities of China, such as Xuecheng, which have

been formed by dramatic changes in the twentieth century. This understanding provides the basis for designers to adopt a more considered approach to redevelopment that respects local urban culture. The *li* and the *wangcheng* have helped shape an enduring Chinese urban culture over thousands of years, and are worthy of consideration in today's design process. Further investigation of China's emerging cities can improve understanding of local urban culture, and help future development to maintain continuity.

Acknowledgements

The author wishes to thank Dr K. Gu, BHI Architects in Shanghai, and the local government of Xuecheng.

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