

# Interpreting urban micromorphology in China: case studies from Suzhou

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**Abstract.** *In light of the Conzenian tradition of urban morphology, this paper explores the concept of micromorphology in China. Here the widespread absence until recently of true ground plans of cities showing accurately streets, plots and building block-plans is an obstacle to conventional plan analysis. Using such sources as local gazetteers, other local writings, historical photographs, and existing historical buildings, this paper undertakes a micromorphological analysis of a public building complex and two private house complexes in the Guanqian area, Suzhou. The relative persistence of various morphological elements is demonstrated. Links are made between morphology and political social economy. Micromorphology is shown to be potentially valuable for urban design, management and policy-making.*

*Key Words: urban micromorphology, building types, political social economy, Chinese cities, Suzhou*

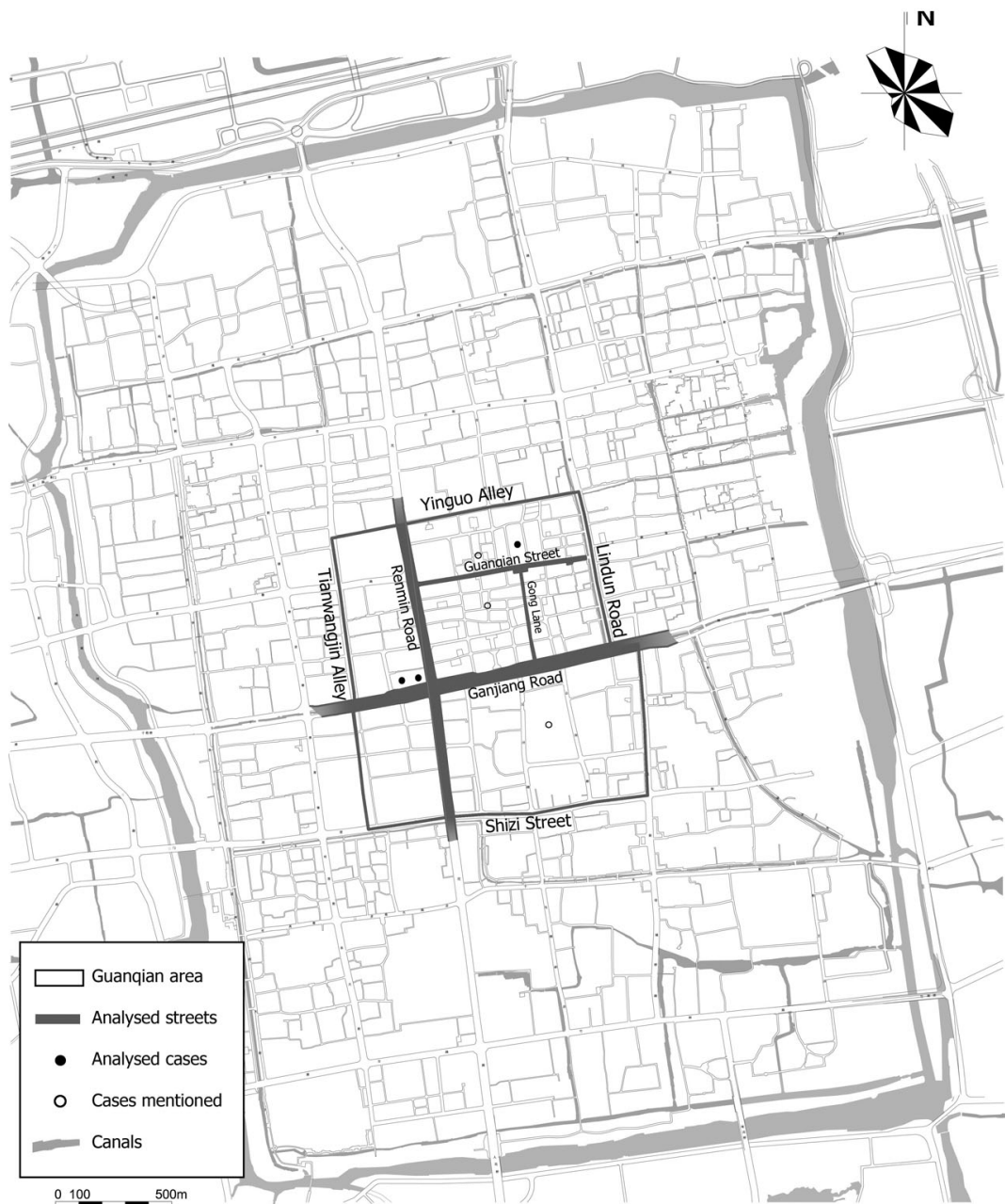
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It is critical for urban designers and policy-makers to understand morphological changes and how they relate to socio-economic change. In the past 3 decades, the historical districts of Chinese cities have been undergoing rapid transition, giving rise to extremely intricate urban patterns (Gaubatz, 1999; Ma and Wu, 2005). The conflict between new demands and urban conservation has become a major issue for design and administration. In this paper it is argued that problem-solving strategies need to be based on comprehensive understanding of both morphological transformation and socio-economic transition.

The Conzenian method of urban morphology, especially plan analysis, is well-recognized as a fruitful approach to examining the transformation of urban form (Conzen, 1969; Slater, 1990). Although a few pioneer applications of Conzenian methods have been

undertaken in China (Chen and Romice, 2009; Whitehand and Gu, 2007; Whitehand *et al.*, 2011), a problem is the absence of true historical plans of Chinese cities showing accurately plots and building footprints. Fortunately, written records – such as gazetteers documenting local historical buildings, streets, canals, and bridges – and historical photographs and paintings provide alternative or complementary sources. The need to consult such sources in the study of Chinese urban form was raised by Piper Gaubatz (2007), but their exploitation needs to be pursued further. These sources are particularly suitable for morphological analysis at the micro level.

This paper demonstrates ways of investigating micromorphology in China. The Guanqian area of Suzhou, bounded by Yinguo Alley, Tianwangjin Alley, Shizi Street and



**Figure 1. The Guanqian area in the walled city of Suzhou. Based on an unpublished plan of Suzhou walled area prepared by the Urban Planning Bureau of Suzhou, 2005.**

Lindun Road is selected as the focal area for examination because of its long history of development since the establishment of the city about 2500 years ago (Figure 1). How can we understand the micromorphology of this area? In particular, why are some urban

elements long lasting and others ephemeral? Consideration is given first to urban forms as social production and the idea of micromorphology. Analysis is then undertaken of current building types in the study area, and morphological transformations are explained

at the individual plot level in order to gain general understanding of morphological changes.

### The production of urban form

Although much has been written about the relationship between society and space in the fields of sociology, economics and cultural studies (Castells *et al.*, 1983; Harvey, 1973; King, 1983; Lefebvre, 1991; Sassen, 1994; Soja, 2000), the relationship between urban form and socio-economic conditions, or what has sometimes been referred to as 'political social economy', is often given insufficient attention by urban morphologists and designers. As Castells (2000, p. 7) expresses it, production is 'the action of humankind on matter (nature) to appropriate it and transform it for its benefit'. Urban forms are the products of human actions for such purposes as political representation (Sonne, 2003), social interaction (Gehl, 2001), cultural symbolism (Frampton, 1991), and economic materialization. Urban forms express urban meaning that reflects the changing goals of the city in the interactions between historical actors in society (Castells *et al.*, 1983). Thus it is important to link the physical dimension of urban forms to their political socio-economic dimensions to understand their meaning. Cuthbert (2006, 2007) has claimed that the whole subject of urban design should be based on political social economy, through which the city may be analysed, debated and re-shaped for new purposes.

Chinese urban forms reflect the political, economic and cultural conditions of Chinese society in different periods. Chinese imperial urban forms, such as the Forbidden City, were created as political symbols of the universe to emphasize the divinity of the emperor as son of the heavens (Liu, 1989). The development of the areas near city gates in most traditional cities in the imperial period reflected the direct reliance on agrarian society in the immediate vicinity (Xu, 2000). Houses were laid out according to the patriarchal system, as well as reflecting the general social hierarchy (Blaser,

1995). In this way physical forms incorporated social beliefs and mores, as will be shown in the morphological analysis of the examples in Suzhou.

### Urban micromorphology

Urban morphology as grounded in M. R. G. Conzen's work (Conzen, 1969, 1988) is well established and increasingly practised in the fields of urban geography, architecture, planning and conservation (Bienstman, 2009; Larkham, 1996; Samuels, 1999; Slater, 1990; Whitehand, 1987; Whitehand and Morton, 2004). Conzen's major contribution lies in the establishment of a conceptual framework for the analysis and interpretation of the formation and transformation of urban form. This has proved beneficial for urban landscape management, policy-making and design. In this historico-geographical approach, attention is given to conceptualizing and delimiting morphological features in relation to temporal processes. Morphological features are identified based on urban ground plans (street networks, plots and building block-plans), land use and building forms, while concepts and methods are formulated to explain the changes in these elements over time. Examples are the burgrave cycle, the morphological period, the morphological frame and fringe belts (Larkham and Jones, 1991). While such concepts have attracted increasing attention practically worldwide in recent years (Conzen, 2009; Erslund, 2010; Gu, 2010; Rodrigo Cervantes, 1999; Satoh, 2008), less attention has been paid to them in relation to political and socio-economic changes. The investigation of micromorphology offers an opportunity to strengthen the link between urban morphology and social aspects of political economy, since the reasons for change are often more readily uncovered in individual buildings and their plots than in complex urban entities.

Micromorphology has not been widely investigated (Whitehand, 2001), perhaps because it requires detailed information about individual plots that is often difficult to obtain

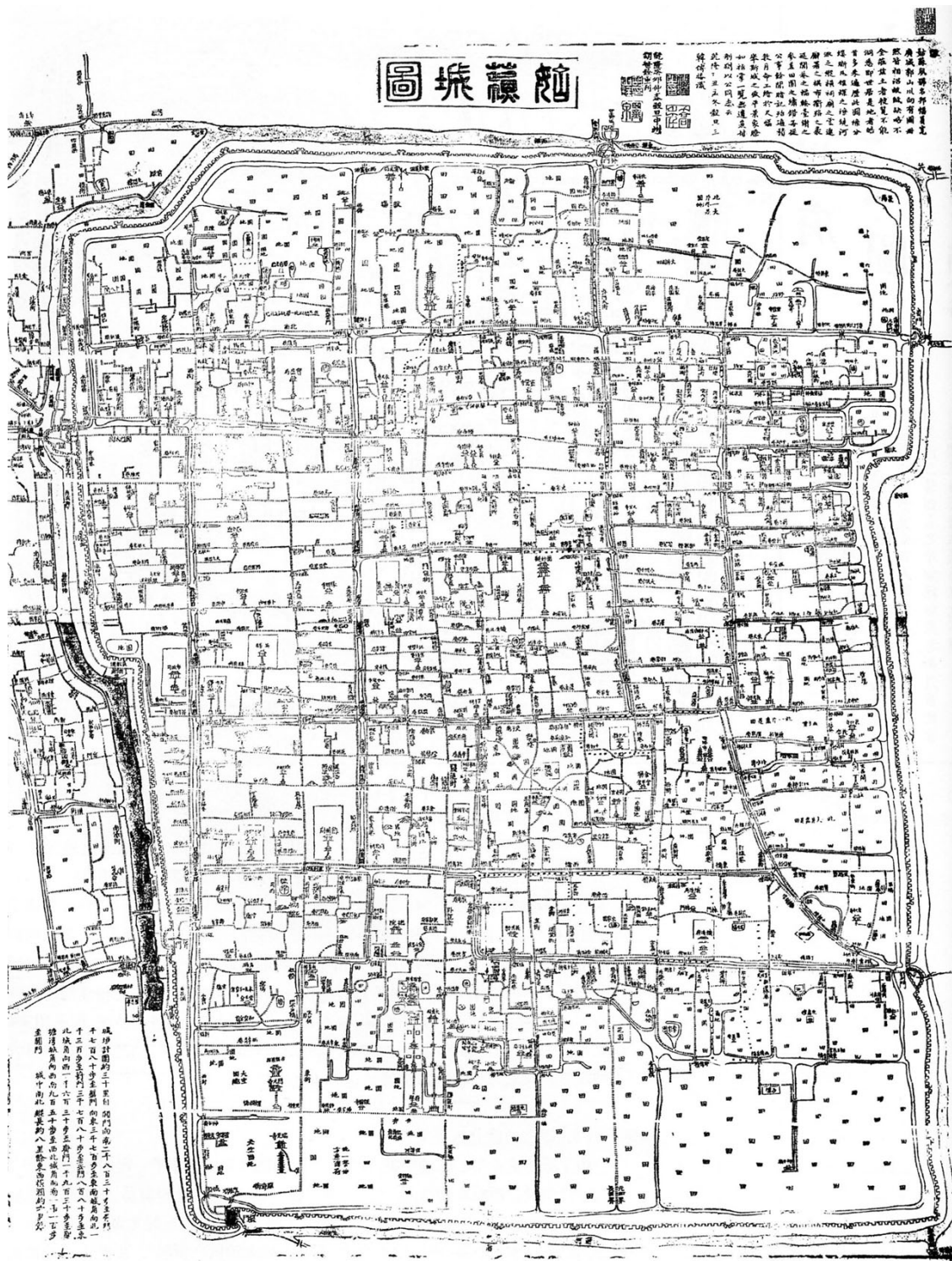


Figure 2. An historical map of Suzhou dating from 1745. Only limited morphological information is shown. Reproduced from Zhang (2004) with the permission of Yinglin Zhang.

for lengthy periods, particularly outside the Western world. In China, historical maps (Figure 2) were not drawn to scale until the twentieth century. They often included elevations of imperial and religious buildings in their respective locations. It is not possible to trace the plot patterns and building layouts from these maps. Therefore, detailed mapping of urban features, as has been done for Western cities, is difficult before the twentieth century. It is largely reliant on diagrammatic maps and field surveys of existing historical buildings and plots and streets. Local gazetteers often record information on the construction, alteration and demolition of city walls, palaces, streets, canals, bridges, religious buildings and wealthy people's family houses, which are important morphological features in Chinese centrally planned cities (Sit, 2010). Historical transformations of such features in Suzhou are recorded in gazetteers and other published literature. However, the credibility of local gazetteers is open to question given their wide-ranging encyclopaedic character and the officially organized groups of experts involved in writing and editing them (Gaubatz, 2007). Local governments often retain some house transaction records for the imperial period. They are useful for the study of individual buildings and plots, but they are not readily available to the public (Chen, 2006). Using such methods and sources, it is possible to provide a micromorphological interpretation of the Guanqian area in Suzhou, China.

### The Guanqian area, Suzhou

Suzhou is one of the oldest cities in China. It is located in the alluvial plain of the Yangtze River, with the Tai Lake to its south west and Shanghai to its east. The region benefits from numerous streams flowing out from the Tai Lake to the Yangtze River. Much of the layout of the historical city, with its gridiron street and canal networks, derives from that of the capital city of the State of Wu built in 514 BC (Lu, n.d.; Zhao, 1986). The Guanqian area, containing the site of the imperial palace, is in the centre of the walled city. The

imperial palace and the city walls, moats, major streets and important ritual buildings had vital symbolic and socio-economic roles. Since the demolition of the palace (the prefectural seat after the period of the State of Wu) in the late-fourteenth century (Compiling Committee for Suzhou Gazetteer, 1995), the Guanqian area has accommodated commercial activities.

Eight building types have been identified in the area by the author based on the plan prepared by the local planning bureau in 2005 (Figure 3). These building types emerged in different historical periods. The 'key public buildings' of the traditional courtyard type include the Xuanmiao Temple, originally built in the fourth century, and Wanshou Gong dating back to the early-eighteenth century. The area still contains a small number of 'traditional *tianjin* courtyard houses' (Chen and Romice, 2009), which were built in the eighteenth and nineteenth centuries. The third type is '*lilong* houses', initially emerging in foreign concessions after the Opium War and later in inland cities during the early-twentieth century (Arkaraprasertkul, 2009; Liang, 2008). The 'small compact houses' (Figure 3) were often constructed by residents themselves in the first half of the twentieth century (Chen, 2008). During the same period, 'modernist large building complexes' (department stores and places of entertainment) were introduced from the West (Wu *et al.*, 2010). The 'slab building type' consists of the monotonous concrete buildings built in the Socialist era, reflecting the Socialist ideology of classlessness and social equality (Pannell, 1977; Xie and Costa, 1993). The two latest building types, 'buildings in traditional style' and 'recent large complexes', were shaped under the conditions of economic boom and conservation control after the Economic Reform in 1978. Buildings of these two types often incorporate traditional architectural features of the area.

The eight building types are well mixed, resulting in an extremely intricate pattern in the area. The micromorphological analysis that follows focuses particularly on the oldest public building complex, the Xuanmiao



**Figure 3. Building types of the Guanqian area. Sources: unpublished map prepared by the Urban Planning Bureau of Suzhou, 2005; field survey by the author, 2011.**

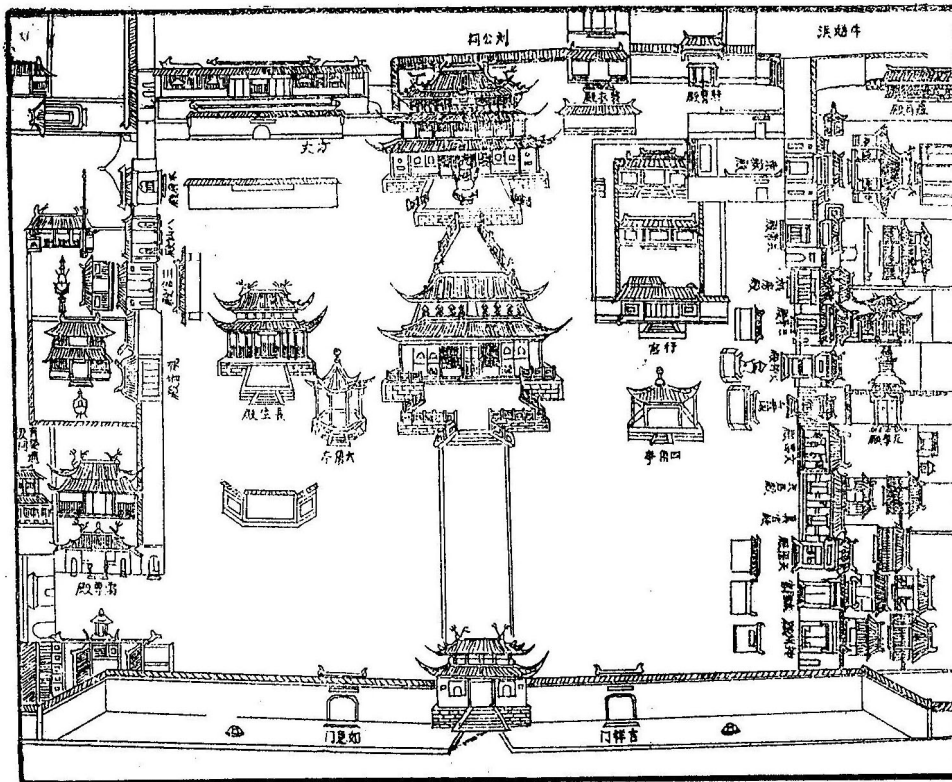
Temple and two historical houses, those of Gu and Ren. However, all eight building types are considered, facilitating a general understanding of how and why building types have emerged, replaced others and co-existed in the Guanqian area.

### The Xuanmiao Temple, Guanqian Street and Gong Lane

The Xuanmiao Temple was built in 276 AD as Zhenqing Daoyuan, a small Taoist court for monks' religious practice (Zhang and Zhang, 1999). Subsequently the temple underwent repeated destruction and reconstruction over nearly 2000 years. In the thirteenth century, the temple complex was significantly expanded as part of the promotion of Taoism by emperors of the Song Dynasty. As portrayed on the Pingjiang Map of 1229, the earliest available map of Suzhou, the complex consisted of several buildings and courtyards. The central axis of the rectangular complex linked the symbolic gate to the south, the main hall (Sanqing Hall) and the secondary hall to

the north, and the main courtyards. The wall of the complex marked the plot boundary. The complex was accessed from Gong Lane ('lane to the temple'), which led to the main entrance and emphasized the central north-south axis. The street that was parallel to the south wall and orthogonal to Gong Lane was Guanqian Street, which acquired that name in 1745 and provided direct access to the complex. A 'T' junction such as this just to the south of a key public building complex was common in traditional China.

A grand three-storey pagoda, Miluo Baoge was built in 1438 to replace the previous secondary hall (Yang and Wang, 1995). This was to re-emphasize the grouping of major buildings in the centre of the city after the palace complex was burnt down in the transition between the Yuan and Ming dynasties (Compiling Committee for the Record of Urban Construction of Suzhou, 1999; Gu, 2000). The pagoda was purely symbolic. The palace to its south was originally the core of the city and was believed to endow it with physical strength for a prosperous future. After being burnt down,



**Figure 4. Pictorial map of Xuanmiao Temple in the first half of the nineteenth century. Reproduced from Compiling Committee for the Gazetteer of Xuanmiao Temple (1984) with the permission of the Committee.**

the palace was, according to the authoritative history *Ming Shi* (Zhang, 1977), forbidden to be rebuilt, as rebuilding could have symbolized the revival of the previous dynasty. The pagoda was conceived as physically completing the symbolic administrative core of the city. It was rebuilt several times on the same site after demolition in wars. It was finally destroyed by fire in 1912, and the Zhongshan Hall, which was on a more modest scale, was built in 1933 on the same site to commemorate the founder of the Republic of China (Jiang and Lin, 1999).

During the first half of the nineteenth century, the temple complex contained 28 single buildings, forming a number of courtyards and occupying 34 840 m<sup>2</sup> (Dong and Bo, 2005) (Figure 4). A group of small buildings was added on the northern part of the site. Within the large open space in the vicinity of Sanqing Hall, single-storey pavilions, incense burners and trees were

placed to support ritual activities. In major ritual events, government officials and social elites prayed there for fortune and blessing. Apart from a Taoist cult, the temple hosted various other functions that contributed greatly to the social interaction among different social and commercial groups at that time (Xu, 2000). In the eighteenth century, the east part of the complex accommodated a textile guild, outside which labourers waited daily to be hired in the textile industry. Also within the complex there were herbal medical services, charities and other small businesses related to Taoist practices (Compiling Committee for the Gazetteer of Xuanmiao Temple, 1984). Guanqian Street was developed to accommodate numerous shops and workshops which benefited from periodic ritual festivals and religious services held in the temple. The social role of the temple was particularly important for the city, because other kinds of public spaces were generally lacking in the

imperial period (Liu, 1989; Wheatley, 1971; Zhuang and Zhang, 2002).

Many buildings were destroyed during wars in the late Republican period, and open courtyards were occupied by temporary shops and stalls during the 1940s and 1970s (Dong and Bo, 2005; Gu, 2000). Especially after 1949, ritual activities were seldom performed and the complex was split into building groups, the use of which was allocated to different state-owned work units (*danweis*) by the government. The physical boundary of the complex collapsed. The author's field survey revealed that some work units constructed walls to separate their buildings and courtyards from those surrounding, and rebuilt buildings within the new walls. Thus the original single plot was split into small plots although land ownership was retained by the state.

From the 1980s onward, Xuanmiao Temple comprised just Sanqing Hall and a small number of surviving historical buildings. It has been preserved and renovated according to the conservation plans proposed by the local government (Ruan and Liu, 2005). Temporary stalls and shops were cleared from the main courtyards (Chen, 2006; Urban Planning Bureau of Suzhou, 1998). The rest of the land was leased to developers to generate revenue. Individual buildings at the perimeter of the complex were replaced by international chain stores, banks and the like (Figure 5). Buildings that were occupied by work units were let for commercial use. Buildings in traditional style have been constructed along the south perimeter (Figure 6), and slab buildings and car parks occupy the north part of the original complex. The construction of two different building types in the same period reflects the fact that the preservation of traditional images is considered more important in the southern part of the temple complex than in the north, presumably because the temple was traditionally approached from the south.

Both Guanqian Street and Gong Lane experienced a more radical process of building renovation than the temple complex. This was partly a consequence of government-led development of the area facilitated by the

construction of the modern railway connecting Shanghai and inland cities via Suzhou in 1908 (Compiling Committee for the Record of Urban Construction of Suzhou, 1999). Before the 1930s, Guanqian Street was a narrow lane, 3 m wide, defined by two-storey timber shop buildings with residential functions at the rear (Xu, 2005, p. 41). The widening of the street began around 1930 and was enhanced in 1944 by the Nationalist government, when the street became 9 to 13 m wide. At that time buildings of two or three storeys in Western eclectic style were constructed (Chen, 2006, p. 130; Compiling Committee for the Record of Urban Construction of Suzhou, 1999). Seventeen modern banks in a new building type moved in (Yang and Wang, 1995), and Chengde *lilong* houses replaced some of the traditional *tianjin* courtyard houses facing Guanqian Street. The Beiju area to the south-west of the temple, adjacent to Guanqian Street, was redeveloped to accommodate modern department stores, theatres and cinemas in a new type of 'modernist building complex' (Figure 7). The traditional small plots of this area were inevitably amalgamated to accommodate these newly introduced functions and building type. Five modernist building complexes in the Beiju area formed a modern civic square of 400 m<sup>2</sup> in the centre – a new type of public space in China. Similar replacement with modern building types and commerce occurred in Gong Lane and several other streets in the city. Subsequent widening and renovation of Guanqian Street took place between 1998 and 2002. This followed the conservation guidance for Suzhou launched in 1982, one of the first such documents in China (Chen, 2003; Ruan and Liu, 2005). Parts of the temple were also renovated. The symbolic gates were reconstructed and set back from the street. Shops on Guanqian Street and Gong Lane, which was widened from 7 to 14 m, were replaced by shops in traditional architectural style. A total of 46 000 m<sup>2</sup> of old buildings, made up of previous work units and traditional houses, were demolished and residents displaced (Suzhou Urban and Rural Development Archive, 2003). This facelift project reorganized the traditional blocks to create



**Figure 5. Xuanmiao Temple complex and present plot subdivision. Sources: unpublished map of Suzhou prepared by the Urban Planning Bureau of Suzhou, 2005; field survey by the author, 2011.**



**Figure 6. Existing buildings in Chinese traditional style in Guanqian Street. Photograph by the author, January 2011.**



**Figure 7. Kaiming theatre, built in 1958: a typical modernist building in the Beiju area. Photograph by the author, March 2011.**

more street-facing plots on Guanqian Street and other nearby streets while maintaining the general gridiron pattern of the area. The Chengde *lilong* houses and the temple complex survived the change.

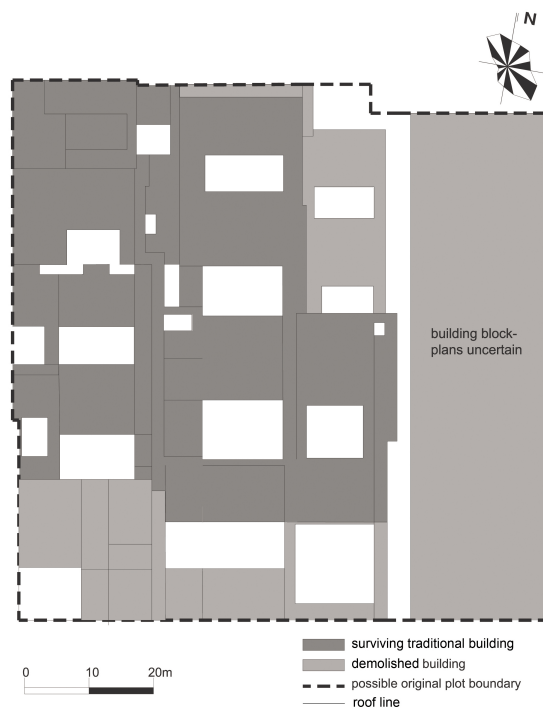
### **Gu's and Ren's houses, Remin Road and Ganjiang Road**

Located at the intersection of the current thoroughfares of Remin Road and Ganjiang Road, Gu's and Ren's houses were built in the 1870s and 1880s as typical *tianjin* courtyard houses (Property Management Bureau of Suzhou, 2004). This house type consisted of several one- or two-storey timber buildings arranged sequentially in a north-south direction, forming a series of small courtyards. The number of buildings and the size of the complex reflected the wealth and social status of the family. Such houses were generally entered from the south lane, with complementary doorways facing the north lane for servants or casual access. What made this type different from other courtyard house types in China was that the courtyards were generally deep in relation to surrounding buildings, creating well-like spaces to help ameliorate the

warm and humid weather. Gu's and Ren's houses were separated by an extremely narrow lane and shared the same south and north lanes for access.

Gu, a scholar bureaucrat of the Qing Dynasty, bought the land which previously housed the Memorial Temple of Chunshen and several ordinary houses. He built the family house on the site around 1870. The complex now comprises 15 buildings and 13 courtyards arranged in four parallel north-south oriented series, occupying over 4000 m<sup>2</sup> (Property Management Bureau of Suzhou, 2004). High-quality timber was used and the buildings were elaborately decorated. The house accommodated four generations of Gu's family and also his art collections, an ancestor hall and a private charity. In 1874, Gu bought an additional 6700 m<sup>2</sup> to the north of his house which formed a private garden, Yi Garden (Liu, 2005; Wei, 2005). The house complex and the garden were separated by a small lane. Later, two buildings at the north-east corner of Gu's house were burnt down and not rebuilt (Compiling Committee for Suzhou Gazetteer, 1995) (Figure 8).

Ren, also a scholar bureaucrat of the Qing Dynasty, built his house next to Gu's several years later (Property Management Bureau of

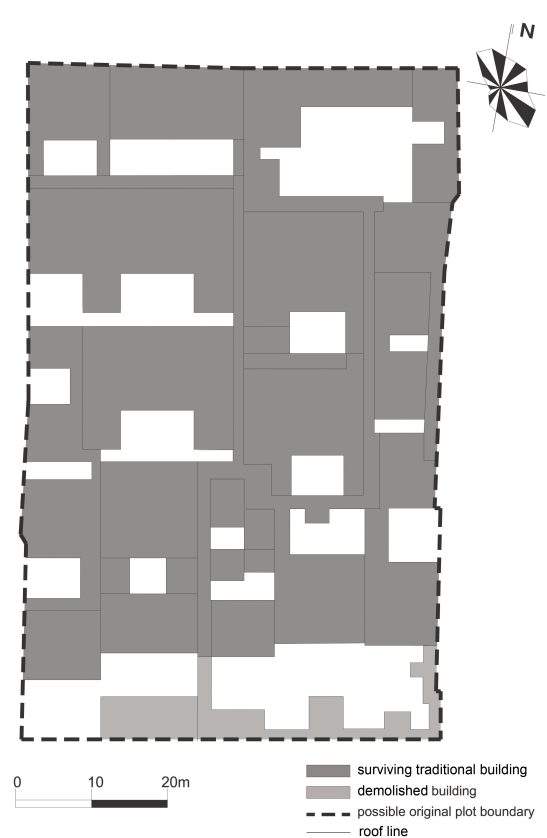


**Figure 8. Building block-plan of Gu's house with demolished parts highlighted. Adapted from a plan prepared by Property Management Bureau of Suzhou (2004, p. 204).**

Suzhou, 2004) (Figure 9). Ren's house currently consists of 23 buildings and 21 courtyards arranged in four parallel north-south oriented series. The house currently occupies about 3750 m<sup>2</sup>. A small private garden in the south-east corner of the complex connects to the main entrance.

The ownership of both Gu's and Ren's houses was transferred to the state after 1949, and the houses were occupied by employees of the state-owned work units (Compiling Committee for Suzhou Gazetteer, 1995). Yi garden was restored by the government and opened to the public in 1953 as one of the classic gardens of Suzhou (Yang and Wang, 1995). Since 1982, the two houses have been preserved and managed by the government and the residents of the work units have been displaced (Compiling Committee for Suzhou Gazetteer, 1995).

Adjacent to Gu's house and garden, Renmin Road was only 3 m wide before 1928. The modern railway to the north of the walled city



**Figure 9. Building block-plan of Ren's house with demolished parts highlighted. Adapted from a plan prepared by Property Management Bureau of Suzhou (2004, p. 212).**

brought economic opportunities, but put pressure on the city's infrastructure. The Nationalist government intended to turn this north-south lane into a thoroughfare to connect the railway station with the inner area of the city. This plan was implemented in several stages between 1928 and 1941 (Compiling Committee for Suzhou Gazetteer, 1995). Between 1951 and 1979, the Communist government continued the work and the road became a main street, 30 to 40 m wide (Chen, 2006). Traditional buildings were demolished alongside the road, including the eastern part of Gu's house. Land was divided into parcels for redevelopment, dramatically changing the ratio of building height to street width (Xu, 2005, pp. 64-5). To meet the need for east-west thoroughfares in the city, during 1988 to 2000, the south lane of Gu's and Ren's houses was widened to become Ganjiang Road, a



**Figure 10. Gu's and Ren's houses and the subdivided plots in their present form. Sources: unpublished plan prepared by the Urban Planning Bureau of Suzhou, 2005; field survey by the author, 2011.**

dual-carriageway 40 m wide (Chen, 1999; Tan and Qi, 1997). To provide space for the road widening, the southern parts of the two house complexes and the eastern part of Gu's house were demolished with the government's permission. Land alongside Ganjiang Road was cleared and building types constructed that incorporated traditional features. The new roads stimulated land price increases. Consequently, other sites in the street blocks that accommodated the two houses and Yi Garden were soon occupied by new commercial buildings, although the majority of the original houses and the garden remained inside the blocks (Figure 10). The ownership of land by the state made this transformation possible.

### Conclusion

Why then did some urban elements persist and others change? The three case studies in the Guanqian area reveal the significance of the inherited rough gridiron street network; the solid building mass in the geometric centre (the palace and the Xuanmiao Temple); and the 'T' shape arrangement of streets (Gong Lane as the central axis and Guanqian Street). When the city was planned and built, these elements were determined by social and political ideology embedded in traditional philosophies and cultural custom. They acted as morphological frames providing constraints to or influencing the form of future develop-

ment (Conzen, 1969). Even after the city had lost its political status as a capital city, such elements persisted because they were deeply imprinted in the culture, as witnessed in the demolition of the imperial palace and the emergence of Miluo Baoge. Furthermore, great attention was continuously paid to Gong Lane and Guanqian Street in the course of renovation and development. The image of the buildings alongside them was carefully controlled to maintain a historical appearance, while that of buildings to the north of the temple received less attention. The 'T' shape arrangement of the two streets persisted through periods of change, whereas in the Beiju area modernist building types and the civic square were introduced. Planning decisions on what to preserve and what to change were based on the recognition of such important urban elements, which became significant in design and conservation strategies. Nevertheless, in recent times there has been a gradual decline in the protection given to such elements. The redevelopment of the site of the palace failed to take account of the axial street and historical central axis. The Xuanmiao Temple is less clearly recognizable owing to major recent buildings around it.

The case studies also reveal the changing plot patterns over the course of history. Significant in this respect have been changes in land ownership after 1949 and in land-use rights since the 1980s. The temple was within a very large walled plot in the imperial period although it accommodated various functions. The wall as a physical boundary ensured the clarity of inner courtyard spaces and outer urban spaces. After 1949, the original plot was subdivided into small plots, some of which were walled off and managed by individual work units. As a result, the distinction between the inner courtyards and the outer urban spaces was reduced. The new plots at the perimeter of the temple complex have been redeveloped to accommodate commercial building types and this has posed difficulties for conservation. The same phenomenon is observed in the two house complexes, where the surrounding area was

transformed after the transfer of ownership to the state. Considerable parts of the houses and the garden were either redeveloped as new thoroughfares were constructed or were adapted for commercial use. The remaining parts of the houses became cultural museums.

The process of transformation of the study sites, accords with the resilience of the traditional street network and building types in the traditional part of Suzhou more generally. Both street widening and plot subdivision occurred within the general gridiron pattern of streets, and this has helped to preserve the structure of the historical city. Though the traditional scale of streets and buildings was altered, the pattern of street blocks was able to accommodate the demands of modernization. The traditional courtyard building type of both public and private buildings allowed partial replacement and functional change. To an extent more evident than in many Western cities, plots have changed while buildings have remained intact. Nevertheless, conservation is facing great challenges, such as the ambiguity in the boundaries between public and private spaces, and the superficiality of cultural images.

Finally, what conclusions can be offered about micromorphological analysis as an aid to understanding long-term changes to Chinese urban form? In the absence of true historical ground plans, it has proved possible in the studies pursued here to employ other sources to help make sense of how buildings have been added, removed and replaced over time; how plots have been subdivided or altered; and why specific urban elements have persisted. Like all micromorphological analysis this needs to be seen in relation to continuity and change, and socio-economic and political factors, especially at the local level. In this way a contribution can be made to understanding, and thereby inform conservation and design decision-making in the future. This paper is indicative of the possibilities for detailed study of Chinese urban form, but a great deal more needs to be done in other Chinese cities to uncover other micromorphological sources and further explore the conclusions drawn here.

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## Fifteenth International Planning History Conference, São Paulo, Brazil, 15-18 July 2012.

Over 300 delegates from more than 30 countries travelled to São Paulo for this gathering of planning historians. With its attention to various urban design themes, and processes of change *and* continuity in relation to the design of built environments, the conference provided much in the way of interest for urban morphologists.

Opened by the Gordon Cherry Memorial Lecture by Stephen Ward (Oxford Brookes University) on 'Cities as planning models', the conference had as its core theme 'Cities, regions, and nations in planning history'. A great deal of attention was given to the theory and practice of urban design, in particular the dual process of learning and imagining what 'good' city forms and planning have been. Ward demonstrated that to thoroughly grasp planning models necessitated much knowledge of cultural attainment, taste, and how urban forms are composed. He asked delegates to consider why some cities have become urban models, how they have been promoted as urban models, and whether indeed they are the most creative cities in terms of environmental design. Such points were further explored by numerous other speakers, amongst whom were plenary session presenters Florian Urban (Glasgow School of Art) and Nihal Perera (Ball State University). With reference to Colombo in Sri Lanka, Perera revealed how urban space has been manufactured, and how the perceived successful nature of spatial design in Colombo had led to its exportation into India and Burma (principally Calcutta and Rangoon). With reference to the European context, Urban ventured to explain why planners, architects, and municipal governments in places such as Berlin and Paris consider historic urban fabrics to be 'acceptable urban forms'.

Much thought was given to colonial and post-

colonial urban arrangements in South America. Macarena Ibarra Alonso (Catholic University of Chile) and Adrian Gorelik (Quilmes National University) helped reveal many of the influences and meanings behind colonial and post-colonial urban forms. The foreign influences that have shaped environments in Brazil since independence from Portugal were highlighted by Mervyn Miller (Letchworth Garden City Society), Renato Leão Rego (University of Maringa), Milena Kanashiro (Londrina State University), and Staël Alvaranga de Pereira Costa (Federal University of Minas Gerais). Miller, for instance, discussed the influence of the British landscape in the work of Barry Parker in São Paulo in the 1920s, especially in the creation of landscaped roadways in the Jardim America estate. Alvaranga de Pereira Costa in comparison explored neighbourhood density differences as well as visual elements in the settlement of Nova Lima, which was developed in proximity to Belo Horizonte from the 1830s by the British-owned Saint John Del Rey Mining Company. Many speakers noted the importation of planning ideas, policies and urban forms to South America, and conceptual connectivities to other parts of the world were explored for countries such as Brazil, Argentina and Chile.

The next International Planning History Conference will be in St Augustin, USA. Like the São Paulo conference, it is likely to be of interest to morphologists interested in both abstract and technical criteria behind the establishment of urban environments.

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