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SHANGHAI’S LANEWAY HOUSING: ITS DESIGN, OCCUPATION AND DEMOLITION

Shanghai’s lilong housing built between the 1850’s and 1930’s is a unique typology, characteristic of the city. Large scale demolition of this housing has been in progress for twenty years as part of a development trajectory aimed at situating Shanghai as a global city with an exceptional culture and history. It will eventually result in the disappearance of the early and most characteristic examples of this form. This paper analyses the extent that the demolition is being driven by perceptions of this housing as an archaic form or an element of the past better erased. It examines the extent of the effect of the condition of the housing stock, associations with foreign concession times, economic factors and cultural attitudes toward new and old in decisions to demolish. It also considers why the new construction differs so dramatically from the previous fabric of the city. The demolition is not simply due to the unsuitability of the model and style of the housing. Equally, it should not be regarded as just another example of the reconstructions attempted by Haussmann in Paris and Moses in New York.

Demolition, as much as construction, is part of the Shanghai streetscape and this presence is analysed as a “space of demolition” with characteristic aesthetics, ephemerality, animation and exposure. It also includes critical aspects of the space and time of demolition, exhibiting a set of characteristics which set it apart from the everyday spaces of the city. An analysis of the history of the site and its place in the fabric of the city provides the basis for understanding the nature of the critique that it offers and its impact outside the space of demolition itself on the city beyond.
Introduction

Shanghai is undergoing a comprehensive rebuilding of the former Concession areas that have seen the wholesale demolition of traditional housing forms and large-scale alteration of the urban fabric. This landscape of demolition has become an integral part of the Shanghai streetscape for over 20 years. This paper is an investigation into the drivers and effect of demolition, both in the transitory, dynamic space it creates and in the associated physical rearrangement of the fabric and networks of the city. The first section establishes what is being demolished, considering the major characteristics of the typology and its qualities at the time of its fullest implementation in the late 1940s. The progression of subsequent gradual changes, major road building in the early 1990s then the commencement of large-scale demolitions in the late 1990s is traced. The second section examines the factors leading to the large-scale demolition as the preferred means of urban regeneration and the final section considers characteristics and effect of this large scale and ubiquitous space.

The Housing Form

The housing and its arrangement in the concession areas is highly characteristic of the city. The combination of historical, architectural and factors in the design produced an arrangement with a graduated, multi-staged transition from public to private space generally absent in Western housing. This lilong housing provides a model for low-rise high density housing which demonstrates a qualitative difference in the levels of privacy and walkability from medium and high-rise tower block types replacing it.

Following the signing of the Nanjing Treaty at the conclusion of the Opium Wars in 1842, the English, American and French took up concessions in Shanghai in the 1840s. The housing was commissioned by the English and later American and French concessions holders in the foreign concessions areas as developer landlords whose clients were the Chinese refugees flooding Shanghai in the wake of the Small Swords and Taiping rebellions in the 1850s and 1860s and subsequently further refugees and immigrants drawn by the safety and opportunity offered by Shanghai. The houses themselves were modified versions of traditional Jiangnan (i.e. south of the Yangtze River) sanheyuan (wings around three sides of a walled courtyard) housing. In the single house form this had made a limited appearance in Shanghai prior to the Concession era, however in Concession times were developed initially in rows and subsequently in clusters of rows to make the characteristic lilong (also referred to as linong) block form with its orthogonal internal laneways. The term shikumen is applied to those dwelling forms where the dwelling entry was through a courtyard which was part of the dwelling space via a large stone framed gate (the shikumen). In these forms, entries to lilongs from the main street was generally through a similarly framed entry portal. These formed the majority of the dwellings built prior to 1900.

The plan form of “old style” i.e. early shikumen closely followed the sanheyuan in that it was comprised of three wings enclosing three sides of a courtyard, the fourth side being closed by a gated wall. In old style shikumen housing, the courtyard dimensions were reduced in line with restricted urban block sizes, thereby matching the building module (the jian, typically around 4m). (The courtyards are referred to as tianjin [skywells].) These early forms were three jian houses. While utilising traditional modules, the structure consisted of traditional timber structural frame with infill walls, initially timber, subsequently rendered then exposed “blue,” or rather grey coloured bricks (later incorporating Western style red bricks.) The lilong houses were arranged in single loaded rows, with entries generally facing south and rear doors facing north, in accordance with Chinese principles and in contrast to the back-to-back arrangement of English terrace housing.
There are varying positions regarding the influence of English terrace row housing on the development of the housing type and lanlan form. A number of factors lend weight to the view that the outcome is the result of the traditional sanheyuan form adjusted to the urban constraints and to maximise financial returns available. Characteristics such as the construction in single rows rather than back to back housing, orientation with the door to the south wherever possible, courtyards and use of the traditional Chinese timber structural frame identify it as a distinct typology. The appearance in early Concession times of examples of the form in the Chinese city is evidence of an early adoption of the form in areas with no European involvement. In a study of the development of the form, Feng Qui assessed the reasons as:

After carefully studying the evolution process of Linong housing, we posit, that the emergence of Linong is, for the most part, the spontaneous result of the transformation of traditional Chinese habitat under the pressure of land speculation, but also the evolution of the traditional type, which is conditioned by local morphological conditions. The Linong embodies indigenous Chinese dwelling culture and behavior.

The housing built in the concession areas over the period 1850s to 1930s developed through a series of styles, consistent within the style but with marked differences between them. The crucial aspects for the following discussion revolve around the degree to which they are distinctive of Shanghai and strongly incorporated the associated social organisation that is strongest in forming the Shanghai identity. A comprehensive treatment of the house with plan, elevation and section drawings and a detailed treatment of the variations was undertaken by Zhao among others.

The typology developed through five variations over the 100 years of the concessions, which trace a change from a highly formal walled courtyard based form through continuous rows of houses without the walled courtyard, to separate villa units. The significance of this development for the topography of present-day Shanghai is twofold. In the first instance, the extent and type of enclosure changed qualitatively between the early and late types, changing the relationship between the public and private spaces which is a key characteristic of the form. And secondly, the lists of “Outstanding Historical Architecture” in progressively issued conservation listings show a strong emphasis to the latter period housing, and it is mainly this latter, less characteristic form that will be preserved in the future fabric of Shanghai. The categorisation in the following analysis is in accordance with the schema laid down in the Office of the Shanghai Municipal Archives “Record of Shanghai Housing Construction” which is followed closely in the English language research of Qian Guan.
The earliest and most characteristic forms incorporate the most complex relationship between the public and private spaces and the transition between them. The two earliest forms were both characterized by a laneway wall with an entrance gate opening into a courtyard. The Old Style Shikumen are typically 3 jian (5 metre structural modules) wide, constructed in rows typically 3m apart with a 5m high courtyard wall incorporating a stone framed timber plank gate. They utilise a timber structural frame. Very early styles had timber walls but most extant examples are of the later brick wall construction. They were usually built without bathrooms. The New Shikumen house appeared from 1911 and there are smaller single jian dwellings with a minimal front courtyard, constructed with brick and concrete walls and timber roof structure.

These housing forms were built in blocks, with the major bounding streets have a fringe of shop houses comprised of ground level shops with upstairs residence(s). The typical internal arrangement of the block comprises a major north south internal lane with a series of broadly east west smaller lanes. Depending on the extent of the development lot within the overall street block, these east west lanes are either dead ends or extend to the bounding north south street. They reflect a complex combination of the traditional relationship between the house and the street and the internal organisation demonstrated in the siheyuan form, (the four sided courtyard form prevalent in Beijing among other locations). However, some of the less private spaces within the siheyuan are displaced into the semi-private space of the lilong. The configuration results in a semi-public north south internal lane, on occasion along with some retail catering mainly to the local inhabitants and some external customers. The smaller east west lanes are semi-private, well surveilled with non-residents observable and noted, “a benign Panopticon.” As well as being a space for cooking and laundry, since many of the developments are without an internal laundry or kitchen, it was a space for casual meetings, play, and in the nineteenth century at least, courtesan houses.

Subsequent forms were sited in a structure of laneways within the block, but the relation to the lane was no longer mediated by a wall and courtyard. New Type Lilong Houses are of varying widths, typically 3 stories high with some changes to the internal arrangement. They incorporate gardens and increasing instances of western ornamentation.
Inclusion of bathrooms, gas kitchens and in some cases, garages appear in these houses. The later Garden Lilong House was typically 3 stories high and freestanding villas. Apartment Lilong Houses appear within the laneway block structure. These are typically 4 or 5-storey concrete construction with full facilities and appear in both row and point block styles.


This housing and urban form reached its fullest expression in the late 1940s, following the end of World War II and the Japanese occupation. After the founding of the People’s Republic of China in 1949, construction and development of this housing form ceased, with the common model being apartment housing, often in the form of danwei housing, where a workplace would have attached housing and often schools and other facilities. Generally this construction occurred outside the concession areas although in some cases, particularly in the French Concession, there was demolition of laneway housing.

The original composition and subsequent demolition has been examined in a 1km square case study area in the western part of the former American Concession (later incorporated into the International Concession area). The “Office of Shanghai Chronicles” lists 200 lilongs in this area, constructed between 1860 and 1942, with 85 percent of the constructed area built between 1911 and 1937.

Detailed maps from the time show warehouses, factories, smaller workshops, schools, hospitals embedded in the fabric. In addition to locations on the main street frontages, some of these were embedded deeper in the laneway fabric with no street frontage and accessed solely via the smaller laneways. The pattern of the streets and lanes in Fig. 4 shows the strongly hierarchical pattern of the streets and lanes with the disruptions of the larger non-residential sites.
An amalgamation of data in the 1947 “Compendium of Shanghai Manufacturing Firms”\textsuperscript{11} and the “Shanghai Manufacturer's Directory”\textsuperscript{12} indicates that by 1947, small workshops such as printing works, small textile manufacture and dyeing works, and hardware manufacturers were located throughout the case study area, often deep in the laneway structure rather than on the main street frontages. For the most part, these were small scale and interspersed in the rows of primarily residential housing. These operated without major external changes to the building form. Over the subsequent 40 years, these workshops reverted to residential use.

An early project on the commencement of economic reforms from 1991 was the development of the road transport infrastructure and a year later, saw the construction of the first of the major expressways in Shanghai and widening of selected local roads from 1992-93. In the case study area, this affected the housing immediately adjoining Xizang North Rd and Haining Road, which experienced strips of housing demolished adjoining these roads. Outside the case study area, road building included cutting through built areas rather than being confined to the widening of existing roads. As with Haussmann in Paris in the 1850s to 1870s, the demolition was focused on the road alignment rather than being a wholesale demolition of whole blocks and large areas of buildings inside these new or widened roads remained. From 1995, demolition in Shanghai was characterised by complete clearing of entire blocks of laneway housing. This is particularly evident in the case study area where 150 metre by 150 metre blocks were cleared as a single large scale demolition. In some cases, simultaneous clearing of contiguous blocks resulted in streetscapes formed of demolition sites several hundred metres long.

Drivers of Demolition

The ubiquity and primacy of the laneway housing form from the 1860s to the 1940s indicates a type of success of this typology over an extended period of time. However the development of Shanghai from the 1990s saw this progressive, ongoing demolition of the form. Statements from successive mayors regarding the development trajectory and urban renewal practices of the past 20 years demonstrate the alignment of demolition and development decisions with the pursuit of status as a global city characterized by exceptional history and culture. Mayor Huang Ju said in 1993 that the, “Shanghai of the future must be a metropolis equal to New York or London … an oriental Manhattan,” with the aim to “revive the past glories of Shanghai and make the city an international metropolis of the 21st century.”\textsuperscript{13} To do this, Shanghai drew on the most cosmopolitan era of the past – the 1930s.

The living conditions, particularly in the earlier forms of the lilong housing are not well aligned with this development direction. The earlier types were in the main unsewered and housing pressure had led to cramped living conditions. Houses were modified to accommodate multiple families and subletting became common. In 1937, 86% of houses recorded multiple families living in the one house.\textsuperscript{14} Zhao records and documents the existence of standard internal modifications to accommodate multiple families.\textsuperscript{15} Living space per person in 1985 remained at 5.2m\textsuperscript{2}, rising to 8.8m\textsuperscript{2} by 1997.\textsuperscript{16} The economics of building favour high rise development rather than refurbishment or rebuilding of the form. A refurbishment exercise was carried at out at Bugao Li (also known as Cite Bourgogne) and Jianye Li was rebuilt, however neither have become the model for larger scale adoption of these practices.

Whilst there are Asian instances of demolition specifically aimed at erasing the memory or works of a colonising or invading power, there is no evidence that this is operative in the decisions on areas to demolish in Shanghai. Despite being built in the Concessions, they maintained a strong connection with the Jiangnan form in spite of the extended row form and the Chinese builders used substantially traditional methods. In any case, the “Lists of Outstanding Historical Architecture” contain many examples of buildings designed by foreign architects and constructed during the Concession eras (even if those lists are lacking in the earlier forms of shikumen housing). Despite foreign links, they are primarily now connected with the thriving Shanghai of the 1930s and are therefore strongly aligned with the stated development trajectory. These links have been no barrier to their preservation.

As part of a 23-block redevelopment in the former French Concession, the 2-block Xintiandi complex is a mixture of refurbished and rebuilt shikumen housing and new construction, opened in 2002. This is a successful high end shopping and eating complex.\textsuperscript{17} Whilst the streetlife is not preserved, the form has presented the housing in a rehabilitated form and generated popular interest. Subsequent batches of the “Lists of Outstanding Historical Architecture” have included increasing entries of the form.
The indications of the sort of buildings and the aspects of the past with which they are most strongly associated with, along with the image of a global Shanghai, are evident in these lists of worthy buildings published progressively from 1993, with the batch 5 being issued in March 2015. Additionally, lists of preservation areas date back to 1993 and continue to be referenced in the 2040 plan and a streetscape (as opposed to building) preservation list was issued in 2015.18

The later batches show an increasing proportion of entries for housing however the proportion and raw amount of the most characteristic old style shikumen are low. The implication is twofold: as the inner concession areas were predominately old style, whereas the outer areas e.g. the western part of the French Concession, were predominantly garden or villa styles, the skewing toward the later styles, by implication, means a heavier demolition in the inner areas. Secondly, few examples of the older style shikumen housing will remain. The examples that do remain, will be in isolated groups, located among new tower blocks in garden settings, thus even if the form remains, the street continuity and block context will be lost.

The Landscape of Demolition

Demolition is a ubiquitous part of the Shanghai landscape and has been since the mid 1990s. In the pre-1949 areas of the city, the demolition site is the inevitable counterpart of the new construction. This demolition proceeds on a block-by-block rather than building-by-building basis. Areas vary, but typically 200m x 200m (40,000m², 4ha) may be demolished as one site.

William Gibson, in his introduction to Greg Girard’s photographs of the large scale demolition of lilong housing in Shanghai, described the experience of looking at the photographs: “[E]very time I open it and start looking through them, its as though my head falls off. … Phantom Shanghai is the actual vanishing, the hideous twenty-first century hat-trick itself. I think of the line of dawn rushing through the desert, causing stones to explode.”19

FIGURE 5 Time Phased Demolition of Suzhou Creek North Area. Map produced by author using QGIS Geographic Information System. Open Source Geospatial Foundation Project software. Streets are from OpenStreetMap® open data, licensed under the Open Data Commons Open Database License (ODbL) by the OpenStreetMap Foundation (OSMF). As CC BY-SA, © OpenStreetMap contributors.
The scale of the demolition is such that the disruption to the streetscape is not that of a single building but a full block street frontage. Based on a three-year cycle of demolition, the residents of the study area in Fig. 1 live in an area where there has been significant demolition areas and affected street frontages for a period of fifteen years. There is a well-understood progression to the demolition process. Firstly, the character for demolition (chai, 拆) is painted on the walls, Notices are pasted up and banners relating to the urban development and co-operation are hung. The entrances to businesses fronting the main encircling streets are bricked up progressively as relocation arrangements are settled and shop owners move on and the shop signs removed. In some cases, piles of bamboo scaffolding arrive.

Residents start to move out. The liveliness of the street starts to diminish. The demolition proceeds to the extent that residents have relocated. Hoardings on the street boundary are usually not yet in place and the site is open to the view and access is porous. The old entries and exits remain open, with some new ones. In contrast to the demolition sites in the west, this is not an unoccupied site. Some businesses continue to operate – the food stalls in a building already missing its roof in Zhejiang Lu in the demolition of late 2015, the peanut seller in Shanxi Bei Lu in 2014, sustained by the demolition workers, the hairdresser down the lane. The remainders include the residences of those holding out for a better relocation deal. Vacated residences are a mixture of demolished and partly demolished structures. In the early stages, the forms of the demolition derive from the original design despite elements of randomness of the demolition process. The demolition however proceeds with some care. Rather than demolish the building in the shortest possible time, it proceeds in a manner to allow the sorting of materials for reuse and recycling, instead of extracting them from a pile of assorted rubble. This process, in part, controls the form of the landscape. Timber, steel, copper, bricks, doors are gathered into groups.

Despite the Gibson metaphor of the line dawn, rather than demolition commencing at one corner of the site and progressing across it, in fact, the emergent forms are the result of a number of factors working together. This includes the material recovery, the sequence of residents leaving the site, any buildings to be preserved on site, and action to empty dwellings and shops uninhabitable as quickly as possible by single smaller but effective moves. The workers return later to demolish the bulk of the building. The net result is a site with a mixture of open space, buildings without a roof, buildings, particularly fronting the street without front walls, isolated buildings, piles of brick and concrete rubble, often up to first floor level, sorted material, stacks of timber for recycling, doors for reuse. As time goes on, the open space percentage increases; the piles of rubble diminish. Families can be seen picking over the rubble for any items of value. The scene continues for several hundred metres down the street, the homes of former neighbours.

The interior of the block is exposed (even though in terms of the time of construction, these may not be the oldest) as any modern fringe of refurbishment is removed. The nature of the former laneway structure with its embedded warehouses and the like is emphasized when a building deep in the block is revealed. At night, the few lights mark the residences of those yet to accept relocation. People can be seen walking across the site, faces lit by mobile phone. As connected groups of houses are demolished, the trace of those houses are visible, imprinted on the walls of the isolated houses that remain – outlines of brickwork, staircases, rooflines. Some rooms are shown cut in half, with the interiors revealed. The furniture is gone and timberwork stripped, but posters pasted on the wall remain. Some are advertisements, some posters of singers and movie stars, some date back to Mao era publications. It is often the street-facing wall that is removed, thus this opening up of the formerly private becomes one of the prominent features of this landscape. The traces of the formerly attached building provide the basis of a visual continuity. These areas also act as a material / physical manifestation of the development direction and strategy of the city.
The particular configuration of this landscape has introduced to the consciousness of the inhabitants of the city an aesthetic of the fragmentary and the disordered. Though demolition may be distinguished from ruins by the exercise of power reflected in demolition as opposed to the lack of power to act associated with ruins, aspects of the binary nature of ruins also apply to the demolition site. “Ruins merrily transgress and collapse a whole set of binaries: transience/persistence, nature/culture, attraction/repulsion, power/vulnerability, potential/purposelessness, abandonment/appropriation, presence/absence, aestheticization/abjection.” There is a point at which the demolition becomes generic and loses its relationship to the specifics of the pre-demolition state. Jean Baudrillard writes regarding the Berlin Wall: “Every other abandoned urban zone offers the same spectacle. The most amazing thing is that history is being antiquated as vague terrain…I view this wall with astonishment, and I no longer manage to remember anything.” The question then becomes, “What will persist?”

The dilemma in Shanghai is that even if the form remains in something more than the odd isolated single lilong, modern city life has changed to the extent that life is not and cannot persist or be expressed within that form in the same way as it was pre-1949 or even pre-1995. In asking: “How do we find our (historical) bearings in post demolition Shanghai?” Mark Crinson answers his own question “In the dialectics of demolition, there will always be the debris, the loose threads, the drips, the dust – these are the remains of last things, these are what we must come to love most of all, these are the stuff of which memories are made.” When the demolition is finished there will be time to draw breath before the next round of re-invention. All will be somewhat new, but scaled and connected differently. The period of demolition not only has demanded attention because of its scale and ubiquity, but that attention enables the examples that do remain to strongly trigger memories of the former ubiquity and significance of the form.
Postscript

There is a marker in Changping Lu near Shaanxi Bei Lu on the edge of a demolition site that uses a shikumen gate form with broken edged courtyard wall brickwork attached, along with bas-relief sculptures. It acts as much a marker to the demolition as to the habitation. It could be considered to be a constructed ruin, and therefore able to act “in order to dramatize its difference from the past. Ruins can function as signatures of historical breaks, but such breaks paradoxically rest on the continuous presence of the past within the present.”26 In Shanghai, these multiple meanings enable it to act as a marker of future progress.

Endnotes

1 Sun Ping (ed. 孙平), Shanghai chengshi guihua zhi [Gazeteer of urban planning in Shanghai], (Shanghai: Shanghai shehui kexueyuan chubanshe 1999), 56.

2 Office of Shanghai Chronicles “上海住宅建设志”[Record of Shanghai Housing Construction], http://www.shtong.gov.cn/node2/node2245/node75091/node75094/index.html (Accessed 28 February 2016), This lists shikumen construction in the Chinese city dated 1876.


9 This comprises the area of the Concession to the west of Henan Rd North. The other bounding roads, Suzhou Rd North, Xizang Rd North and Tianmu Rd were boundaries of this concession.

10 Office of Shanghai Chronicles “上海住宅建设志虹口区”[Shanghai Housing Construction Record, Hongkou District], http://www.shtong.gov.cn/node2/node2245/node75091/node75110/node75188/node75190/userobject1ai90078.html (Accessed March 1, 2016).


12 Shanghai Manufacturer’s Directory (Shanghai Municipal Chamber of Commerce, 1947).


15 Zhao, “From shikumen to new-style.” 87.


17 Xintiandi is discussed in detail in X. Ren, “Forward to the Past: Historical preservation in globalizing Shanghai,” 2006, University of California International and Area Studies 04-14-2006 available from http://escholarship.org/uc/item/84z0j8tv.


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20 Figure 2 is presented in the form of a detailed lot-by-lot mapping, based on a visual analysis of a series of aerial photos. (A larger scale but thicker grained computer based detection method which presents a similar picture of change in the former concession areas is presented in Antoine, L, Courty, N & Corpetti, T 2013, “Monitoring urban transformation in the old foreign concessions of Shanghai from 1987 to 2012,” ISRSE35 - International Symposium on Remote Sensing for Environment - Earth observation and Global Environmental Change.

21 In the case study area, the former Hualian Xintai Warehouse behind Xintai Lu 57 appeared in this manner. It was listed in “List of Outstanding Historical Architecture Batch 3.”


24 M. Crinson, Urban Memory History and Amnesia in the Modern City (Florence : Taylor and Francis, 2005), 11.

25 Crinson, Urban Memory History and Amnesia in the Modern City, 18.