




Tina Kanagaratnam

INDEPENDENT SCHOLAR

 <https://orcid.org/0000-0002-0434-4519>

Bricks in the Shanghai Landscape: Revealing the City's Shifting Identities

Abstract: This paper considers the parallels between the changes in Shanghai's brick usage through history and the city's shifting identities. Taking a new angle on studies of the Chinese wall, the author looks at the most basic element of the wall – the brick – in the context of Shanghai's social and political history and postcolonial theory and proposes that it was the changes in the city's identity, precipitated by both internal and external forces, that have ultimately driven the selection and subsequent interpretation of brick types during different periods of history. This paper also considers how brick usage is employed today to re-interpret history and define heritage.

Keywords: bricks, Shanghai, *lilong*, material history, Hai-Pai

China is known for its walls, “a land operated by walls since ancient times” (Shan 2018). These walls, from the macroscale to the microscale, were built to simultaneously defend and protect: the Great Wall protected a nation, defending against foreign threats; walled cities protected citizens against local threats; courtyard walls provided security for families. Yet despite their fame and the scholarship conducted on the topic of China's walls, the elements that make up those walls are rarely considered: bricks. This paper will address a small part of that lacunae in material history in an examination of Shanghai's bricks and brick usage over time in the context of the social and political currents of history. In doing so, we will offer fresh perspectives on reading the bricks: how and why certain bricks dominated the landscape at certain periods in history, and how interpretations morphed as the city's identities shifted.

Before the Foreigners: Imperial Quality in a Chinese City

Today, Shanghai is known as a global Chinese metropolis with a cosmopolitan past. The city's brick landscape is part of that cosmopolitan story, but its brick beginnings go back to a time before the waves of international influence that would come to define Shanghai.

The Jiangnan region, the area south of the Yangtze River that encompasses Shanghai, has long been renowned for its superior bricks. The iron-rich clay was used to fashion bricks of such beauty and quality that the Ming Emperors commissioned them as floor tiles for the palace in Beijing. Known as *jinzhuan* or golden bricks, they were produced in the imperial kiln in Suzhou from local clay. No gold was involved – the name refers to the high cost and complicated, year-long manufacturing process. The association with the Emperors transformed these generously sized bricks (up to seventy-four square centimeters) into objects of prestige for the literati, who repurposed them for scholarly and cultural pursuits: practicing calligraphy or serving tea (Johnson 2018).

Shanghai's own local bricks were never sent to the palace, but they were made from similarly high-quality clay from the banks of the city's river, the Huangpu. These bricks are called *qingzhuan*, translated as blue bricks after their blue-grey color (Shu 2015, 315). Following their victory in the Opium Wars, the British arrived in Shanghai in 1843 to find a thriving merchant town, where blue bricks were used for stout city walls to defend against potential attackers (Photo 1), and for structures that required durability and permanence, like Lu Xixiong's walled library, Shuyinlou (the Hermit's Library).

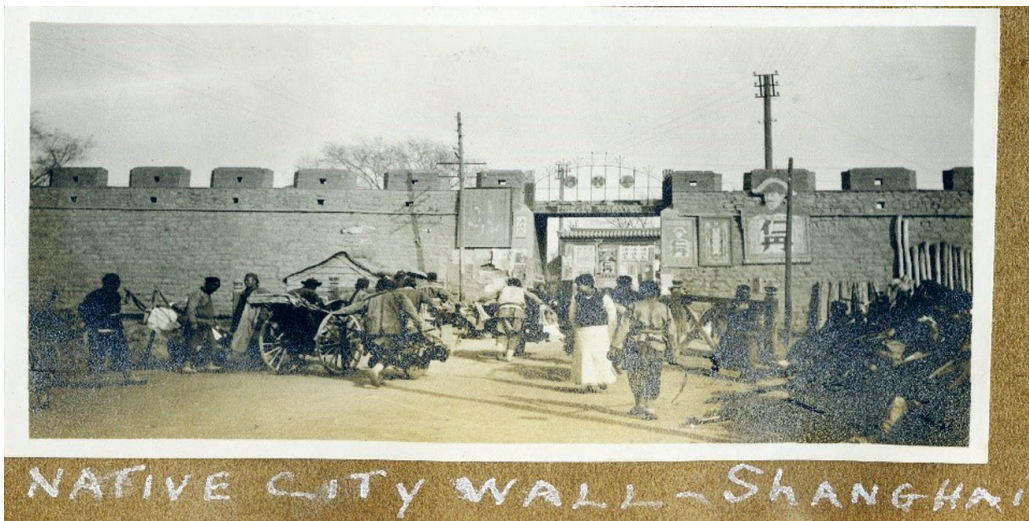


Photo 1. Shanghai's city wall was built of blue bricks (Courtesy of Stephen Waite)

When Lu built his library in 1763, he needed walls that would provide security both from robbers and from the elements. The library included a fireproof door and massive walls built of custom-made Shanghai blue brick. The walls stood ten meters

high – taller even than the city wall – and sixty centimeters thick (Glahn and Pihler 2004, 132). The bricks were custom-made to his specifications, each one stamped with the image of a sage. Built over 250 years ago and neglected for the past half-century, the blue brick walls were so sturdy that they endure to this day (Photo 2) (Knayzeva and Sinykin 2018, 146).



Photo 2. The walls surrounding Shuyinlou today (Courtesy of Katya Knayzeva)

McCartney Mission:

Inferior Local Bricks in the Colonial Mindset

But the bricks that were good enough for city walls, strong enough to protect Lu's library, and keep Shanghai's population safe were not good enough for the British. In 1793, Lord George McCartney led a mission from Britain to China to persuade the Qianlong Emperor to expand trade between the two countries. The Emperor famously dismissed the group, saying that China possessed all things in abundance, and needed nothing from the barbarians. During this time, the mission had also made detailed observations of Chinese life, documenting, among other things, Chinese bricks. The British were not impressed.

John Barrow, the mission comptroller, reported that Chinese bricks "were ill-burnt, half-burnt" (Barrow 1804, 63, 136, 206, 301). Under-burnt bricks are those that are not fully baked in the kilns and, as a result, are relatively weak and unsuited for construction (Photo 3).



Photo 3. Under-burnt brick, Shanghai 2018 (Tina Kanagaratnam)

Yet every batch of bricks includes both under-burnt and good quality bricks (Waite 2018). It is not documented why Barrow did not presume that this was the case when it came to the bricks he came across, nor why, with no previous knowledge of China, and little knowledge of local bricks, he decided to dismiss this building material as inferior. No doubt he did come upon a batch of bad bricks, but his pronouncement based on a small sample was typical of the colonial mindset of the period: native materials would always be inferior to British ones. There was no need to investigate further.

From Chinese City to Treaty Port: Rise of Red Brick Superiority

In 1843, Britain defeated China in the Opium Wars, and succeeded where the McCartney Mission had failed: several cities, including Shanghai, were forced open to trade. Although China retained sovereignty in these treaty ports, foreigners could now live, work, and build there, under the laws of their own government. In Shanghai, the British came first, settling in the area around the waterfront Bund. Almost immediately, they began to build a city in their own image, superimposing upon the Chinese landscape buildings that looked as if they could be found somewhere in England.

As Shanghai's identity shifted from a purely Chinese city to one with foreign influences, a shift began in Shanghai's brick usage, from local blue to red. The reasons behind the change were not documented contemporaneously (Shu 2015, 315) but extrapolating from statements made by the architects and engineers in charge of these projects reveals the underlying reason, foreshadowed by Barrow: a belief that the European red bricks were of a superior quality.

This belief was vividly illustrated in the early days of the Treaty Port by the insistence on red bricks for two of the newly established Settlement's landmark projects. When a previous wooden incarnation of Holy Trinity Church burned down, the most prestigious architect in Britain was commissioned to design a new one. Sir George Gilbert Scott was the architect for Westminster Abbey, and for Shanghai he created an elaborate design of a classic red brick English church that would not have been out of place in an English country village. It was, however, completely out of place in 1866 Shanghai. With its red bricks and spire looming over blue brick one- and two-story buildings, it stood out as a physical symbol of colonial domination. To this day, locals call the church "Hong Miao," Red Temple, for its outstanding physical characteristics (Photo 4).



Photo 4. Holy Trinity today (Courtesy of Patrick Cranley)

Scott's final design was too costly for the church to execute, and as the architect never set foot in Shanghai, it fell to the firm's architect onsite, William Kidner, to modify the design to fit the budget. Cost-cutting notwithstanding, Kidner insisted on using the higher-priced red bricks instead of local blue bricks. It was, he claimed, a quality issue (Kidner 1867a, 1867b).

Less than twenty years later, architect John William Hart made the same request, as he planned the construction of the Shanghai Waterworks. The building was another prestige project: the first waterworks in China, and the largest in East Asia, designed to look like an English castle. Such a project demanded prestige bricks. Hart had red bricks made to his specifications in Shang-

hai but insisted that they were inferior to those imported from Europe (Shu 2015, 316). The inference was that something in the local environment was at fault, whether in the clay from which the bricks were made, or the local workers executing the processes. Hart got his way, and like Holy Trinity, his waterworks stood out in the landscape, in part because of the unusual red color (Photo 5).

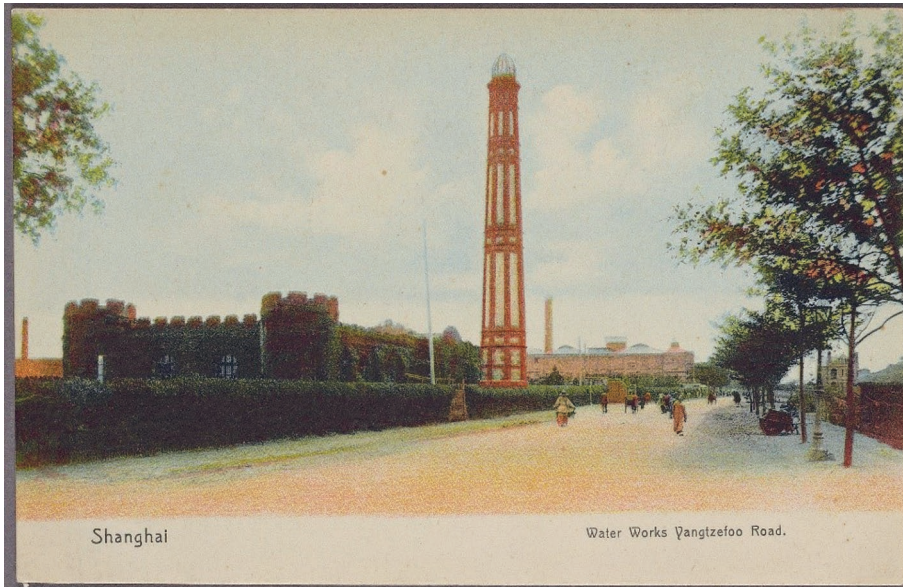


Photo 5. Shanghai Waterworks (Courtesy of New York Public Library Digital Collections)

Scholars have hypothesized that the preference for red bricks may simply have been a matter of taste (Shu 2015, 315). Red bricks, after all, were a favorite in the Victorian architecture of the period, yet the architects and engineers never couched it in these terms.

From the McCartney Mission onwards, quality was insistently and consistently cited as the issue, specifically the inferior quality of local bricks. This dominant ideology of Western superiority was translated into the Shanghai landscape in the Western architecture of English castles and Gothic churches – and soon, in local architecture as well.

1860–1920s – Internalizing Red Brick Preference

According to Franz Fanon, colonized populations often internalize the colonizer's prejudices, viewing their own culture through the lens of the colonizers (Fanon 2005). In China, this tenden-

cy was reinforced by a reform movement known as the Self-Strengthening, or Westernization, movement (1861–95).

Following a series of military defeats at the hands of Westerners, China's intellectuals concluded that major reforms were needed, including technological modernization. Since superior Western technology had defeated China in the Opium Wars, it was logical to assume that the foreigners' red bricks were also technologically superior. Thus, the superiority of red bricks spread into local architecture. Shu notes that "red bricks were usually applied to higher forms [of architecture] with the connotation of dignity, or to constructional load-bearing shapes like columns and arches, while blue brick was used in a comparatively inferior way. Contemporary historians also ascribe [...] the different uses of the bricks to the consideration of quality" (Shu 2015, 316). See Photo 6 for an example of this usage.



Photo 6. Red brick used for an arch and in accents, Xintiandi (Tina Kanagaratnam)

Creating a Shanghainese Identity:

Hai-Pai in the Brick Landscape

By the 1920s, many in the Shanghai population had embraced Western culture, and a term was coined for this blend of East and West: Hai-Pai. Hai-Pai encompassed the arts, cuisine, and architecture: for the latter, this meant *lilongs*, or lane neighborhoods, and *shikumen* houses, the ideal canvases for Hai-Pai bricks. When domestic rebellions in the 1850s and 60s caused Chinese merchants in the region to flee to the safety of foreign-controlled Shanghai, developers began building *lilongs* or lane neighborhoods to house them. Based on the Jiangnan region's classic courtyard architecture, they were attached and laid out in rows, like British terrace houses. Lanes ran between the houses, and each lane neighborhood could be as large as a city block. The individual *shikumen* ("stone gate") house facades also departed from tradition by incorporating Western designs, from neoclassical to Art Deco, and – for another layer of Hai-Pai – red and blue brick were used in combination on the buildings. In other cases, the houses or even entire lane neighborhoods were fashioned entirely of foreign red brick.

The Hai-Pai brick mix of red and blue was born from a preference for the colonizer's red bricks, yet it created a distinctively Shanghainese identity, one that the city continues to use to define itself to the present day.

1920s–1940s Shanghai:

Nationalism, Modernity & the Persistent Myth of Red Brick Superiority

But what was the red brick superiority based on? Were the local blue bricks actually inferior to the foreigner's red bricks? In 1925, the Material Test Committee of the Chinese Engineering Society in Shanghai determined to find out and conducted a series of laboratory tests on blue and red bricks (Shu 2015, 316). Just as interesting as their results are the reasons behind their experiment. The ideology of Western superiority had been dominant for the past half century. In this environment, why did these Chinese scientists decide to embark on this experiment? The timing of their experiment offers a clue.

In 1919, nationwide student protests over the Chinese government's decision to allow Japan to retain control of surrendered German territory spurred a nationalist, anti-imperialist cultural and political movement. The May Fourth Movement called for modernization on all fronts, with a focus on science and democracy. China and Shanghai began perceiving themselves, their landscape and their colonizers differently. We can reasonably conclude that this was a contributing factor in the inspiration behind embarking on this experiment.

The scientists tested thirty-six brick samples, both handmade and machine made, all produced in Shanghai from local clay. Acknowledging the small sample size, the results were surprising: in almost every case, blue bricks were actually *superior* in strength when compared to their red counterparts (Shu 2017, 789).

No further testing was done, the scientists' findings were not widely reported, and the myth of red brick superiority persisted. Red bricks continued to be used for prestige projects, and when cost considerations prevented this, they appeared as accents in blue brick buildings. The persistence of the myth meant that this red-blue mix was in use for eighty years in the city's vernacular housing, during a period of enormous growth, becoming ubiquitous throughout the city.

1949–1980s:

Communist Shanghai: Deep Freeze & Deterioration

The Communist revolution of 1949 brought great changes throughout society, but little change in the brick landscape, as the country focused on industrial production and political movements, and the capital that had funded pre-1949 Shanghai's go-go growth dried up.

The city's pre-1949 housing stock deteriorated as multiple families crowded into houses and apartments built for single families, and the lack of funding resulted in little maintenance. While the Shanghai brick landscape of the Communist era remained static, that period left a superficial mark: slogans, particularly from the Cultural Revolution era, scrawled on the bricks. They are erased and painted over today, occasionally resurfacing during renovations as a reminder of a period and an identity that otherwise would be lost. It was only in the 1990s, when the city re-took its mantle as a global city, that it began the process of tearing down and re-creating its physical heritage, using the vocabulary of bricks to re-interpret history.

1980s – Present: Global Chinese City

The economic reforms of the 1980s, the “Reform and Opening Up” period, heralded the demolition of dilapidated housing that had come to be viewed as urban ghettos, as the city focused on building a global city. However, as Martinez points out, “global identity rests in equal parts on the development of iconic contemporary architecture and historic architecture” (Martinez 2018, 1055).

Enter the city's first adaptive reuse project, Xintiandi. Opened in 2002, this project redeveloped a lane neighborhood into a commercially successful enclave of restaurants and shops and was so

successful that it has since been replicated throughout the city, and indeed, throughout the country. With Xintiandi, the classic red-and-blue brick leapt from being associated with deteriorating housing to being linked to an aspirational lifestyle. Shanghai's Hai-Pai bricks were now heritage, and heritage was driving economic gain.

However, Shanghai's approach to its brick heritage is to simultaneously burnish it, destroy it, and recreate it (Photo 7). Extensive demolition of historic urban neighborhoods continues, with lilyong housing portrayed as undesirable substandard dwelling: "It's goodbye and good riddance to the old, cramped, damp community," according to one headline (Yang 2018).



Photo 7. Sign in a lane about to be demolished, exhorting residents to "enthusiastically cooperate with the removal exercise." The couple is happily waving goodbye to a rubble of bricks with the character for "demolish," saying "we're trading our old house for a brand new one!" (Tina Kanagaratnam)

As definitions of authenticity loosen (Martinez 2018, 1056), the classic Hai-Pai bricks are celebrated as recreations: the practice is to paint over existing walls to make them look like fresh new brick walls, delineated by perfectly straight lines, a practice that conservation experts say destroys the original bricks as well as portrays a misleading and false narrative (Waite 2018). Citing an example of a Victorian-era Shanghai building whose bricks have been "renovated," Waite notes that the original brickwork made

the statement that highly skilled work was required and showed prestige and wealth. The dramatic contemporary intervention has changed the entire brick aesthetic, presenting a false history and irreparable damage (Waite, email message to author, July 20, 2021).

Yet this alternative history is increasingly what is on offer: developers raze neighborhoods, only to rebuild sanitized, politically correct versions of historic architecture. Today, Shanghai's identity as a cosmopolitan Chinese city views its brick heritage through a nationalist lens that has filtered out the Western and colonial influence, sometimes literally – the red brick Shanghai Waterworks is today mostly blue bricks, with red accents.

Examining Shanghai's brick use through history offers a fresh perspective on how the brick landscape reveals the city's shifting identities. The physical bricks themselves remain static, but as the city's identity changes, the bricks are interpreted and re-interpreted to fit the prevailing narrative. The imposition of today's nationalistic Chinese interpretation upon the brick landscape, an interpretation that erases Western influence is not, in the end, so different from the colonial mindset of red brick superiority.

Bibliography

- Barrow, John. 1804. *Travels in China, Containing Descriptions, Observation, and Comparison, Made and Collected in the Course of a Short Residence at the Imperial Palace of Yuen-MinYuen and on a Subsequent Journey Through Peking to Canton*. London: A. Strahan.
- Fanon, Franz. 2005. *The Wretched of the Earth*. New York: Grove Press.
- Glahn, Henrik Egede and Mette Pihler. 2004. *Shu Yin Lou: The House of Secluded Books: A Research Study in Shanghai*. Copenhagen: Royal Danish Academy of Fine Arts School of Architecture Publishers.
- Johnson, Linda. 2018. "Golden Bricks." *Lecture, Shanghai Culture Study Group*. Shanghai, November 28, 2018.
- Kidner, William. 1867a. "Church Meeting, the Trustees of Trinity Church." *North China Herald*, January 9, 1867.
- Kidner, William. 1867b. "Mr Kidner, the Architect, Read his Report on the Progress of the work, The Trustees of Trinity Church Shanghai." *North China Herald*, November 4, 1867.
- Knyazeva, Katya and Adam Sinykin. 2018. "Shuyinlou. The Secret Library." In *Shanghai Old Town: Portrait of a Phantom City. Volume II: The Walled City*, 145-165. Shanghai: Suzhou Creek Press.
- Martinez, Plácido González. 2018. "From Verifiable Authenticity to Verisimilar Interventions: Xintiandi, Fuxing SOHO, and the Alternatives to Built Heritage Conservation in Shanghai." *International Journal of Heritage Studies*, December 2018: 1055-1072. <https://doi.org/10.1080/13527258.2018.1557235>.

- Shan Man. 2018. "WALL" Defining the Chinese Traditional Introverted Space under the Influence of Chinese Ethics." *The Ethical Imperative*. 106th ACSA Annual Meeting Proceedings. <https://doi.org/10.35483/ACSA.AM.106.48>.
- Shu, Chang Xue. 2015. "From the Blue to the Red: Changing Technology in the Brick Industry of Modern Shanghai." In *Proceedings of the 5th International Congress on Construction History*, vol. 3, edited by Brian Bowen, Donald Friedman, Thomas Leslie, and John Ochsendorf, 313–320. Chicago: Lulu.
- Shu, Chang Xue, Emma Cantisani, Fabio Fratini, Kaare Lund Rasmussen, Luisa Rovero, Gianfranco Stipoc, and Silvia Vettori. 2017. "China's Brick History and Conservation: Laboratory Results of Samples from 19th to 20th century." *Construction and Building Materials*, July: 789–800.
- Waite, Stephen. 2018. Personal interview by author. Shanghai, November 24, 2018.
- Yang, Jian. 2018. "It's Goodbye and Good Riddance to Old, Cramped, Damp Community." *Shanghai Daily*, November 19, 2018.