

Journal of East-Asian Urban History, Vol. 3 No. 1, June 2021. pp. 139-160 https://doi.org/10.22769/JEUH.2021.3.1.139

**Original Article** 

# The Verandah: Hong Kong's Contribution to a Southeast Asian and China-coast Urban Design

### **David Faure**

Chinese University of Hong Kong, Emeritus Professor E-mail: davidf@arts.cuhk.edu.hk Received 22 Jan 2021: Accepted 2 Apr 2021

### **ABSTRACT**

The verandah was a common feature of Chinese multi-storeyed houses in Southeast Asia and China. This paper argues that while an earlier version of a narrow walkway might have had its origin in Singapore, the building of an extension on the upper floors encroaching the airspace over the road skirting the building was an arrangement allowed by the colonial Hong Kong government in compensation to landlords for space devoted to ventilation. As the introduction of reinforced concrete allowed buildings to become taller, the more attractive it was to developers to incorporate the verandah design.

**Key Words:** five-foot way, verandah, ventilation, reinforced concrete, Hong Kong, Singapore, Guangzhou

### I. Introduction

The verandah (qilou 騎樓) was a common feature of Chinese multi-storeyed houses in Southeast Asia and China from the second half of the nineteenth century to the first half of the twentieth century. While many writers on its history have been motivated by an interest in heritage conservation, Brenda Yeoh and Huang Sujuan have provided exemplary studies into their role in the urban architecture of Singapore and Guangzhou.<sup>1)</sup> Yet, despite the common terminology, Yeoh and Huang's studies deal with very different problems. Yeoh documents a colonial policy focused on verandahs as "walkways" that arose from the 1820s. Huang discusses the emergence of the extension of upper floors in private properties into the airspace of thoroughfares that had been built by government in the process of twentieth-century urban planning. Nevertheless, both studies do come together in the description of multi-floor buildings inhabited by Chinese people in China and Southeast Asia in which the ground floor was often used for business (mostly as shops), the upper floors were residential, and the upper-floor extension of the verandah contributed to a roof that covered the pavement skirting the building. In Hong Kong, such buildings came to be known as "Chinese tenements". Complete with business signboards hanging out of the verandahs and the columns supporting them, these buildings contributed to a feature of the Southern Chinese and Southeast Asian city. Most studies on the verandah point to their native Chinese character, but in this paper, I wish to draw attention to the administrative ruling by the Hong Kong colonial government which made the verandah architectural design part of a commonly accepted urban landscape. In the sense that the buildings to which those regulations were applied were constructed and inhabited by Chinese people, there is no reason why they should not be thought of as a Chinese style of architecture. Yet, an examination of its history will show that the verandah was very much an innovation introduced by building regulations.

<sup>1)</sup> Yeoh, Brenda S.A. (2003). Contesting Space in Colonial Singapore: Power Relations and the Urban Built Environment. Singapore: NUS Press; Huang, Sujuan (黃素娟) (2018). Cong shengcheng dao chengshi: jindai Guangzhou tudi chanquan yu chengshi kongjian bianqian (從省城到城市:近代廣州土地產權與城市空間變遷). Beijing: Shehui kexue chubanshe.

### II. What were verandahs?

Verandahs were not a Chinese invention. They were a common feature in colonial buildings throughout South China and Southeast Asia which allowed for leisure space in open ventilation. Quite the contrary, Chinese buildings did not have verandahs. Chinese city streets were too narrow, and, as John Henry Grey observed in Guangzhou in the 1870s, "the houses and shops" were not "raised to the same height nor yet arranged in a straight line", a feature which a photograph by John Thomson around that time attests to.<sup>2)</sup> Thomson's photograph shows that the shop entrance opened directly onto the street: there was no pavement area to demarcate a pedestrian zone from a wheeled traffic zone. Well into the nineteenth century, Guangzhou was better served by rivers than by roads. As for shelter from the rain, Thomson wrote: "It is by no means pleasant to be caught in one of those narrow streets during a shower, as the water pours down in torrents from the roofs and floods the pavement, until it subsides through the soil beneath."<sup>3)</sup>

According to Yeoh, verandahs in Singapore were five-foot "covered walkways" that from the early years of its history had been imposed as a required obligation in building leases issued by the colonial government. The government required that these walkways be kept from obstruction even though property owners regarded them as right and lawful portions of their properties. It would seem that private ownership of verandahs was accepted by law, for the 1872 Summary Criminal Jurisdiction Ordinance "declared that verandahs were subject to 'all rights of property of owners of houses." The Hong Kong colonial government was much less concerned with the problem of obstruction than with encroachment of crown land by verandah extensions. While concerns for passage and health remained on the books, I find prosecution over obstruction on the verandah as a walkway only in 1868, and that was pursued by the government to the outcry of Hong Kong's newspapers. Changes in the wording of what counted as "obstruction" in Hong Kong's law over the years are telling. The Buildings and Nuisances Ordinance of 1856 defines it in the following terms: "Every projection from or over any building which shall cause annoyance or obstruction to any way or to the passengers thereon, and

<sup>2)</sup> Gray, John Henry (1875). Walks in the City of Canton, Hong Kong: de Souza & Co., p. 27; Thomson, J. (1898). *Through China with a Camera*, Westminster: A. Constable & Co., plate between pp 68 and 69.

<sup>3)</sup> Thomson, Ibid., p. 67.

<sup>4)</sup> Yeoh, Op.cit., p. 250.

<sup>5)</sup> China Mail (Hong Kong newspaper), 14, 17 February, 1868.

every encroachment on, over, or under any way or any crown land shall be deemed a nuisance." The ordinance enacted to "prohibit the enclosure of verandahs" in 1888 circumscribed the prohibition with the phrase "created over crown land". Thus, it was not unlawful to "enclose, or partially enclose any portion of any verandah," except when it was erected on crown land. Encroachment over crown land by verandahs continued to be deemed a nuisance under the Building Ordinance of 1889, one of the first efforts to streamline all provisions on buildings in Hong Kong. In line with such provisions, the Building Ordinance defined a verandah, not in the manner as a passage way as it was understood in Singapore, but as "any projection over crown land, whether verandah, oriel, portico, flying balcony or other structure".

The different understanding of what constituted a "verandah" between Hong Kong and Singapore is quite vital to an understanding of the history of that structure. Indeed, both interpretations referred to the extension of a building on an upper floor over a walkway by the roadside. In Singapore, the term referred to the walkway, but in Hong Kong, it referred to the building extension on the upper floor or floors. The reason for the difference rested on an understanding of ownership. Yeoh's reference to the 1872 Summary Criminal Jurisdiction Ordinance suggests that the walkway was considered part and parcel of the property lease, while in Hong Kong, the fact that the extension over the walkway might be considered encroachment on crown land indicates that the lease over the property stopped not on the edge of the walkway, but at the outer wall of the building. There might be reasons in the respective settlement histories of the two cities to account for that difference, but they will not be the concern of this paper.

<sup>6)</sup> Leach, A.J. (1890-1891). Ordinance for Buildings and Nuisances, *The Ordinances of the Legislative Council of the Colony of Hong Kong, Commencing with the Year 1844.* Hong Kong: Government Printer, p. 347.

<sup>7)</sup> Hong Kong Government Gazette, 1868, Hong Kong: Government Printer, p. 165.

<sup>8)</sup> Hong Kong Government Gazette, 1889, p. 379.

## III. Shophouses: Singapore and Malaysia

While Yeoh's book provides a broad-sweep historical background for the Singapore verandah, the details of its architectural history have to be found in two papers especially devoted to the subject, written respectively by Jon S. Lim and Mai Lin Tjoa-Bonatz.<sup>9)</sup> Both papers are focused on the "shop houses", the Singapore term for the types of buildings that in Hong Kong were known as the "Chinese tenements". The subject is also dealt with in Yeoh's book, but in the following discussion, I shall turn first to Lim and Tjoa-Bonatz for an outline history before returning to Yeoh. Moreover, to clarify the comparison I shall make of their analyses to Hong Kong, it is necessary to point out that neither Lim's paper nor Tjoa-Bonatz's deals exclusively with Singapore but both draw their examples also from Chinese settlements in Malaysia, notably Penang. "Shop houses" or "Chinese tenements" were springing up in numerous cities as their populations rapidly expanded. All those cities were subject to congestion and concomitant hygiene problems accentuated by the threat of epidemic, and in Malaysia, Singapore, as in Hong Kong, all of them came under British colonial administrations that were concerned with drainage, clean drinking water and the need of ventilation in buildings. Yeoh considers the intervention of the state a contest for public space, but it is changes in building style that concerns us here.<sup>10)</sup>

Lim argues that the shop house went through three stages from the end of the eighteenth century to perhaps the 1950s, implying that two significant structural changes had taken place in that century and a half. In one, the "early shophouse type" "which is two-storeyed with a repetitive facade, verandah and upper windows which are set between giant brink piers", morphed into the true "Shophouse Rafflesia", Lim's term to highlight Stamford Raffles' five-foot ruling on the verandah walkway. With reference to such buildings found in Malacca, he describes their essential features as follows, "It is obvious that the builders have extended the upper or first floor over the verandah by taking advantage of an extra space and aligned it with the street to constitute a uniform facade." <sup>11)</sup>Lim's description suggests to me that the earlier shophouses, as for instance the ones built between

<sup>9)</sup> Lim, Jon S.H. (1993). The 'shophouse Rafflesia': an outline of its Malaysian pedigree and its subsequent diffusion in Asia, *Journal of the Malaysian Branch of the Royal Asiatic Society*, 66 (1): 27-66; Tjoa-Bonatz, Mai Lin (1998). Ordering of housing and the urbanisation process: shophouses in colonial Penang, *Journal of the Malaysian Branch of the Royal Asiatic Society*, 71 (1), 123-136.

<sup>10)</sup> The sanitation question is discussed in greater depth in Chang, Jiat-hwee (2016). *A Genealogy of Tropical Architecture, Colonial Networks, Nature and Technoscience*, London: Routledge, pp. 129-161.

<sup>11)</sup> Lim, Op.cit., p. 58.

the 1840s and the 1880s, were principally two-storeyed, and that the evolution of the early type into the full-fledged version consisted of architectural renderings of a consistent facade fronting the street.<sup>12)</sup> That facade would have consisted of, not only the columns that studded the walkway and held up the upper floor, but also the frontage of the upper floor extension over the walkway.

It would seem from Lim's discussion that the shophouses of the earlier periods were built with bricks and a great deal of timber. That would have changed quite substantially by the introduction of reinforced concrete, leading to his third period, possibly between the 1890s and the 1920s. Lim detects in the shift to reinforced concrete the introduction of European building styles into shophouses and the rest of his paper came to be fixated with the application of such styles especially to the columns that held up the upper floors. Nevertheless, shophouse inhabitants would probably have understood better his description when he says "The forms are *box-like* (emphasis mine), each with a cantilevered balcony and corner towers." It catches my attention that he says one such corner tower went up to four storeys. I would expect that shophouses might have been built taller when reinforced concrete was used as their building material, but Lim does not really discuss this question and the plates he provides show that for the most part, they remained two-storeyed.

Tjoa-Bonatz's paper confirms some of my impressions from reading Lim. She refers to the later shophouse developments as "terrace houses", as they would have been when the verandahs on the same block were aligned with the street. However, she departs from Lim in stressing the importance of ventilation on shophouse layouts, a feature that she seems to ascribe both to the skills of traditional Chinese craftsmen (working with wood) and contemporary concerns for hygiene. The result on the building layout is captured in the following description:

The necessity of lighting and ventilation led to the creation of intermediary courtyards becoming the integral feature of the spatial organisation of the shophouse. It provided a horizontal progression of multifunctional spaces allowing a continuous expansion. There was no passage through the house. The first room was either open to the full length of the frontage, indicating commercial use, or was entered by a street door between two windows, indicating a residential dwelling. In the smaller types there was practically no backyard: instead, there was an airwell. The deeper shophouses were intersected by inner courtyards either placed to

<sup>12)</sup> This is confirmed by reference to Lee, Ho Yin (2003). The Singapore shophouse: an Anglo-Chinese urban vernacular, in Ronald G. Knapp (ed.) *Asia's Old Dwellings, Tradition, Resilience, and Change*, pp. 115-134. Oxford: Oxford University Press.

<sup>13)</sup> Lim, Op.cit., p.62.

one side of or along the axis of the house. Additionally, backyards contained the service areas. (Emphasis added) These back-yards ran back-to-back within the block. Some compartments even stretched over the whole building block from one street to the other. The lay-out on the ground floor was more variable and less specialised, whereas the first floor was invariably assigned to bedrooms. The interior open space had multiple functions, serving as access path, providing space for household chores and, therefore, forming the centre of domestic life. <sup>14)</sup>

The description provides two images of the interior layout of the shophouse. It could be "boxlike" indeed, if it was the "smaller type", a deep cavity surrounded by walls except for the front windows and punctuated by an "airwell", or, if it was "deeper", it could have been "intersected" by courtyards within the building and wrapped by a backyard towards the rear. Tjoa-Bonatz finds the presence of the courtyards so important that she subtitles this section of the paper "the shophouse as a courtyard house during the early urbanization period", even though she does not go on to really make a case for the "courtyard house" as a typology. Nevertheless, that is an important observation and should not be missed. Chinese village houses commonly incorporate courtyards. They not only let in light and air, but they also provide drainage for the house. In south China, commonly, exactly as Tjoa-Bonatz describes it, the courtyard intersects the built-over structures of the house along its axis. No passage way leads from one house compartment (known as "jin"進) to another. One enters the main entrance, walks through the front compartment to enter the courtyard, and beyond that, enters the second compartment. Two-storeyed buildings are rare in villages, but in market places, quite commonly a floor is added to this structure and the courtyard becomes an "airwell".

We may return to Yeoh at this point. Yeoh makes a compelling argument about the importance of the airwell to ventilation in the shophouse: "The front portion of the house was ventilated by window openings facing the street while back rooms received air and light from airwells, or from clerestory openings under a jack roof." She also notes that the colonial government's strategy to build back lanes to shophouses conflicted with the location of the airwells, citing in her support a report by the Housing Commission in 1918. These comments together with Lim and Tjoa-Bonatz's papers say a great deal about the evolution of the shophouse. The turning point in the history of the colonial government's efforts on housing regulation has often been given as the Simpson report of 1907. The report found that Chinese houses had been extended laterally but not upwards (a trait that the report

<sup>14)</sup> Tjoa-Bonatz, Mai Lin, Op.cit., p. 132.

<sup>15)</sup> Yeoh, Op.cit., p. 143.

<sup>16)</sup> Ibid., pp. 155-156.

ascribed to Chinese preference), and argued that building space came to be congested as shophouses extended backwards until they touched back-to-back the neighbour in their rear. The Simpson report suggested that the solution to space congestion was for the government to insert backlanes into this built-up area. Had the lanes been successful, the shophouse layout would have changed, as pointed out by the Housing Commission in 1918:

Formerly, in a house they had two rooms, a front room and a back room, with an airwell and a passage between, but since the back-lane system has been introduced, the Municipality will only allow one room. . . . Now except for a kitchen at the back it is all front part and open space. <sup>17)</sup>

However, splitting the house into two in order to accommodate a backlane would hardly have found favour among its occupiers or owners. Yeoh refers to the strategy of building backlanes at least up to the end of the 1910s as a "failure". By then, houses might only be built when building plans had been approved by the government. For that reason, I would presume that the backlane strategy would have discouraged rebuilding and many existing structures would have survived into the 1920s and 1930s as slums.

<sup>17)</sup> Statement by Seah Liang Seah to the Singapore Housing Commission in 1918, cited in *Ibid.*, pp. 156-157.

# IV. Chinese tenements: Hong Kong

Hong Kong dealt with the hygiene of Chinese tenements in 1882 through Osbert Chadwick's report, some twenty-five years earlier than Singapore. Historians have always found that as a handy marker in the course of Hong Kong's housing history. The details and the diagrams the report includes on tenement houses located on the hill slope by the edge of the city centre, once aptly described as Hong Kong's "China town", 18) have provided the iconic image of living conditions for the poorer Chinese people in colonial Hong Kong for many an historical account. Indeed, Osbert Chadwick was the son of Edwin Chadwick who dealt with Britain's sanitation problems in the 1840s, and, so, there are good reasons in plenty to argue that he looked at the colonial housing situation through nineteenth-century science- informed eyes. Osbert was summoned back to Hong Kong in 1902 in the company of W J Simpson (who went on to author the 1907 Simpson report for Singapore) for another report on sanitation, and he came to very much the same criticism of the housing situation then as he had put forward in 1882. He highlighted that in the heading of the housing subsection of his report: "Crowding together of too many houses on too small a place". That description rather gives the impression that for twenty years, despite any government effort, housing congestion had not eased and that tenement houses remained as unsanitary as ever. 19) This impression gives weight to the view that government action turned serious only with the subsequent Public Health and Building Ordinance of 1903. The chronology constructed on that would also bring Hong Kong's housing history in line with Singapore's, the 1902 report being a turning point in Hong Kong, and the 1907 Simpson report for Singapore.

This broad-sweep chronology overlooks some significant differences between Hong Kong and Singapore, and within Hong Kong, between 1882 and 1902. Significantly, the verandah drops out of the history of the shophouse in the Singapore account, while it served as a tradeoff offered by the Hong Kong colonial government to property developers in exchange for greater ventilation provision. Unlike Singapore, the walkways (pavements) in Hong Kong were owned by the Crown. In other words, the outer wall of the building extended to the limit of its boundary. Therefore, verandahs on upper floors, covering over the pavement area, invade the space over crown land. As we shall see,

<sup>18)</sup> Evans, Dafydd Emrys (1970). Chinatown in Hong Kong: the beginnings of Taipingshan, *Journal of the Royal Asiatic Society Hong Kong Branch*, 10, 69-78.

<sup>19)</sup> Report on the question of the housing of the population of Hong Kong, Sessional Papers laid before the Legislative Council of Hong Kong, 1902, pp. 627-652.

this understanding of who owned the pavement was a very material question in the evolution of the verandah. Nevertheless, it was a material question only because the Hong Kong colonial government was prepared to offer it in compensation for ventilation.

The compensation was offered by Governor Sir John Pope Hennessy in 1878, *before* the Chadwick investigation. The most prominent Chinese property owners petitioned the governor when they found out that the Surveyor General had turned down a building plan of Chinese houses on the grounds that insufficient ventilation had been provided for. The Surveyor General required that alley space be allowed at the back of the houses onto which windows might be opened. The Chinese property owners argued that land was scarce and expensive and that the requirement would be self-defeating because those windows would never be opened. Hennessy supported the Surveyor General, but he approved "the privileges afforded by this verandah (ie of the houses for which application was being made) being erected over crown land ... so long as a continuous blank wall forms the back of any tenement not adjoining a side street, an open yard shall be provided between the house and its kitchen of the full width of the said house and of a depth proportionate to the number of stories contained therein", etc. Specified was the depth of 4 feet for every house of two floors, 5 feet for three floors, and 1 increasing foot in depth for every additional floor beyond. I have cited his decision almost in full because the details are germane to the present discussion.

Governor Hennessy had taken up office for barely a year when he was confronted by the Chinese property owners. The Chinese population had been expanding and, therefore, real estate developers were seeking land to build houses for them. As in Singapore, a distinction was made between Chinese houses and Western houses and restrictions were imposed on where they might respectively be built. Because Chinese houses were far more often than not occupied by multiple families, they were usually referred to as "tenements". Allotting land for these houses brought the governor into conflict with the British military, whose barracks were located close to the city area. The Commander of British Forces (in China and the Straits Settlement) had written to the War Office in London to complain that it was unhygienic to locate Chinese houses near the barracks. The War Office had written to the Colonial Office, and the Colonial Office was breathing down the Governor's neck. In response, the Governor argued that Chinese houses had been greatly improved, under new regulations which included his verandah ruling. That dispute led directly to the Colonial Office's appointment of Chadwick to conduct his survey on Chinese houses in Hong Kong.<sup>21)</sup>

<sup>20)</sup> Hong Kong Government Gazette, 1878, pp. 370-373, citation from p. 372.

<sup>21)</sup> The correspondence is included in Papers Relating to Restrictions upon Chinese in Hong Kong (1971). British

The "verandah regulation", as it then came to be called, became part of the law. By 1879, it applied not only to any single property but was laid out in a standard format for the Governor's signature. The requirements of backyards became law in the Public Health Ordinance in 1888, which brought protest from Ho Kai, Chinese member of the Sanitary Board, along the lines argued by the property owners of 1878. <sup>22)</sup> The "verandah regulations" must have applied, for the colonial government was charging rent on verandahs from 1888 to 1890. <sup>23)</sup> In 1897, additional rules added to the Building Ordinance of 1889 made it part of the law that approval for verandahs was contingent on building "a clear and unobstructed courtyard, backyard, back lane or other open space extending in length across the entire width of such building". <sup>24)</sup> The same clause was retained in the Building and Health Ordinance of 1903 and the Verandahs and Balconies Regulations of 1935. <sup>25)</sup> With one exception, the floor plans drawn of tenement houses surveyed by students of the University of Hong Kong in 2003 all had backyards as well as verandahs. <sup>26)</sup>

It should be noticed, too, that Governor Hennessy's ruling in 1878 specified varying width of the backyards for houses not only of two storeys, but of three storeys and more. Indeed, at the time he made that ruling, Chinese tenement houses were being built taller. The Surgeon General, who had responsibilities over the sanitation of those houses, wrote about that vividly in his report in 1880:

Six years ago I reported on the unhealthy and unwholesome style adopted in the

Parliamentary Papers, China No. 27, Hong Kong 1862-1881. Shannon: Irish University Press and discussed in Faure, David (2005). The common people in Hong Kong history: their livelihood and aspirations until the 1930s, in Lee Puitak (ed.) Colonial Hong Kong and Modern China, Interaction and Reintegration, pp. 9-37. Hong Kong: Hong Kong University Press.

<sup>22)</sup> Dr Ho Kai's protest against the Public Health Bill, submitted to the government by the Sanitary Board, and the board's rejoinder thereto (1887), *Sessional Papers laid before the Legislative Council of Hong Kong*, pp. 403-412.

<sup>23)</sup> Only negligible amounts were collected: 243 dollars in 1888, 1,801 dollars in 1889, and 368 dollars in 1890. No rent was charged from 1890 onwards. *Hong Kong Blue Book, 1888, 1889 and 1890*, Hong Kong: Government Printers, 1889-1891, respectively, pp. c2, c2, c2; Hong Kong Government Gazette 1890, p. 1.

<sup>24)</sup> Hong Kong Government Gazette 1897, p. 1045.

<sup>25)</sup> Hong Kong Government Gazette 1903, p. 251 and The Laws of Hong Kong, Containing the Ordinances Enacted Until and Including the 1st Day of September, 1950, and Subsidiary Legislation Made Thereunder, Prepared under the Authority of the Revised Edition of the Laws Ordinance, 1948, Hong Kong: Noronha, 1950, pp. 407-410.

<sup>26)</sup> Lung, Ping Yee, David (2003). Tong Lau, A Compilation of Measured Drawings of Tenement Buildings in Urban Areas of Hong Kong, 2003. Measured Drawing Project by Year-3 Students of the Bachelor of Arts in Architectural Studies Programme, project directed by drawings supervised and compiled by Ho Chi Ching, Ivan and Lee Ho Yin; Hong Kong: Department of Architecture, University of Hong Kong.

construction of Chinese houses, but things have been growing steadily worse instead of better. Whereas in many cases narrow gullies affording some amount of air separated the old houses, now enormous blocks of houses three and four stories high are built back to back or with plain back walls with no apertures in them, and on the worst conceivable plans as regards sanitation. Since I wrote my Annual Report for 1874, in which I particularly brought to notice the construction of Chinese houses, thousands of houses have been built or pulled down and rebuilt, and hundreds of others built on what were unoccupied places at that time. With only this difference that whereas the old houses were rarely more than two stories high, none are now built less than three and many four stories high and built on as bad if not worse plans than those they have succeeded. I have seen nearly all Queen's Road, a road about three miles long, change in the last seven years from houses two stories high to houses of three stories.... Land that five years ago could have been bought for \$5,000 could not be purchased now for \$50,000.<sup>27)</sup>

And how big were the verandahs? They were no five-footers. In 1888, when the Hong Kong government charged rent on them for the encroachment they made "upon or over" crown land, the rates were set between 10 to 18 cents per foot, respectively for verandahs ranging from 4 feet to 10 feet.<sup>28)</sup> It does not take much arithmetic to see that a multi-storey tenement from which verandahs stretched on every floor 4 to 10 feet into the street would have been quite valuable in monetary terms. It should be no wonder that beyond the 1880s, property-owners no longer objected to mandatory ventilation requirements.

Why was it that property-owners in Hong Kong were building upwards, when in Singapore they did not do so? The answer lies in the geographic extension of Chinese-style houses. The Chadwick report of 1882 indicates as much. The examples of Chinese tenement houses it drew from the "China town" area were for the most part two-storeyed. He did report on two three-storeyed houses in the area, but he noted that they were "new houses … not yet fully occupied".<sup>29)</sup> Moreover, in this area, the streets were so narrow it would not have been practical for verandahs to stretch into them. When he turned to Queen's Road (compare the Surgeon General's comments cited), he said, "In Queen's

<sup>27) &</sup>quot;Colonial Surgeon's report for 1880" unpaginated, citation from approximately pp. 6-7, possibly intended for *Hong Kong Government Gazette*, 1881.

<sup>28)</sup> Hong Kong Government Gazette, 1888, p. 881.

<sup>29)</sup> Mr Chadwick's Report on the Sanitary Condition of Hong Kong, 1882, Colonial Office, Eastern No. 38, CO 882/4 Public Record Office, London, p. 13.

Road and some other streets, permission has been given to construct verandahs over the public sidewalks."<sup>30)</sup> Queen's Road was not located on a hill slope. It ran at the foot of the hill parallel to Hong Kong Island's northern shore line. Queen's Road was wider than the streets of the "China town". As he continued, he objected to the verandahs but his description also confirms that the verandah was often converted into just another room in the house: "··· the verandahs above are so substantially built, and so enclosed with blinds, that they amount to inhabited spaces, and thus the width of the street is diminished by the depth of the verandah."<sup>31)</sup>

The impression that verandahs were found in tenement houses in newly developed residential districts comes across even more strongly in Chadwick and Simpson 1902 and the Housing Report of 1935. The Chadwick and Simpson report describes separately "crowding together of houses under old regulations" and "crowding together of houses under existing regulations". Their examples of old-regulation houses were drawn from the "China town" area and Queen's Road. The existingregulation houses cited were located in what is now the Western District. In the paragraph devoted specifically to verandahs, they complained that "the large masonry verandahs three and four storeys high encroaching on the public streets to the extent of 10 feet on each side lessen the width of the streets and at the same time darken the rooms of the houses." They note that "masonry verandahs projecting on to the street were first constructed as a concession and privilege," but "now it is almost looked upon as a right which permits the builder to construct in a three or four-storied house two or three extra rooms at the expense of the government, i.e. on government land, because the verandahs become practically rooms of the house."32) The Housing Report of 1935 classifies Chinese tenement houses into three types. The first, or "early" type, is found in the "congested areas". In these houses "the open space in rear of the house is negligible." It also says, "This type was normal until the passing of the Public Health and Buildings Ordinance of 1903. A very large proportion of the houses in Victoria (ie the city area on Hong Kong Island, including the "China town") are of this type." The second, or "normal", type "has developed as a result of the 1903 ordinance." Characteristic of this type is that "the frontage is still limited to less than 16' 0" as it is still governed by the normal usable length of the China fir pole, with which the roofs and floors of most of these houses are constructed." On the geographic locations where such houses might be found, the report notes, "Most of the houses in Kowloon (across the harbour from Hong Kong Island), and later developments in Victoria, are of this

<sup>30)</sup> Ibid., citations from p. 14.

<sup>31)</sup> Op. cit.

<sup>32)</sup> Report on the question of the housing of the population of Hong Kong, (1902), Op. cit., p. 635.

type." The third type is described as "the latest development". On its structure, the report says: "the plan of the living room is substantially the same, deep and narrow, although with reinforced concrete construction, the width is no longer restricted by the China fir pole." The report does not say where these houses might be found, but it should be clear enough that over time, timber frames gave way to reinforced concrete and that houses built according to the 1903 ordinance were found not only on Hong Kong Island but also in newly developed Kowloon.

Therefore, the Hong Kong government succeeded in trading the verandah for ventilation space at the back of the house. But the verandahs now being built were not 5-foot extensions over the pavement on only the second storey, but 10-foot extensions protruding on three or four storeys. It was this much enlarged structure that was adopted in China, not the Singapore five-foot way.

### V. Qilou: Guangzhou and elsewhere

In Singapore, the five-foot way was known as the "ngo ka ki" (五腳基, pronounced in the Minnan dialect). As Jiang Bowei points out, the term was likely to have been a direct translation of the English term, the word "ka" could as well have been a human foot as a measurement.<sup>34)</sup> Wang Shan, et. al. 2018 suggests that the term came to be popularly used in speech in Fujian and Shantou, from which places Chinese people emigrated to Southeast Asia.<sup>35)</sup> Zhang Yiyi, writing about Taiwan, where Minnan was (and still is) widely spoken, found for the verandah another popular term, "ding a ka" (亭仔腳). She cites a 1758 land deed from Taiwan that specified that the shop property being transacted was bound, in front, by the line "where water drops (from the eves)", the eves protruding from the wall being described as the "ding a".<sup>36)</sup> The image of a projection from the front of the shop

<sup>33)</sup> Report of the Housing Commission 1935, Sessional Papers laid before the Legislative Council of Hong Kong, (1936), pp. 269-270.

<sup>34)</sup> Jiang, Bowei (江柏煒) (2003). 'Wujiaoji': jindai Min-Yue qiaoxiang yanglou jianzhu de yuanxing ("五腳基"近代閩越僑鄉洋樓建築的原型), Chengshi yu sheji xuebao (城市與設計學報) 13 and 14, pp. 177-243.

<sup>35)</sup> Wang, Shan (王珊), Yang Sisheng (楊思聲), Yu Haomiao (餘浩淼) (2018). Qilou wenhua yanjiu: kuajing fangyan 'wujiaoji' de qiyuan jiqi yuyi yanbian (騎樓文化研究: 跨境方言五腳基的起源及其語義演變), *Huaqiao daxue xuebao*, 6, 27-35.

<sup>36)</sup> Zhang, Yiyi (張依依) (2017). Taiwan qilou jiequ de xingshuai yu baocun zouyi (臺灣騎樓街區的興衰與保存芻議), Renwen shehui xuebao (人文社會學報), 17, 135-166.

to protect it from rain, and that the strip of land so protected was classed as part of its property, agrees very well with the Singapore "five-foot way". One might also notice that while such eaves might have granted the shop some protection, they would not protect the pedestrian from dripping water. Photographer Thomson's description of being caught in a Guangzhou street during the rains would have illustrated exactly the scene.

Kong newspaper of 1881.<sup>37)</sup> That became the standard word used for the "verandah" in written form. Interestingly, the *English and Chinese Reader* published by the American Presbyterian Press in Shanghai in 1888 translates "verandah" as "*qilou di*" (literally "under the *qilou*").<sup>38)</sup> That definition confirms the different emphasis in the concept of a verandah between Singapore and Hong Kong: in Hong Kong, the *qilou* refers to that part of the building that juts out onto the road, while in Singapore, it refers to the walkway underneath. Lin Chong notices that when the word "*qilou*" first appeared in Guangzhou government regulations issued in 1912, it was a component of the term "*qilou* with feet" (*you jiao qilou* 有腳騎樓), the "feet" referring to the columns holding up the verandah.<sup>39)</sup> That term would have distinguished the verandah from a balcony, which was not only narrower in width, but also not supported by columns.

Huang Sujuan has provided an account of the introduction of the *qilou* verandah into Guangzhou. It was introduced as a foreign innovation, hence, the *qilou* verandah house was considered a "foreign house" (*yanglou*), even though in Hong Kong it remained a "Chinese tenement". Guangzhou was possibly the earliest city in China to adopt it as a noticeable style, and it did so to facilitate road widening. By the early years of the twentieth century, Guangzhou's narrow streets needed to accommodate the motor car and the electric tram, and by 1904, the Guangdong provincial government had in hand an ambitious plan to build a bund on the northern bank of the Pearl River running through Guangzhou, that would also allow for wharves, access to the newly built railway station, and a motor road. Huang Sujuan cites from the comments of the Imperial Maritime Customs' Guangzhou commissioners for first-hand impressions of the work in progress.<sup>40)</sup> Commissioner Paul H. King said in his 1907 report, "In Canton city (Guangzhou) new buildings are constantly being put up; and it is noticeable that the old style of shop architecture is being replaced rapidly by double-fronted

<sup>37)</sup> Xunhuan ribao (循環日報) July 9, 1881.

<sup>38)</sup> Condit, I.M. (1888). English and Chinese Reader with a Dictionary. New York: American Tract Society, p. 127.

<sup>39)</sup> Lin, Chong (林沖) (2001), Guangzhou jindai qilou fazhan kao (廣州近代騎樓發展考), *Huazhong jianzhu*(華中建築), 5, 114-116.

<sup>40)</sup> Huang, Sujuan, Op. cit., pp. 114-115, 180-184.

shop windows of Western design."<sup>41)</sup> Commissioner J. F. Oiesen said for 1910, "Buildings, many in foreign style, have sprung up from one end to the other along the main road, and very few sites are vacant, though several of those already acquired have no buildings on them yet. A great feature of an evening walk down the bund is the number of cheap foreign goods which are exposed for sale at the different stalls lining the road: boots, elastic garters, caps, singlets, sweaters, handkerchiefs, towels, cheap jewellery, etc. may all be purchased."<sup>42)</sup> The comments herald the conversion of the street as a walkway into an arcade. Indeed, historians of the Ming and Qing dynasties, and even the Song, would point out that Chinese cities had long been emporiums of consumer goods, but what the commissioners describe here is window shopping, and the shops opening out to the street to display their wares which they obviously saw as a new development. One might have thought that consumerism would have contributed to covered walkways outside the shop windows, but that was not the case.

Huang Sujuan finds some evidence to suggest that shop owners on the bund were required by their land covenants to build verandahs, but those requirements, if they were indeed made, attracted no attention. The experience of the Shanghai French Settlement in the 1920s is relevant to this question. In 1924, the settlement introduced the Arcade Regulations when it rebuilt Rue de Consulat and required owners to build verandahs. It succeeded then, but in 1930, when it sought to introduce the same requirements onto Xingning Road, the owners objected, arguing that verandahs blocked out sunlight from their shop fronts and provided no convenience.<sup>43)</sup> Streets were no less arcades without the verandah. In Shanghai, the department stores built to the edge of their plots, an awning and not a verandah providing the shelter from sun and rain.

The much more important contribution to the rise of the *qilou* verandah in Guangzhou may be traced, once again, to the trade-off between encroachment over public land and the surrender of portions of privately owned house plots. Unlike Hong Kong, ventilation was not the object of the trade-off, but space for building the widened roads was. The 1910s and 1920s, during which time much road-widening took place in Guangzhou, were politically turbulent years. We need not be concerned with the politics here, suffice it to note that since the Revolution of 1911, successive

<sup>41)</sup> China, Imperial Maritime Customs (1908). *Returns of Trade and Trade Reports, 1907, Part 2.* Shanghai: Statistical Department of the Inspectorate General of Customs, p. 484.

<sup>42)</sup> China, Imperial Maritime Customs (1911). *Returns of Trade and Trade Reports, 1910, Part 2.* Shanghai: Statistical Department of the Inspectorate General of Customs, p. 616.

<sup>43)</sup> Sun, Qian (孫倩) (2009). Shanghai jindai chengshi gonggong guanli zhidu yu kongjian jianshe (上海近代城市公共管理制度與空間建設). Nanjing: Dongnan daxue chubanshe, pp.90-95.

governments that held authority over Guangzhou were short of funds. Therefore, road-widening was not only designed to re-shape the city in the interest of modernization, but it served also to raise revenue. In 1918, those two aims came together in the strategy of demolishing the city walls. Nevertheless, the walls were not thick enough to yield the width for the road, and, to find the extra room, 3,500 houses had also to be demolished. When shop-owners haggled over the compensation, the government relaxed the limits on verandahs as part of its compromise. Property owners were allowed to build 20-foot verandahs stretching over the pavement where the road was 100 foot across, and 15-foot verandahs where it was 80 foot. A license was required for building the verandah, but it was issued free to property owners who had surrendered equivalent land for road widening. The area added to the property by the verandah came to known as "verandah land" (*qilou di*), which was subject to tax.

Why did property-owners turn away from the qilou in 1900s only to find it acceptable as a compensation in the 1910s? The answer again lies in building upwards and, very importantly to make that possible, the use of reinforced concrete in building. Huang Sujuan cites Lin Chong's study for noting the change. Building regulations issued between 1918 and 1920 made copious reference to reinforced concrete, and specified the maximum ceiling heights for buildings respectively of one, two, three or more floors. Where the columns were made of reinforced concrete, the regulations allowed up to five floors. The multi-floor structure is also obvious from surviving samples of *qilou* verandah houses built at the time.

Therefore, like Hong Kong, the encroachment of public space, compensation for loss of private space, the use of reinforced concrete and taller buildings came together to provide the background for the *qilou* verandah building. The exceptions rather proved the rule. In Shanghai, where the varandah

<sup>44)</sup> Of 15 qilou verandah houses built between 1918 and 1920, 14 had verandahs that measured 4.6 m. and one 3 m., Ni, Junming (倪俊明) (2002). Guangzhou chengshi daolu jindaihua de qibu (廣州城市道近代化的起步), Guangdong shizhi 2002 (1), 26-30 as cited in Lai, Yupeng (賴裕鵬) and Nie, Zhigao (聶志高) (2012). Taiwan jiewu yu Zhongguo Guangdong qilou zhi bijiao yanjiu: yi jianzhu fagui dui chuantong jiewu qilou yingxiang wei li (臺灣街屋與中國廣東騎樓之比較: 以建築法規對傳統街屋騎樓影響為例), Dushi yu jihua, 38 (1), 73-98. The size of the verandah is estimated by Lai and Nie from the width of the pedestrian pavements reported by Ni.

<sup>45)</sup> Huang Sujuan, Cong shengcheng dao chengshi cites Lin's doctoral thesis. I have only been able to access his very brief published paper, Lin Chong, Op. cit. Lin Lin 林琳and Xu Xueqiang 许学强also noted the connection between building height and living space gained by verandahs in Lin, Lin (林琳) and Xu, Xueqiang (許學強) (2004). Guangdong ji zhoubian diqu qilou fazhan de shikong guocheng ji dongli jizhi (廣東及周邊地區發展的時空過程及動力機制), Renwen dili, 19 (1), 52-57.

<sup>46)</sup> Lai, Delin (賴德霖), Wu, Jiang (伍江) and Xu, Subin (徐蘇斌) (eds.) (2015). Zhongguo jindai jianzhu shi (中國近代建築史), vol. 2. Beijing: Zhongguo jianzhu gongye chubanshe, p. 85.

house did not catch on, street widening in the 1910s and 1920s was supported by abundant monetary compensation. In Taiwan, like Singapore, the five-foot way was considered private property from early days in the Japanese colonial occupation, but from 1933, building regulations exempted the area covered by the five-foot way from the plot size in consideration of the built-up plot ratio. That might have been a partial concession for ventilation space at a time when verandahs were being built and houses were reaching three storeys.

### VI. Conclusion

The details of the regulation for space that make up a history of the verandah, or, rather, the verandah house, should not distract from the broader setting of urban transformation from the nineteenth to the twentieth century. There was much more in that story than colonial governments invading indigenous space on the excuse of hygiene requirements. The streets that the governments took over were filled with traffic and of pedestrians, not only people going from here to there, but people "hanging out" in between stalls, shops and places of entertainment. They had also been widened out of expediency, because many of them had to be carved out of existing cities. Governments, therefore, could not always ride rough-shod over the local population. They cajoled and threatened, but they negotiated and compromised. Coming out of that context, the verandah building proved convenient as a negotiation chip, even though not every city needed to offer the same chip. It was a viable solution to the problem of road widening, but it was not the only solution.

There can be no illusion that negotiation is a power game and parties do not come to it as equals. But choices are limited for all parties, regardless of their power. Governments make law, their subjects decide how and if they will follow them. The Singapore literature indicates little negotiation between government and property owners, and, therefore, as government demanded by fiat that backlanes be inserted when houses were rebuilt, property-owners simply did not rebuild. When housing for Chinese people spread beyond their nineteenth-century ghetto, it was undertaken by the Singapore Improvement Trust. Now that government undertook to build, there was no need for any more negotiation (for that matter, neither did Hong Kong's public housing in the 1950s incorporate verandahs). In Hong Kong, Hennessy was the first governor to acknowledge the importance of the Chinese presence to the Hong Kong economy. The Chadwick commission did not come as much out of Hennessy's initiative as the imposition of the home government in London, possibly recognizing

the dissatisfaction of some of his subordinates, such as the Surgeon General, with the poor sanitation of the colony. The negotiation process was subdued but real, and the verandah proved a workable compromise. In Guangzhou, successive governments had little control of the city population but they had the authority to demolish houses and widen roads. The planners, however, would have preferred roads unencumbered with verandahs but the city governments needed the funds and local acquiescence. The perception of qilou verandah houses as a Western introduction possibly also aided its acceptance to all parties. As such, it became a feature of the urban architecture. Guangzhou did not permit it everywhere, not only because wider roads were not needed everywhere, but also because the government thought that some roads should be lined with trees.

Nevertheless, ultimately, the verandah was aided by technology. Reinforced concrete allowed taller houses, and with each extra floor, property owners encroached an extra verandah space from the street. Reinforced concrete transformed not only verandah houses but the entire city. It was itself part and parcel of long-term industrialism and commercialism. The verandah, therefore, naturalised, known to be good for sheltering pedestrians and street level tradesmen (shops and peddlars) from sun and rain. However, by the second half of the twentieth century, the verandah house gave way because street life itself gave way to the shopping mall. Arguably, the department stores of the 1920s led the movement to showcase merchandise not on the street but on upper floors of designated buildings arranged as "malls". When push came to shove, pedestrians were driven from the streets to make way for motor transport. The verandah was rightly symbolic of a localized urban feature in the first half of the twentieth century. It might have had its origins in the five-foot way, but to lock onto that interpretation alone is to miss the main part of its history.

#### **Ethical considerations**

Ethical issues (including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, and redundancy) have been completely observed by author.

#### **Conflict of Interest**

The author has no conflict of interests to declare.

### References

#### Articles

- Chang, J. (2016). A Genealogy of Tropical Architecture, Colonial Networks, Nature and Technoscience. Routledge.
- China, Imperial Maritime Customs. (1908). *Returns of Trade and Trade Reports, 1907, Part 2*. Statistical Department of the Inspectorate General of Customs.
- China, Imperial Maritime Customs. (1911). *Returns of Trade and Trade Reports, 1910, Part 2*. Statistical Department of the Inspectorate General of Customs.
- China Mail. (14, 17 February, 1868). Charles Adraham Saint.
- Condit, I. M. (1888). English and Chinese Reader with a Dictionary. American Tract Society.
- Dr. Ho Kai's protest against the Public Health Bill submitted to the government by the Sanitary Board, and the board's rejoinder thereto (1887). Government of Hong Kong, Sessional Papers laid before the Legislative Council of Hong Kong. Government Printer (pp. 403-412).
- Evans, D. E. (1970). Chinatown in Hong Kong: the beginnings of Taipingshan, *Journal of the Royal Asiatic Society Hong Kong Branch*, 10, 69-78.
- Faure, D. (2005). The common people in Hong Kong history: their livelihood and aspirations until the 1930s. In P. Lee (Ed.), *Colonial Hong Kong and Modern China, Interaction and Reintegration* (pp. 9-37). Hong Kong University Press.
- Government of Hong Kong. (1868; 1878; 1881; 1888; 1889; 1890; 1897; 1903). *Hong Kong Government Gazette*. Government Printer.
- Gray, J. H. (1875). Walks in the City of Canton. de Souza & Co.
- Hong Kong Blue Book. (1888; 1889; 1890) Government.
- Huang, S. (2018). Cong shengcheng dao chengshi: jindai Guangzhou tudi chanquan yu chengshi kongjian bianqian [從省城到城市:近代廣州土地產權與城市空間變遷]. Shehui kexue chubanshe [社会科学文献出版社].
- Jiang, B. (2003). 'Wujiaoji': jindai Min-Yue qiaoxiang yanglou jianzhu de yuanxing ["五腳基": 近代 閩越僑鄉洋樓建築的原型], Chengshi yu sheji xueba [中国建筑工业出版社] (pp. 13-14, 177-243).

- Lai, D., Wu, J., & Xu, S. (Eds.) (2015). *Zhongguo jindai jianzhu shi* [中國近代建築史], vol. 2. Zhongguo jianzhu gongye chubanshe [中國建築工業出版社].
- Lai, Y., & Nie, Z. (2012). *Taiwan jiewu yu Zhongguo Guangdong qilou zhi bijiao yanjiu: yi jianzhu fagui dui chuantong jiewu qilou yingxiang wei li* [臺灣街屋與中國廣東騎樓之比較:以建築 法規對傳統街屋騎樓影響為例], *Dushi yu jihua* [都市與計畫], 38 (1), 73-98.
- Lee, H. Y. (2003). The Singapore shophouse: an Anglo-Chinese urban vernacular. In G. K. Ronald (Ed.), *Asia's Old Dwellings, Tradition, Resilience, and Change* (pp. 115-134). Oxford University Press.
- Leach, A. J. (1890-1891). The Ordinances of the Legislative Council of the Colony of Hong Kong, Commencing with the Year 1844. Government Printer, 1890-1891.
- Lim, J. S. H. (1993). The 'shophouse Rafflesia': an outline of its Malaysian pedigree and its subsequent diffusion in Asia. *Journal of the Malaysian Branch of the Royal Asiatic Society*, 66 (1), 27-66.
- Lin, C. (2001). Guangzhou jindai qilou fazhan kao [廣州近代騎樓發展考]. Huazhong jianzhu, 5, 114-116.
- Lin, L., & Xu, X. (2004). *Guangdong ji zhoubian diqu qilou fazhan de shikong guocheng ji dongli jizhi* [廣東及周邊地區發展的時空過程及動力機制]. *Renwen dili* [人文地理], 19 (1), 52-57.
- Lung, P. Y. D., Ho, C. C. I., & Lee, H. Y. (2003). Tong Lau, A Compilation of Measured Drawings of Tenement Buildings in Urban Areas of Hong Kong: A 2003 Measured Drawing Project by Year-3 Students of the Bachelor of Arts in Architectural Studies Programme. Hong Kong: Department of Architecture, University of Hong Kong.
- Mr. Chadwick's Report on the Sanitary Condition of Hong Kong (1882). Colonial Office, Eastern No. 38, CO 882/4 Public Record Office, London.
- Ni, J. (2002). Guangzhou chengshi daolu jindaihua de qibu [廣州城市道近代化的起步] Guangdong shizhi [廣東石植], 2002 (1), 26-30.
- Papers Relating to Restrictions upon Chinese in Hong Kong (1971). *Irish University Press Area Studies Series, British Parliamentary Papers, China, No. 27, Hong Kong 1862-1881*, Irish University Press.
- Report of the Housing Commission 1935 (1938). Government of Hong Kong, *Sessional Papers laid before the Legislative Council of Hong Kong*. Government Printer, 1938 (pp. 257-287).
- Report on the question of the housing of the population of Hong Kong (1902). Government of Hong Kong, Sessional Papers laid before the Legislative Council of Hong Kong. Government

- Printer (pp. 627-652).
- Sun, Q. (2009). Shanghai jindai chengshi gonggong guanli zhidu yu kongjian jianshe [上海近代城市公共管理制度與空間建設]. Dongnan daxue chubanshe [東南大學出版社].
- The Laws of Hong Kong, Containing the Ordinances Enacted Until and Including the 1st Day of September, 1950, and Subsidiary Legislation Made Thereunder, Prepared under the Authority of the Revised Edition of the Laws Ordinance, 1948. (1950). Noronha.
- Thomson, J. (1898). Through China with a Camera. A. Constable & Co.
- Tjoa-Bonatz, M. L. (1998). Ordering of housing and the urbanisation process: shophouses in colonial Penang, *Journal of the Malaysian Branch of the Royal Asiatic Society*, 71 (1), 123-136.
- Wang, S., Yang, S., & Yu, H. (2018). *Qilou wenhua yanjiu: kuajing fangyan 'wujiaoji' de qiyuan jiqi yuyi yanbian* [騎樓文化研究: 跨境方言五腳基的起源及其語義演變]. *Huaqiao daxue xuebao* [華僑大學學報], 6, 27-35. *Xunhuan ribao* [循環日報]. Hong Kong: Xunhuan ribao guan [循環日報].
- Yeoh, B. S. A. (2003). Contesting Space in Colonial Singapore: Power Relations and the Urban Built Environment. NUS Press.
- Zhang, Y. (2017). *Taiwan qilou jiequ de xingshuai yu baocun zouyi* [臺灣騎樓街區的興衰與保存芻議]. *Renwen shehui xuebao* [人文社會學報],17, 135-166.