



Up-Down Nine and Five-Foot Way: Characteristics of Cityscape in a Cultural Perspective

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ABSTRACT

The paper explores the central question of how to identify architecture and its meaning that crossed the territory line in a cultural perspective. By analyzing the buildings and spaces with certain key dimensional aspects, the authors have studied one of the most typical streets in Canton, the Up-Down Nine and its Five-Foot Way. This paper argues that the characteristics of cityscape covers aspects of surface structure, flexible compressive components, pattern forming process, material proto-structure, exactitude of the connections between components, as shown in the case study, all weave together to form the image and identity of the city in history. By exploring the cultural characteristics of urban space in Canton, as well as the genes that produced the Up-Down Nine street of Five-Foot Way pattern, this study aims to explain the street forming process by comparative study on Canton cityscape with Singapore's since the 19th century linked with culture.

Keywords: cityscape, cultural perspective, Canton, Up-down nine and five-foot way

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1. INTRODUCTION

This paper explores the central question of how to identify architecture that crossed territorial lines and unlock its meanings, using a cultural perspective. The history of mutual, open exchange between Canton and Singapore is recorded in what we might term stone books. Reading these two cities, we identify the shared characteristics of their architecture by particular building types, such as shop houses. The materials, craftsmanship and decorative motifs coded the ethnic identity in a culture that infused the cityscape. Based on their common beliefs and international trade links, those who erected buildings in Canton and Singapore embodied lifestyles, aesthetic tastes, technologies, and crafts of their shared cultural roots.

1.1. A brief history of Canton

Traditional Chinese cities represented urban places with both open and closed space. In south China, the former type of urban space was usually located near a river, while the latter kind of urban space, more characteristic of north China, was enclosed by walls. Canton, located in the Pearl River Delta, has a natural watery topography. The waterfront was a typical significant place of the urban settlement, and it also played an important role in generations of complex interactions between economic and social forces in a large hinterland, which in turn was tied up into a historical nexus of vast international trade.

Historically, Canton was composed of two parts: the district of Panyu and the district of Nanhai. The prefecture and other offices of the provincial governor were situated in the center, surrounded by squares enclosed by two layers of thick, high city walls reinforced with watchtowers along the walls, which were further protected by a wide moat. The city was only accessible through four gates from the east, south, west, and north.

Renowned as the earliest trading city on what many scholars have called the maritime Silk Road, since the Song (960–1279) and Yuan (1271–1368) dynasties the city had multicultural roots. From its traditional structure and fabric, the city was both an administrative capital city and a key urban center of commerce and trade. The layout was first based on the traditional Magic Square concept, but it was then incrementally altered because of the development of commerce and the services associated with that commerce in the network of international trade.

As early as the Kangxi emperor (c.1662–1722) set up the Canton Customs in 1685, trade flourished until the Qianlong emperor (c.1735–1796), who made Canton the only port open to overseas trade in 1757. The Qianlong reign lasted 60 years while Europe witnessed significant cultural change and revolutions during the 18th century. Beginning in the Qianlong period, various glass objects such as vases, cups, bowls, snuff bottles, plant pots, incense burners, water-pots-for-calligraphy, and brush washers were made in the palace workshops. Vases with either eight sides of transparent red color or of geometric design were made to meet Qianlong's high taste for objects that mixed European with Chinese design. In the palace glass workshop, most of the craftsmen with glass-making or jade-working experience came from Canton.

Glass was so fragile that it had not been widely used in Chinese people's daily life. Glass-making was still a small-scale production, for artifacts rather than for buildings, although the material had many practical functions in buildings. In the lodging houses of Canton, windows with stained glass were used by clients to show their social status and identity, thus complementing its purely decorative function. In addition, regarding the styles, forms and patterns of glassware and glass windows, the art and cultural exchange between Europe and China from the 17th to 18th century had a great influence. With

the support of imperial orders, glass workshops were popularized in Canton and Suzhou through the late 19th century. Glassware and stained-glass windows were not the privileged products of imperial palaces anymore. Stained glass windows gradually came into extensive use in five-foot way shop-houses in Canton, with mixed patterns and characteristics of vernacular arts and crafts.

Accordingly, Canton's Thirteen Hongs were formally set up in 1782 as types of two-and three-story buildings along the waterfront of the Pearl River. Export commodities from China via Canton consisted mainly of silk, textiles, ceramics, or blue-and-white porcelain. From the 17th and 18th centuries, the Philippines also played an important role for art and exchange between China and the Spanish New World. The Portuguese exploration of the Far East in the 16th century had already spread European art, culture and religion to the south coast of China (i.e., Macau) via the maritime Straits of Malacca. Artifacts from other cities in coastal or inland China were also sent to Canton for trade with the outside world. For example, this small vase with white glaze shows historic evidence of how the products of Fujianese kilns in Dehua were exported via Canton, and were carried together with art pieces and goods from Asia by Manila galleons to America.

In south China, the "Canton Trade System" reflected the strength of the Qing dynasty (1644–1911) at its height, controlling trade with the foreign export market from 1700 to the 1860s via the custom house. Art pieces, glassware, and goods linked south China to Western Europe and the Americas. Based on the Canton Trade System, traders from Europe, Southeast Asia, the United States and the south China coastal area all gathered in Canton during prime trading periods. Foreign traders formed a community based at the "Canton Thirteen Hongs," or called foreign factories and merchant shops as commercial agents. Buildings with each

national flag in front of them stood along the river through which fine Chinese art pieces were exported and highly appreciated in Europe and the United States. Concurrently, generations of artists provided a significant amount of visual records on the Canton trade, and a special guild of Cantonese craftsmen and businessmen obtained a monopoly over trade with foreigners, developing a kinship-oriented pattern for trade, commercial activities and artistic exchange. The imperial court gained personal revenue from these guilds, called "Canton Cohong" merchants.

Throughout the history of Canton, the city had lofty and imposing buildings; broad, well-paved and well-kept streets; and beautiful promenades, all of which led to significant regional development. The diverse economic activities within the network of the South China Sea extended the cultural zone of Canton from southern China to the broader region of Southeast Asia.

The Treaty of Nanking in 1842 resulted in the payment of an indemnity of \$21,000,000^[1], and the opening to British trade of the five ports of Canton, Foochow, Amoy, Ningbo and Shanghai. The foreign commercial community that thrived by using these five treaty ports also established the new trading foundations. However, the conflict with foreign countries in the mid-19th century cast shadows on many port cities along the southeast coast of China. Many studies, both from the Chinese perspective and the Western perspective, regarding cities and people's life along the southeast coast of China, have studied the semi-colonial cities of China during the period discussed above^[2,3,4]. Until 1919, during the days of the Student Movement, Dr. Sun Yat-sen (1866–1925) proposed what he called the "International Development of China," which had been an ideal for many Chinese cities to achieve, in terms of city planning, civic construction, and urban administration at the beginning of the 20th

century^[5]. In 1921, his son, Sun Ke (1891–1973) proposed an “Urban Planning Theory” to support his ideal, when he served as the first mayor (in the Western sense of that term) of Canton. He stated that “urban planning includes everything related to the construction of a city: the network of roads, the location of commerce, the choice of parks and fairgrounds, the facilities of public institutions, the management of water supply and sewage, the construction of factories and housing, etc.”^[6] Since many contemporary overseas Chinese people in Southeast Asia had enthusiastically supported the overthrow of the Qing government, Sun Yat-sen often honored them as what he called either “the mother of revolution” or “patriotic overseas Chinese”^[7]. As noted above, Canton already had a close relationship with countries around the South China Sea. Frequent migration between south China and Southeast Asia could be represented by two cities at either end of a historical, commercial spectrum: Canton and Singapore. The mutual trade and commercial activities led to both dynamic and disorganized cityscapes in these two pivotal cities.

1.2. A brief history of Singapore

On 30 January 1819 Sir Stamford Raffles landed on the shores of the Singapore River as the agent of the East India Company. There he signed a treaty for free trade policy. On his third visit – on 10 October 1822 – he proposed a Town Plan and set up a committee to oversee its implementation. The plan made the south bank of the river a Chinatown, which was divided into separate areas for different dialect-speaking groups, including the Cantonese group from Canton. The plan also provided for a network of roads, and for streets to be built at right angles, as well as for the subdivisions of land into private lots and public spaces. A linear arrangement of shop houses of specified widths linked by a covered passageway

was introduced for the sake of regularity and conformity^[8].

In the 1860s, the town had the same size, and with the same basic layout of streets, as had originally been planned. This was the case until the 1880s, when the city expanded in all directions. Chinese (or what were originally known as Straits Chinese) immigrated to the city either from south China or Malacca (further north of Singapore, along the shore of the Straits that bear Malacca’s name), when Singapore reached its high wave of trade between Europe and the Far East, after the opening of the Suez Canal.

Most of the shop houses were partially used for commercial purposes, whereby the front room of the ground floor was given over for these purposes, and the veranda that extended into the street was also devoted to commerce. These structures also served residential functions, whereby the rooms and spaces on the first floor—beyond the shop—were for family uses, as were the second or third floors of the buildings. Inside, for lighting and ventilation purposes, there were often a series of “sky wells” (*tianjing*, in Chinese) that extended back from the street, since many of Singapore’s lots were extremely narrow and deep. Most of the shop houses had narrow facades characterized either with European classical stylistic details (elaborately plastered onto the brick structure to simulate stone), or with distinctive Chinese roofs and curved eaves, which identified them as being reminiscent of a Chinese cityscape. Some materials and motifs were imported from China. Shop houses were as prevalent as a building type that they shaped the basic forms and building character of the city. When this building template migrated north to Canton – and then back south to Singapore and elsewhere in the region, often with adaptations – it linked the two cities with dimensional aspects, since the entrance of the shop houses was marked by a five-foot wide arcade, commonly known as a “five-foot way” [Figures 1-2].



Fig.1 Shop-houses in Singapore (Mei Qing, 1997)



Fig.2 Shop-houses in Canton (Mei Qing, 2012)

1.3. Etymology of Up-down nine and five-foot way

The term “up-down nine” is another colloquial expression of Mandarin-Cantonese origin. Up-down nine was originally a literal translation from the “Ninth PU” in Canton’s Xiguan area, the earliest business settlement during the Song Dynasty (960–1279). Until the Ming Dynasty (1368–1644), Xiguan became a major commercial street, especially after the opening of the Daguan River in Canton in 1472. “PU” denoted “shop.” With many shops lining the street, the street itself was referred to as “PU.” For self-defence, each shop built a fence door and a gatehouse. Shops on the street were arranged numerically. “PU” had another connotation as either a “foot” or “quay” along the river or water alley. Up-down

nine referred to the Up-down ninth “PU” in the history of Canton [Figure 3].



Fig.3 Historic Area in Canton City (Guangzhou City Planning Bureau, 2012)

The characteristics of a cityscape in Canton come from, on the one hand, the buildings and streets-their functions, forms, styles, scales, fabrics, textures and colours. On the other hand, that soft atmosphere decided by human ideology, and perceived by human five senses.

On a multi-functional ground of the city space, architecture composes impression and atmosphere of the space paralleled to city history as an art of human habit with multi-demands, and an art of coherent three-dimensional composition, e.g., enclosures, space, architectural works, connections and closures, landmarks and views. All elements are weaved together to form a coherent relationship and a place with physical boundary and spiritual atmosphere.

The term “five-foot way” is a colloquial expression of Anglo-Asian origin. “Five-foot” is a literal translation of either *kaki lima* or *goh kaki*, a Malay and Hokkien (Fujian) term, respectively; and “way” is a corruption of the term “footway,” which is defined as a public walkway alongside the building, according to the Indian Conservancy Acts Nos. 13 and 14, enacted in 1856. In Selangor, Malaysia, Clause 159 of the Conservancy

Regulation No. VIII (1890) states that “every person who shall erect or re-erect any building which shall abut on any street or road shall provide an arcade or veranda-way in front of such building at least five feet in width in the clear, and the pavement of the said arcades or veranda-way shall be uniformly laid”^[9]. In 1822, Raffles did not use the term when he planned Singapore’s lots. Instead, he used either “veranda,” “arcade,” “verandah ways,” or “five-foot paths,” as noted in Singapore’s By-Laws, dated 01.05.1908. The term “five-foot way” originated from local builders, in response to observing the minimum width of a veranda for shop houses^[9].

2. SPREAD OR COEXISTENCE OF THE CITYSCAPES

Some scholars have suggested that shop houses with residential and commercial functions, and having a “five-foot way” were the results of transplantations of building types taken from Canton and brought to Singapore, via Malacca, by Straits-born Chinese with links to southern China^[8]. Jon Lim traced the history of shop houses in Penang and Singapore to prototypes that he found in Hangzhou, China. This research also seems to suggest a southern Chinese origin for the shop house. Because of the historical Chinese migration to the Straits of Malacca, there were Chinese social lifestyles as well as house forms that were exported to these new settings. Lim maintained that it was “essentially a Chinese vernacular style, adapted to a colonial context.”^[9]

A recent study regarding Indonesian shop houses supports Lim’s argument: “The Indonesian shop-house is closely linked to the history of Chinese settlement in the Archipelago...Many immigrants came from southern China. It is the architecture of this region that provided the major formative influence for the Chinese shop-house in Indonesia. Architectural elements designed to combat the humid, semi-tropical climate, with its typhoons, torrential rains and intense

sunlight, meant that the traditional architecture of southern China was well suited to local climatic conditions in Indonesia”^[10].

Jon Lim also suggested that the shop house was the result of European building types that had spread to Singapore and southern China via the Straits of Malacca^[9]. However, Mui Ho’s study of the shop house in Shanghai, Guangzhou, Haikou and Hong Kong traced the history of this building type back to small towns in southern China from as early as the 6th century, when merchant classes and artisans emerged along the coast. She assumed that shop houses were an architectural link over time and place, which led her to research the direction of tracing relations of commercial buildings and social life of the southern Chinese coastal regions with inland areas of China^[11]. However, by analysing the buildings and spaces with certain key dimensional aspects, other authors suggest that the shop house was a kind of building designed and influenced by a multitude of factors. As noted above, Stamford Raffles established a strict administrative method and careful city plan in Singapore after 1819. He laid out a “five-foot way” rule concerning shop houses along the streets. This rule concerning city planning in Singapore could be accepted as the key turning point for shop houses being transformed into the Five-Foot way. Such practices were also popular in cities of Dutch-colonized Indonesia, as well as in British-dominated Penang and Ipoh^[12]. These buildings suggested an architectural coexistence that responded to the natural topography as well as to commercial settings that were emblematic of both.

At the turn of the twentieth century, many cities worldwide experienced the influence of what was commonly called the “City Beautiful Movement,” which had its origin (as a term) in the United States. This term refers to an aesthetic approach to city planning that derived, most significantly, from Daniel Burnham’s

plans for the Columbian Exposition in Chicago in 1893, which was then spread to Australia, Southeast Asia, China, and elsewhere. A “beautiful” cityscape implied a certain urban size, density, built forms, interstitial space and modernity in a cultural sense. In an artistic way, a cityscape represented itself in a particular way of painting, drawing, printing and photographing certain aspects of civic buildings, especially their facades. Craftsmen found building facades the place to paint. Splendid stucco decorations with floral designs were applied to the facades. The city itself became the subject of paintings.

In Singapore during the early 1900s, the town was well laid out, the streets broad and the city well-cared for. Although the average plot sizes of the shop houses were narrow, with one to three units, the plan of each shop house was deep, with many layers of sky wells. Ventilation grates with Malay-inspired, carved motifs stretched across the width of the house. Fine wood carving graced the upper balustrades, with fence doors complementing principal doors on the shop houses’ facades. The fascia board of the roof provided a fertile opportunity for intricate and decorative carving in Malay, European, and Chinese motifs. Fine tiles imported from France, Italy, and Belgium were often applied to the walls, floors, and pillars. Roses, other flowers, and birds abounded as decorative ornaments, serving as accompaniments to relief stucco decoration that derived from Chinese motifs of deer, crabs, dragons, and mythical dogs, all vivid symbols of happiness, good fortune, and long life^[13].

Meanwhile, in Canton, besides the major changes in road structure and other infrastructure, commercial buildings and residential developments also represented the city’s transformation. As a city with so much overseas Chinese investment and other contributions, new business and commercial activities constituted the main activities of the city, along with its

ongoing social life. A new type of building was introduced into the city, constructed along major roads and similarly blending commercial and residential functions. This, too, became a kind of shop house, locally called *qilou*, aligned along a characteristic arched street. Typical interface elements between the structures themselves and the streets were new versions of the “five-foot way.” The household bay ranged from four to five meters, while the depth ranged from seven to eight meters. These *qilou* were often three storeys in height. The first floor was five meters high, with the “five-foot way” along the street, in reality, more likely to be ten meters in width. The vogue for extravagant decoration—similar to more traditional shop houses—also emerged in Canton [Figures 4-5].

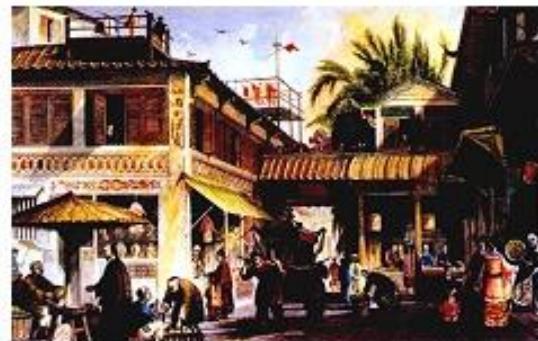


Fig 4 Painting of Canton Street at mid-19th century



Fig 5 Painting of Canton Street at early 20th century

Mainly craftsmen, artisans and commercial traders were responsible for these changes, rather than city planners *per se*. People changed the contradictory city scales by bending, twisting and re-organizing the urban chaos into harmony on the multi-functional ground of the city’s space. They also changed the urban

architecture that composed the impression and atmosphere of the cityscape. As an art of human habitat with many demands, there was a concurrent art of coherent three-dimensional composition, with enclosures, space, architecture, connections, closures, landmarks and views woven together to form a coherent relationship and a place with both a physical boundary and a spiritual atmosphere [Figures 6-7].

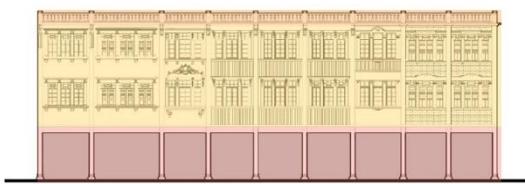


Fig.6 Five-foot way in Canton (measured drawing, 2012)



Fig.7 Details and decoration by local craftsmen (photograph, 2012)

3. TRANSFORMATION OF SPACES, SCALES, FORMS, MATERIALS, COLOURS AND PATTERNS

Shop houses of the “Five Foot Way,” which are the result of an artistic combination of mixed-use spaces, employ simple numeric dimensions. The visual scale and proportion, as shown on shop house buildings, play important roles in producing street-scale harmony. The ideal simple form, when replicated and adapted, represents not only a combination but also a coherence of shape, size, materials, colours, and patterns [Figure 8].



Fig.8 Measured drawings of decoration details on the shop houses in southern China (Mei Qing, 1997)

Similar cityscapes and skylines clearly illustrate the fact that Singapore

and Canton had commonly shared design images, which were then transformed by individual craftsmen, each of whom displayed their own creative impulses as they responded to different climatic conditions. The cities of these craftsmen developed incrementally generation after generation. Most writings about these two cities do not give proper credit to the people, movement, mood, sounds, light, textures, tastes, and smells that complement the visual imagery created by historic shop houses. On the one hand, the characteristics of the cityscapes derive from the buildings and streets, which include their functions, forms, styles, scales, textures, and colours. On the other hand, the atmosphere of the cities was perceived by personal experience, the five human senses and ideology (i.e., regulations, changing planning ideals, and political realities).

From the very beginning of the design, the scale of the shop houses, as well as the street, was established by the dialogues that occurred between shop houses and streets, as well as between craftsmen and clients, the latter of whom paid more attention to basic preferences than others. A desire for sun and rain protection, for example, indicated a preference for planning the five-foot arcade, and a consideration for limiting the height of the buildings. A desire for trade and business in front of the shop houses indicated the relative position of the five-foot way and the special treatment of street edges. The type of five-foot way shop house was the product of planners, designers (and others mentioned above) who translated a variety of activities into patterns that represented the common, vernacular cultural activities in the Canton-Singapore cultural zone. As Frank Lloyd Wright stated, the interpretation of life is a true function of the designer, because we know that buildings are made for life, to be lived in and to be lived in happily, and designed to contribute to that living, joy and living beauty.

In the 1920s, when Canton was selected as the first experimental base where certain American planning ideals might be transplanted, the American architect Henry K. Murphy and other planners unsuccessfully tried to implement municipal planning in the city^[14]. The city districts, streets, and collective images of vernacular buildings were divided by people's genealogy. In Singapore, similar districts and streets were divided according to people's ancestral homelands or territory groups. The surface structure of the town had two layers of contour: the morphology that determined the architectural appearance of the streets; and the protruding five-foot way arcades of the second floors of the shop houses. There is also a compelling study of the contours of building facades^[15].

The comparative views of Singapore and Canton may be reflected in the following poem by the Egyptian architect, Hassan Fathy:

City is a million acts that go into its making.
It is a living organism.
The place to start building the city is with the individual.
You have to know your neighbours,
And their strengths,
Which of them can spare the time for
Another coffee,
Or a child's tears.
And out of such large and small connections
You weave a neighbourhood,
And from such neighbourhoods
A city.^[16]

4. COMPARATIVE SHOPHOUSE STUDIES OF CANTON AND SINGAPORE

One of the most typical streets in Canton is Up-down Nine. The surface structure of the street is its five-foot way shop houses. Most of the residents of the town were pragmatic merchants, traders, and businessmen, which determined their residential morphology. Early Chinese

export pictures of Canton were generally head-on views, seen from a point directly across the river, whereas the export scenes show the river crowded with craft in a seemingly haphazard and perhaps naturalistic manner. However, the history of the city was not simply a case of Western influences upon Chinese; the city also saw the reverse process at work. Western conventions of picturesque composition had a direct bearing upon the scenes being depicted, so that street vendors and other human activity appeared in the foreground^[17]. However, in reality, the crowds thronged all through the narrow shopping streets characterized by shop houses. The shop houses in Canton had narrow-front and deep-layer building layouts along the streets. Thus, the more limited land supply could be distributed to more businessmen for their commercial allocations. The shop houses, varying from two- to four-storey, constituted the majority of the streetscapes.

Correspondingly, the 1846 map of Singapore by J.T. Thomson showed the European, Arab, Malay, and Bugis residential areas north of the Singapore River. South of the River were the more congested Chinese and Chulia areas. The residential areas did not extend beyond these confines until the 1860s^[18]. The majority of the shop houses in Singapore were situated in Telok Ayer Street (meaning Water Street), which paralleled the original seashore Chinese settlement, just as some of their original waterfront house prototypes in Canton. When plots were dictated for residential uses, they were usually of narrow and long shapes, with frontage of four to five meters, since the width was determined by the length of the timber felled.

5. CONCLUSION

In conclusion, first it is clear to us that the "origin approach" to the study of the shop house is limited in its appeal. Buildings are physical expressions of a culture that can be – as shop houses were in both Canton

and Singapore – of more than one origin. In the case of the shop houses, they were created in different territories at the same time. Sometimes, as in the case of Canton and Singapore, building types and styles, both as symbols and carriers of culture, are transmitted across regions through migration. From a cultural perspective, the current five-foot way shop houses along the major streets of Canton and Singapore reflected the people's ways of life, and demonstrated how people use social and commercial space, as well as how people localized the imported, hybrid building types corresponding to commercial, social and environmental influences. These three- or four-storey shop houses, with decorative elements on windows, doors, and other aspects of facades formed architectural and street patterns that are strikingly similar to those shop houses in Singapore, Malaysia, and Indonesia. The humanistic and socio-cultural characters of five-foot way space were achieved by establishing a spatial transition between individual buildings and cities. Such qualities are also influenced by arcades and colonnades imported from western countries via the overseas Chinese in Southeast Asia [Figure 9].



Fig.9 Shop house pattern in cities of southern China during the period from 1890-1930s (Mei Qing, 2003)

During the 19th and the early 20th centuries when national boundaries in many parts of the world were determined, number tradition and its meaning were used as vernacular link between south China and Southeast Asia. Nine is the anode, while five symbolizes fair. The architectural diversities of the cities within each province, country, and region showed us either different or common patterns linked by cultural communication, socioeconomic and political links, religious ties, and commercial activities.

The broad network was either tightened or loosened because of the economic, political, and social conditions, which formed an active and dynamic region in a cultural, historical, socioeconomic, and political sense [19].

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