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The Imageable City – Visual language of Hong Kong neon lights

deconstructed

Hong Kong as an international city has long held the title of 'Pearl of the Orient', known for its gleaming night view. The Hong Kong Tourist Association often featured local neon signs as promotional visuals, a way of attracting foreign visitors in response to exotic voyeurism and imagination. However, numerous neon signs had been taken down since the Buildings Department issued statutory removal orders in 2010, leading to the gradual disappearance of a unique facet of vernacular visual culture. The emergence and decline of neon signs tell rich stories of everyday life, spatial culture, community memories, and socioeconomic change. This article attempts to categorise and analyse 400+ local neon signs of varying types documented since 2015, exploring the following questions: What are the social functions of neon signs, and how do they connect with visual communication and the city? How do neon signs construct the image of the city?

Keywords: Hong Kong, neon lights, streetscape, visual culture, visual communication

Background

In December 1910, Georges Claude presented the world's first large neon light installation at the biennial *Mondial de l'Automobile* at the Grand Palais of Paris, capturing the attention of international guests with his radiant invention (Van Dulken 2002; Caba 2004). Jacques Fonseque, assistant to Claude, had the epiphany in 1912 that the soft luminosity and physical features of neon lights held huge potential in the advertising field. For example, long neon light tubes could be twisted into any letter and pictorial image. Consequently, the world's first commercial neon sign was erected on Montmartre Boulevard, Paris, for a salon named Palais Coiffeur. Claude's neon technology was patented in America as early as 1915, though the country's first neon sign would not appear until 1923 in Los Angeles, when the 'Packard' sign was purchased from the Parisian manufacturer by American automobile dealer Earle C. Anthony. Shortly after, various American businesses began collaborating with Claude to license the manufacturing of neon signs, and a surge of neon lights swept through America. New York's Time Square was a particularly notable site which hosted a range of famous neon signs (Caba 2004; Ribbat 2013).

According to a 1930s periodical by Claude's manufacturing company, the first neon sign to appear in Asia was in Hibiya Park, Tokyo, in 1926 (Ribbat 2013; Caba 2004; Freedman 2011). In the same year, China's first neon sign was set up at the Evan Book Company on Nanjing East Road, Shanghai, as an advertisement for Royal brand typewriters in its display window (Chen 1997: 6). As for Hong Kong, the Hong Kong British Government had defined neon signs as early as 1939, simultaneously issuing guidelines for related construction work (Hong Kong Council Chamber 1939). Claude Neon Light opened Hong Kong's first neon factory in 1932, in response to growing demand in the market (Hong Kong Daily Press 1932). In the 1950s, with local economy and industrial development coming into bloom, a great need for product promotion led to the emergence of various neon manufacturers. As local economy prospered in the 1960s, neon signs were in high demand for any type of business, especially Chinese restaurants, bars, nightclubs, department stores, household appliances, cigarettes and timepiece brands (Kwok 2018).

At the present, however, the number of neon signs on Hong Kong streets is in rapid decline. While there are many contributing factors behind this mass disappearance, the Buildings Department is largely responsible. According to the Department website, removal orders for unauthorised signboards have been issued since December 31st, 2010. Through implementation of the Minor Works Control System under the Building (Minor Works) Regulation, the Department have been enforcing removal of signboards that are potentially hazardous, neglected, abandoned, or unauthorised. Shop signs are regarded by the Buildings Department as building works instead of mere extensions of buildings. The Buildings Ordinance (Cap 123) and the Public Health & Municipal Services Ordinance (Cap 132) specify that 'A Sign permanently attached, fixed, annexed or secured to a building normally falls within the definition of "building" or "building works" and is subject to the control of the Buildings Ordinance' (Buildings Department 2012). Therefore, should a signboard pose potential risks to a building's structural safety, the Department may remove it under Section 26(4) of the Buildings Ordinance.

There are also strict guidelines controlling the projection distances and dimensions of signboards (Figure 1); failure to adhere to these guidelines can result in forced removal orders, regardless of sign age (Buildings Department 2013).

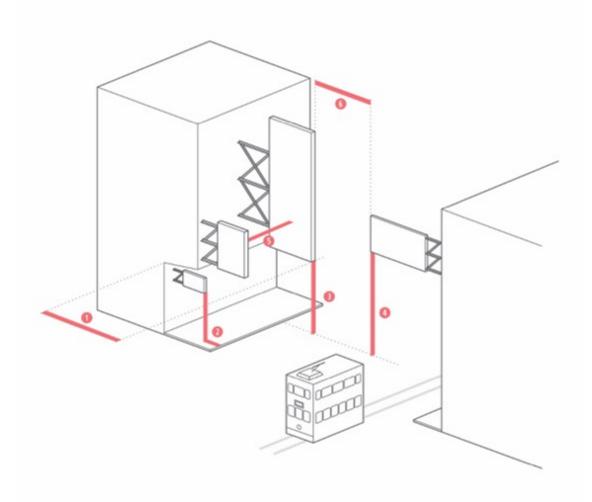


Figure 1. When the owner of a signboard violates any of the above guidelines, the Buildings Department may issue a removal order to demolish the sign in question, under the Buildings Ordinance section 24 (2)(c).

Notes in diagram: 1. Signs shall not project more than 4.2m from the main building line or beyond the center line of a street; 2. Signs shall have a minimum clearance of at least 3.5m and a minimum clearance distance of 1m from the curb if projecting over a pavement; 3. Signs shall have a minimum clearance of 5.8m if projecting over a street; 4. Signs shall have a minimum clearance of 7m if projecting over a tramway; 5. Two adjacent signs shall have a minimum lateral distance of at least 2.4m; 6. Two signs erected from the opposite sides of a street shall have a minimum clear distance of at least 3m.

The Department estimated in 2013 that there were about 120,000 signs, including neon lights, in the city, a large number of which were in breach of regulations (Development Bureau 2013). This number is believed to be constantly diminishing today. Such

disappearance of neon signs has brought about the subsequent perishing of related vernacular visual culture. Apart from causing emotional distress, taking down a few signs could not in fact affect daily life in the city. The vernacular culture, visual aesthetics, as well as historical and social value to be found in neon signs, however, have emerged as culturally significant and deserving of attention. Therefore, we might ask: Apart from their direct relation to design and visual aesthetics, what else about neon signs make them worthy of concern by designers and art practitioners? What makes neon signs socially significant, and how might we understand their connections with visual communication and the city? How is the image of the city presented and constructed by the diverse types of neon signs?

This paper attempts to explore Hong Kong's disappearing 'neonscape' through investigating the cultural and spatial relationships between the neon signs and emotional attachment to place, as well as architectural language and the image of the city. Furthermore, by documenting and analysing the different types of relationships between neon signs and architectural spaces through the lens of visual culture, this paper also explores the unmistakably unique set of local visual language that has grown out of Hong Kong's neon history.

Signs and Emotional Attachment to Place

To answer the above questions, we must first return to the basics by understanding the concept of place. A place refers to a particular site, which could be an entire city or a small part of it, such as a mall, residence, park, or street, etc. People construct places, and places in turn shape people's lives, cultures, identities, and histories. Such unique and rich site are objects of emotional attachment, and become a part of our lives (Chen,

Orum and Paulsen, 2013). Through our everyday participation, in which meaning is accumulated, constructed, and assigned to a place, the place in turn is able to convey for us a sense of proprietorship.

Humanistic geographer Yi-Fu Tuan (1977: 3) raised the following question at the beginning of his landmark work *Space and Place* — What is place? To Tuan, the place is the centre space of human emotional values. Throughout the book, Tuan emphasises the human experience, or how people make sense of space and place through various experiences such as touch, feeling, and thought, as well as the ways in which people interpret the meanings of space and place. In fact, humans have always made certain associations to specific places or buildings; for instance, a financial district is often associated with values such as elitism, the middle-class, and prosperity. Political geographer Cresswell (2004:6) described this type of place as a space containing meaning, to which people attach meaning through different means. In other words, a place in itself is a neutral existence without any meaning; it becomes a meaningful space only when meaning is ascribed and attached by people.

A more encompassing understanding of place is offered by political geographer John Agnew (1987), who believed that the meaning of a place can consist of three basic elements: 1) Location, referring to cartographic coordinates; 2) Locale, pertaining to physical environments under social relationships — places such as street buildings and parks may be represented through their tangible physicality; and 3) Sense of Place, understood as the subjective and emotional attachment to a place formed by humans, wherein a certain place incites a particular feeling. We often describe feeling a sense of home or kinship towards places in which we had been born and bred, or had spent long periods of time living. In daily life, we tend to make attempts at generating familiar meanings to strange places by arranging personal belongings around them (family photographs, for instance). Similarly, residents in a neighbourhood often identify particular shop signs on the street as wayfinding landmarks or rendezvous points.

Expressing similar views as Tuan and Agnew, geographer Relph (1976) observed that people are prone to missing the places they'd left behind; such a reaction to him reflects the fact that places hold deep meaning to the 'being' of a human. The concept of 'being', according to Relph, refers to a person's act of living within the world. Relph believed that the existence of space is felt concretely by humans. Such a sense of place emphasises the idea that the place is a type of amalgam connecting human experiences (Relph 1976: 8).

According to Chen, Orum, and Paulsen (2013), the main purpose provided by the function, use, and existence of a place is for people to assign it meaning. Such meaning includes memories about the place, whether they are first-time experiences, oral histories narrated by inhabitants, or historical accounts in literature. The meaning of a place can also originate from personal feelings and experiences. People regularly become emotionally attached to — in other words, they establish emotional connections with — particular places and things (such as signs). Such intense attachment springs from long periods of repeated and varying positive interactions with said places and things.

The construction and manifestation of place attachment can be traced back to childhood, according to Morgan (2010), who pointed out that childhood place experience is the

beginning of such attachment. Thus, place attachment is the result of long-term positive interactions with a locale, creating in the process deep emotional relationships, instead of a momentary reaction to a place. As Giuliani and Feldman (1993) defined in their research, place attachment must involve an experience of long-term affective bond towards a specific geographic location, as well as the meaning behind it. It is widely acknowledged (Hay 1998; Proshansky, Fabian & Kaminoff 1983; Morgan 2009) that long-term residents of a particular place tend to feel a sense of affection and belonging towards said place. Morgan (2009) further stated that such emotional attachment is more established when people have stayed to live in their places of birth through childhood; as they grow in age, their sense of connection or belonging to a place grows as well.

In a certain sense, attachment to place is a sense of belonging, or a close psychological and emotional relationship with the place on a deeper level. Jacobs (1961) believed that attachment to place is 'a sense of proprietorship' towards neighbours; this feeling can encourage interactive behaviour and activities among citizens for the sake of the neighbourhood, consolidate cultural characteristics of a community, as well as protect citizens and their possessions.

This explains the often remarkable emotional responses from local communities in recent years, whenever we receive media news that neon shop signs — especially those belonging to historical businesses — are scheduled to be demolished. We as residents may feel the loss of not only specimens of signboards, but more importantly the meanings of place contained within such signs.

The Neon Sign as Architectural Language

In *Learning from Las Vegas*, Robert Venturi, Denise Scott Brown, and Steven Izenour (1972) explored architecture as language representing forms and notions, and further examined the deeper meanings of architecture. Venturi believed that architecture had become a means of conveying messages, that people are concerned with the messages communicated by buildings, as opposed to the buildings themselves; architecture to him is both language and symbols. In Venturi's studies of the phenomenon of Architectural Communication in Las Vegas, he (Venturi et al 1977, 8-9) emphasised that the impact of the 'Symbol in Space' is often greater than that of the 'Form in Space'. Venturi referred to the combination of architectural style and symbol as 'antispatial' (Venturi et al 1977, 8), which means architecture is seen as communication instead of space; in the realm of architecture and place, communication dominates over space as a paramount element.

Venturi pointed out that the giant advertisement signboards on highways, through their shapes, image silhouettes, specific positions, varied forms, and graphic meanings, contribute to the identification and connection with the wider structures of meaning communicated. Stressing the domination of symbol over space, he wrote that just the architectural form alone is far from enough; the influence of architecture is greatly limited. In the case of Las Vegas, 'The Big Sign and The Little Building' triumphed (Venturi et al. 1977, 13) Venturi believed that, without signs as symbols for promotion or communication, there is no existing meaning of Las Vegas as a place.

Venturi saw neon signs as a type of symbol, as opposed to mere extensions; the neon sign according to him is a part of the building's 'decorative façade'. Architecture

becomes a medium of communication through neon signs, as the images, graphics, and text on the signs convey particular messages, present the contents of buildings and human activities, and also exist as a type of displaying site for visual language in the city and the street. Taking them down is an act of erasure towards the long-established communicative exchanges, symbolic meanings, and relevant collective memories surrounding the signs, all shared within the community.

Neon Signs as The Image of the City

Kevin Lynch in his classic book *The Image of the City* (1960) mentioned how urban citizens develop long-lasting emotional connections with their cities, and create their own images of the cities from personal memories and sense of meaning. Therefore, the more the urban citizen can clearly express the image and narratives of their city, the more they can engage with life in the city and understand its structure. In his studies, Lynch (1960, 9) examined 'Mental Images' of Americans about their present cities, in order to understand the visual qualities presented by American cities — in particular cityscape-related qualities such as 'clarity' and 'legibility'. Lynch believed that a good image of the city must embody high legibility; the term refers to whether the different parts of the city could be easily recognised, and whether the contextual structures within are inter-connected.

Lynch (1960, 9-11) also mentioned the notion of 'Imageability' — how the characteristics and structures of physical objects in reality are constructed or presented in mental impression. In other words, certain objects or things possess distinct qualities that significantly evoke the creation of strong impressions. Such qualities could induce the mental construction of a highly recognisable, soundly structured, and usable 'mental image' of the city, through factors such as shape, color, or arrangement. 'Imageability'

to Lynch is synonymous with 'legibility', as well as 'visibility' on a deeper level, in that objects are not only seen by people, but also evoking clear and strong emotional reactions. A highly 'imageable' city, according to Lynch, includes a legible or visible exterior; the sensual attraction of such a city will not be over-simplified, and will instead be extended, strengthened, and deepened over time.

Regarding how the image of the city is constructed, Lynch (1960, 46-49) outlined five elements dominated by physical form: Paths, Edges, Districts, Nodes, and Landmarks. In the last case, he wrote that city landmarks are usually clear and recognisable objects, such as buildings, signs, shops, and hills; these are often used for recognition, and can function as major clues for the understanding of city structures.

Lynch pointed out that a large size is not a prerequisite for a landmark; it can be small, but the position is paramount. The position of a landmark must be easily noticed, for example on a building façade parallel to or slightly lower than eye-level, or any turning corner or junction where decisions are made. This shows that neon signs possess the qualities for becoming landmarks, as they are usually placed in highly visible positions, easily prompting passers-by to notice and remember their locations. As Lynch pointed out, when landmarks have the ability of creating mental associations, the image of the city becomes more distinct.

Research Methodology

As emphasised by Lynch, the image of the city not only provides a clear impression of the city itself, but also plays a role in society by providing collective memory, strengthening citizens' sense of belonging to the place, actualising emotional security, as well as establishing harmonious relationships between the self and the society (Lynch 1960: 4-5).

As an element of the image of the city, signs can reflect cultural narratives and lifestyle changes in the local community. In the research project *Fading of Hong Kong Neon Lights – The Archive of Hong Kong Visual Culture*, extensive photo documentation and field observation targeting local neon signs was conducted from August 2015 to December 2016. The research team explored a part of Kowloon on foot, covering 15 major roads and over 40 streets across the districts from Tsim Sha Tsui to Prince Edward, as well as visiting other major areas in Hong Kong. Aside from photographing the lettering, patterns, and graphics on neon signs, the team recorded the relationships between different signs, as well as their overall visual and spatial effects on the streets, striving to document their unique aesthetics in a precise and holistic manner. As of this writing, the research team has documented over 400 existing neon signs.

Typology of Neon Signs

As an example of Venturi's 'Big Sign and Little Building', as well as possessing landmark-worthy visual elements, neon signs have the advantage of reinforcing the imageability of a city. In what ways, then, are these signs presenting a city's image? Using Hong Kong as a case study, this article shall examine how neon signs present and construct local streetscapes in the context of a modern city of high population density and extreme spatial limitations.

Design researcher Keith Tam (2014a) has long been studying Chinese and bilingual typography, with a special interest in Hong Kong shop signs. In June 2014, Tam and I

received an invitation from the M+ Museum to create a neon sign bus tour, with the goal of sharing knowledge about the connections between neon shop signs, visual culture, urban space, and architecture. Part of the museum's initiative 'Mobile M+: NEONSIGNS.HK', the tour was complemented with the 'NEONSIGNS.HK' interactive online exhibition, which encouraged public interest in the diminishing signs and crowdsourced photo documentation from citizens. Unfortunately, the project was short-lived. In view of the lack of systematic documentation of local neon sign visual culture despite continued demolition, our team began in 2015 to undertake this research effort.

The neon signs documented in our research have consequently been categorised using Tam's established framework (2014b) as a starting point. In his typological analysis of local shop signs, 12 sign archetypes were constructed based on the ways different types of signs interacted with buildings, pedestrians, and urban environments. The archetypes could be broadly categorised based on their positions on buildings: As projecting extensions, on façades, and at shopfronts. The 12 sign archetypes (Table 1) are as follows:

Shopfront	Building	Extension
. Shopfront fascia	. Building columnar	. Projecting columnar
. Shopfront projecting	. Building fascia	. Projecting banner
. Shopfront columnar	. Building corner fascia	. Projecting irregular
. Shop window	. Façade coverage	
. Plaque inside shop		

Table 1. The 12 local shop sign archetypes including all types of signboards, as presented by Tam.

As our team continued to document signs in other areas of Hong Kong, and discovering different and newer visual forms in the process, the analysed data have been reorganised and presented below to supplement Tam's original framework, with the goal of advancing a more comprehensive typology of Hong Kong's shop signs and related visual aesthetics that may benefit future research.

The 400-plus signs documented in our database were divided into 4 major categories, namely 1) Projecting Signs Attached to Buildings; 2) Wall Signs on Building Exteriors; 3) Shop Signs, and; 4) Animated Signs. Several types from Tam's list were eliminated in this context due to lack of neon representation, while other observed forms specific to neon signs were added. In a variety of circumstances, these 4 types of neon signs complement each other in the rendering of our city's image, containing between them 16 sign archetypes in total, which are listed below (Table 2). This paper shall discuss several examples (Figure 2).

Shop Signs	Wall Signs on Building Exteriors	Projecting Signs Attached to Buildings	Animated Signs
Shopfront fasciaShopfront projectingShop window	 Canopy side wall Building corner wall Building exterior façade Building silhouette Building side wall Building interior 	 Horizontal Vertical Irregularly shaped Rooftop 	 Changing light effects in background neon tubes Two sets of neon tubes operated separately Revolving sign and frame

Table 2. The 16 local shop sign archetypes (only neon signs are presented), as presented by Kwok.

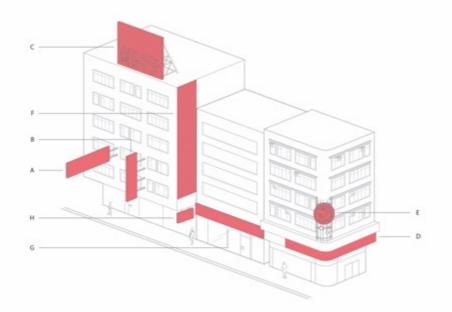


Figure 2. All possible positions of neon signs in the buildings: A. Projecting Horizonal Signs; B. Projecting Vertical Signs; C. Rooftop Signs; D. Wall Signs on Canopies; E. Wall Signs on Street Corners; F. Wall Signs on Side Walls; G. Horizontal Shop Plaques; H. Projecting Shop Signs.



Figure 3. They are examples of neon signs located in the different positions indicated in the diagram of Figure 2. A. Demolished sign for Sweetheart Garden Restaurant in Prince Edward; B. Signs for a noodle shop, Mak Man Kee (left) and dessert shop, Australia Dairy Company (right) in Jordan, both demolished; C. A church sign saying 'Jesus is God' (top) and a sign for Carnival Chinese Restaurant (bottom); D. Swanlake Sauna in Shum Shui Po; From E to G are restaurant signs in Tsuen Wan – Co Co Duck Restaurant (Demolished), Red Seasons Restaurant and Tak Lee Restaurant; H. A sign for tea shop Lee Kum Lan Tea Co Ltd. in Mong Kok.

Projecting Signs Attached to Buildings

Projecting Horizontal Signs

Our record shows that Projecting Horizontal Signs are the most representative among all the types of local neon signs (Figure 3A). Since horizontal signs are installed on lower storeys of buildings, they are usually found around the 1st and 3rd storey. This height allows pedestrians to notice very clearly the shop's location and nature of business. Signs extending horizontally into the streetscape are visually quite powerful and unmistakable passers-by. In the past, when regulations had yet to be seriously enforced, some shops would even extend their signs well into the middle of the street in a bid for attention. The view of competing horizontal signs of varying lengths, all displayed at different heights on the same street, creates a cascading and complex visual spectacle.

Projecting Vertical Signs

Another popular form of local neon signs, Projecting Vertical Signs are generally positioned closer to buildings in comparison to their horizontal counterparts (Figure 3B). Since they are vertically parallel to the exterior walls of buildings, their forms create a tidier and more agreeable visual experience in the streetscape. While Projecting Vertical Signs appear to be more subtly attached to buildings, their vertical rectangular form allows them to take up the heights of anywhere from the 2nd to 4th storeys, making them as visually striking as Projecting Horizontal Signs. In the old days of loose regulations, most local streets boasted co-existing vertical and horizontal signs; such visually chaotic ecosystems developed from vernacular culture are one of the greatest features and attractions of Hong Kong's streetscapes.

Rooftop Signs

Projecting neon signs may also be installed on the rooftops of buildings (Figure 3C). This type of sign cannot be found in every district, however, since rooftop signs are generally intended for viewing from a greater distance, targeting faraway pedestrians or tourists. It is quite apparent that rooftop neon signs in general tend to advertise for large corporations or global brands, such as Motorola, Samsung, Rolex, Canon, Hitachi, and China Mobile. These signs are largely concentrated in the rooftop positions of commercial buildings lining both sides of the Victoria Harbour; the unobstructed views at the top allow these businesses to convey brand image and messages to a wider target consumer group, even across the sea.

Wall Signs on Building Exteriors

Wall Signs on Canopies

Instead of projecting from buildings, some neon signs are directly built on the exterior walls of buildings, using spaces such as the canopy façade (Figure 3D). Neon tubes in such signs are designed to cover the façade, which is why businesses tend to favour placing rows of vertical tubes as a backdrop for the signs, creating in effect a dynamic and dazzling ribbon of neon light. This type of sign is usually positioned in areas of high traffic, such as crossroads, right in the midst of bustling streets. Wall Signs on Canopies have the advantage of not needing structural support from cables and wire frames; by essentially fusing with the building exteriors, they become a part of the architecture.

Wall Signs on Street Corners

Buildings occupying the prestigious spot of street corners are blessed with foot traffic from varying directions, multi-faceted building space, and wide views (Figure 3E). Such visual advantages can be well-exploited by businesses to erect neon signs attracting pedestrians from both sides and in front of the space. To business owners, street corners are the most advantageous spot for visual advertising. This is evident in the numerous advertisement signs of different sizes covering many of the city's street corner buildings. Here, spatial warfare is constantly on display every day.

Wall Signs on Side Walls

In response to the extreme prices and limitations of space in Hong Kong, even sidefacing walls between buildings are used to install neon signs. As buildings from different eras varying in shape and form can be found on a single street, they tend to create jagged and uneven streetscapes. Ingenious business owners make use of spaces between these buildings to put up neon signs (Figure 3F).

Shop Signs

Horizontal Shop Plaques

The plaque — in this case, a horizontal sign bearing the name of the business and placed at its storefront — is the soul of the shop (Figure 3G). Business owners value above all the reputation of a 'Gilded Plaque', which guarantees the best quality and trustworthiness. In Chinese traditional culture, signs or plaques are not only a form of aesthetic expression, but also a symbol of the owners' business philosophy and strongly held beliefs. How could a consumer trust a business with a crooked or ill-repaired plaque?

As the saying goes, businesses need to 'polish their plaques' — this does not merely mean for owners to make plaques big and attractive, but refers to the messages conveyed by the plaques. Therefore, the functionality of a plaque is significant; by reading it, the consumer must be given precise information regarding the nature of services or products provided by the shop. Business owners often invest heavily on the creation of their shop plaques, in the hopes of guiding consumers towards favourable choices.

Projecting Shop Signs

While walking on the streets — especially on sidewalks beneath canopies — pedestrians seldom look at objects positioned at a greater distance or height, and therefore tend to overlook Projecting Signs extending from exterior walls. To compensate for this, many business owners choose to set up smaller neon signs projecting from their storefronts, facing the flow of pedestrians at a direct angle, thus making the shops easier to find in the crowded streets (Figure 3H).

Graphic symbols in neon signs

As competition grew in the advertising world, traditional signboard advertisements relying only on text or slogans were no longer meeting the market's promotional demands. This gave way to neon signs featuring graphic symbols supplemented with text. Graphic symbols in neon signs are dominated by geometric shapes and simple line work, since overly complex images made out of glass tubes bear the risk of breakage from excessive twisting. Visual representations of geometric shapes and lines valued by the Art Deco style are therefore highly applicable within the unique medium of neon signs. The graphic symbols documented in our research can be broadly divided into 5 main categories: Animal/Botanical, Characters, Objects, Buildings/Scenes, and Geometric forms. Below is a brief introduction on the more culturally specific categories out of the 5, namely Animal/Botanical. In this category, we can further classify animal symbols into aquatic, terrestrial, and avian creatures.



Figure 4. Various graphic symbols in neon signs. In the first line, palm tree symbol in Indonesia Restaurant (left), coconut tree in Malaysian cuisine (centre) and tea leaf in Chinese tea shops (right). In the second line, groupers, crabs and shrimp are common symbols of neon signs found in Chinese seafood restaurants. In the third line, A more literal illustration cow and a cartoonish cow are found in two restaurants serving for dairy desserts respectively (left and centre). An iconic symbol of leaping deer has been featured in local clothing manufacturer 'Lee Kung Man' for six decades (right). In the

fourth line, Goose and chicken symbols are adopted mostly by Chinese traditional restaurants that embrace the practice of showcasing their signature dishes on neon signs (left and centre). Lok Hau Fook Restaurant features a design of five golden bats gathering in a circle, which symbolises as 'five fortunes to the family' (right).

Botanical

Commonly found in the botanical category is the palm tree symbol, which is often used by restaurants to convey a Southeastern or subtropical ambience; a famous example would be 'Indonesia Restaurant' (Figure 4, the first line, left). Coconut trees are another popular symbol. Asian cuisine such as 'Sabah Malaysian cuisine' (Figure 4, the first line, centre) in Jordan use the coconut tree to express a leisurely atmosphere. Tea leaf motifs are favoured by Chinese tea shops (Figure 4, the first line, right).

Animal – Aquatic

Most local businesses that feature images of aquatic creatures — such as shrimp, crabs, groupers, and carp — on their neon signs are Chinese seafood restaurants (Figure 4, the second line). A double carp symbol is particularly favoured, since the carp is a manifestation of the dragon in Chinese mythology. The Chinese word for 'fish' (魚), a homophone of 'excess' (餘), also holds special auspicious meaning for business

owners, and is believed to attract financial luck.

Animal – Terrestrial

Graphic symbols for a large range of land animals can be found in this category. Two restaurants known for dairy desserts feature cows on their neon signs; a more literal illustration, while a cartoonish cow (Figure 4, the third line, left and centre). The differences in graphic style hint at each of the restaurant's marketing strategies. The

historic clothing manufacturer 'Lee Kung Man' has featured an energetic leaping deer as their trademark since the 1950's. Their illuminated deer sign with its 60 old years of history has long become a part of the older generation's collective memories (Figure 4, the third line, right).

Animal – Avian

Avian creatures represented in neon signs include the three Hong Kong favourites goose, chicken and duck (Figure 4, the fourth line, left and centre). Naturally, such symbols are adopted mostly by Chinese eateries, in particular traditional restaurants that embrace the practice of showcasing their signature dishes (roast duck and the like) on neon signs. The traditional auspicious bat symbol is also popular among such restaurants, since the Chinese word for bat (蝠) is also a homophone of happiness or

fortune (福) (Kwok & Coppoolse 2017). The sign for Lok Hau Fook Restaurant, for example, features a design of five golden bats gathering in a circle (Figure 4, the fourth line, right), which can be interpreted as 'five fortunes to the family' (五福臨門). Winking references to semi-hidden lucky messages are commonly observed.

The five visual forms of neon lettering

The visual form or style of Chinese lettering design on any neon sign is selected based on positioning of text on the signboard, as well as viewing distance from a pedestrian point of view (Figure 5). If a sign is placed closer to the pedestrian's eye line, a 'singlestroke' design is used. This usually serves to provide auxiliary or promotional lines of text on a sign. Single-stroke text is generally placed at the bottom of a sign; with a moderate level of light emitting from single-stroke lettering, the text is more readable and does not suffer from illegibility due to illuminated tubes being squeezed too closely together (Figure 6A).

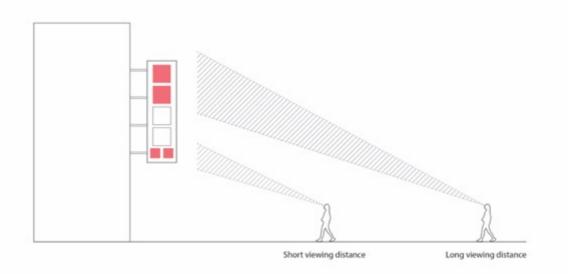


Figure 5. The size and visual form of neon sign lettering are selected based on positioning of information and pedestrian viewing distance. Lettering sizes decrease with shorter viewing distances and increases with longer viewing distances.

Conversely, if a neon sign is placed farther from the pedestrian's eye line, an 'outline' design is selected. Outline lettering is generally used for shop names, and given prominent positions on signboards to convey the most important messages (Figure 6B). This way, pedestrians can quickly recognise and identify a certain business even from a great distance. The design involves outlining Chinese character letterforms with single neon tubes. Some businesses go as far as to use a variant form of the outline design, or the 'single inline', which adds inlines within the outlined shapes (Figure 6C), increasing the sign's visibility from a distance with additional light.

For oversized neon signs installed on the exterior façades or rooftops of buildings, gigantic lettering is constructed with an emphasis on fullness and balance of luminosity within the letterforms, which lend to typographic texture and weight. Such types of neon signs commonly feature the outline design complemented with 'multiple inline' (Figure 6D) or 'parallel lines' (Figure 6E) — known also in the industry as 'spare rib tubes' — which distribute luminosity in a proportionate manner throughout the letterforms. To achieve these visual effects, hundreds or even thousands of neon tubes must be constructed, resulting in extremely high manufacturing costs.



Figure 6. Based on the technical terms coined by Tam, there are five common neon letterings (from left to right): single-stroke, outline, single inline, multiple inline and parallel lines.

Layout of information on neon signs

Our data collection on neon sign typology has also revealed a variety of layout types for information. In order to convey different messages to consumers, textual information is organised and arranged on neon signs according to client needs. In the case of Projecting Vertical shop signs, for example, textual information is presented in the conventional Chinese top-down format, where the name of the shop is given the top prime spot. Sometimes, auxiliary or supplementary messages appear at the top, middle, or bottom of signs (see red sections in Figure 7); such messages provide information specific to the businesses in a smaller lettering size, highlighting signature dishes, expert services, or in some cases the shops' English names. Auxiliary lines of text

placed at the bottom of signs mainly target pedestrians, while those occupying the top or middle sections are designed to be viewed by drivers from a distance.

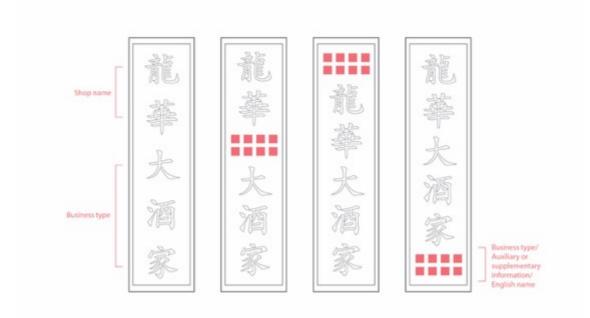


Figure 7. Auxiliary or supplementary messages appear at the top, middle, or bottom of signs; such messages provide information specific to the businesses.

Through categorising visual hierarchies of information found in local neon signs, our team has observed 6 main types of information layout (Figure 8). Particularly interesting is the variations in text orientation, which affect their reading experiences in different ways. Observation has revealed that a single signboard can present up to 6 combinations of vertical and horizontal reading directions — a true testament to the ingenuity of Hong Kongers accustomed to making the most out of extreme spatial constraints.

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Figure 8. Six main types of information layout affect their reading experiences in different ways.

Conclusion

The glimmering spectacle of neon lights used to be symbolic of a city's golden age. Las Vegas in the 1950's is a definitive example; its rise from desert to consumerist haven was marked with large neon advertisements broadcasting commercial symbols and messages. Hong Kong's own economic boom in the 1970's followed a similar path, during which cascades of neon signs flooding the city streets reflected an era of staggering consumption. Following rapid urban development in Hong Kong, however, neon signs are currently being constantly erased from the city as redundant objects without value. Not only are neon signs a reflection of urban modernisation; they are also significant visual evidence of citizens' lives and vernacular culture. Therefore, this article attempts to re-explore and reconsider the visual culture and social functions of the neon sign in Hong Kong. Close contextual analysis revealed more types of neon signs present in the city than previously imagined. Each type of sign presents different spatial relationships between architectures, and streetscapes, and human activity, reflecting the varied needs of businesses. Such relationships play a role in the construction of community life in each district, and provide a glimpse into the distinct and profound visual cultures that permeate local daily life. Being important communicative elements in Venturi's architecture, neon signs also play a role in the construction of narratives in the community and local cultural history through the messages conveyed by their visual content.

The image of a city is collectively constructed by every individual resident participating in the city. Neon signs adorning the walls and storefronts of small businesses are an intriguing reflection of both personal visual taste and the cultures of communities; these have come together throughout the years to form the singular spectacle that is the Hong Kong streetscape. Conversely, when these signs are demolished by the city, the streets quickly become homogenous and dull spaces.

With its focus on modernisation, the local government is intent on eliminating visual clutter on the streets and presenting a sanitised city, seeing nothing wrong with taking down neon signs. The price of each act of erasure, however, is the irreversible loss of relevant culture, history, and meaning of place; it is the sacrifice of individuals' senses of identification, security, and belonging, all fruits of longtime emotional attachment to their community and place.

The majority of our large scale neon sign documentation has been published as a Chinese book and presented in multiple cultural seminars, which have effectively raised public and media interest. Sign photos and relevant information have been organised into the city's first digital neon sign archive (Hong Kong Neon Archive: https://services.sd.polyu.edu.hk/neon/), which is a free resource for public research and appreciation.

The limitations in resource and space make cultural preservation incredibly difficult in Hong Kong; in the case of preserving physical signs, the M+ Museum has so far only been able to collect several sign artefacts. Recently, the Information Design Lab at the Hong Kong Polytechnic University School of Design received a donation of over 1000 hand-painted neon sign artworks from the historic local manufacturer Nam Wah Neonlight & Electrical Manufactory Limited. Constituting a valuable collection for research and preservation, the artworks are currently being categorised and digitised for our archives. They will no doubt be instrumental to future research endeavours towards understanding Hong Kong's histories of visual culture and graphic design.

References

- Agnew, John. 1987. *Place and politics : the geographical mediation of state and society*, Boston: Allen & Unwin.
- Buildings Department. 2013. "Erection of Signboards". Accessed 15 September 2019. https://www.bd.gov.hk/doc/en/building-works/signboards/APP126.pdf#page=3.
- Buildings Department. 2012. "Guide on Erection & Maintenance of Advertising Signs". Accessed 15 September 2019. https://www.bd.gov.hk/doc/en/resources/codes-and-references/code-and-designmanuals/Ad_Signs_E.pdf.
- Caba, Randall. 2004. "Finding the Neon Light, Part Three—The Father of Neon" *SignIndustry.com*, Accessed 10 September 2019.

http://www.signindustry.com/neon/articles/2004-01-14-RC-FindingPt3.php3.

- Chen, Dahua, Yu Bing, He Kaixian, and Cai Zuquan. 1997. Nihongdeng zhizuo jishu yu yingyong [Neon Signs Manufacturing Techniques and Applications]. 1st ed. Beijing: Zhongguo Qinggongye Chubanshe.
- Chen, Xiangming, Anthony Orum, and Krista Paulsen. 2013. *Introduction to Cities How Place and Space Shape Human Experience*. New Jersey: Wiley-Blackwell.

Cresswell, Tim. 2004. Place: a short introduction, Malden, MA: Blackwell Pub.

- Development Bureau. 2013. "LCQ13: Control of unauthorised signboards". Accessed 15 September 2019. https://www.devb.gov.hk/en/sdev/press/index_id_8060.html.
- Freedman, Alisa. 2011. *Tokyo in transit: Japanese culture on the rails and road*. California: Stanford University Press.
- Giuliani, Vittoria, and Feldman Roberta. 1993. Place attachment in a developmental and cultural context. *Journal of Environmental Psychology*, 13 (3): 267–274. url: https://www-sciencedirect-com.ezproxy.lb.polyu.edu.hk/journal/journal-of-environmental-psychology/vol/13/issue/3.
- Hay, Robert. 1998. Sense of place in developmental context. *Journal of Environmental Psychology*, 18 (1): 5–29. url: https://www-sciencedirectcom.ezproxy.lb.polyu.edu.hk/journal/journal-of-environmentalpsychology/vol/18/issue/1.
- Hong Kong Council Chamber. 1939. "Advertisements Regulation Ord., 1912, Additions to Regulations relating to neon signs". *Hong Kong Government Gazette*.
 Hong Kong. Accessed 14 September 2019. http://sunzi.lib.hku.hk/hkgro/view/g1939/593456.pdf.
- Hong Kong Daily Press. 1932. "Neon Light Factory For Hong Kong To Emulate Shanghai's 6,000 Signs". Hong Kong Public libraries – Multimedia Information System. Accessed 14 September 2019. https://mmis.hkpl.gov.hk.
- Jacobs, Jane. 1961. *The death and life of great American cities*. New York: Random House.
- Kwok, Brian. 2018. *Ni Hong An Se: Xianggang Jie Dao Shi Jue Wen Hua Ji Lu* [Fading of Hong Kong neon lights – The archive of Hong Kong visual culture]. Hong Kong: Joint Publishing.
- Kwok, Brian, and Coppoolse Anneke. 2017. Illuminography: A Survey of the Pictorial Language of Hong Kong's Neon Signs. *Visible Language*, 51 (1): 88–111. url: http://visiblelanguagejournal.com/issue/242/article/1622.

Lefebvre, Henri. 1991. The Production of Space. Oxford: Blackwell Publishers.

Lynch, Kevin. 1960. The image of the city. MA: The MIT Press.

- Mobile M+: NEONSIGNS.HK. 2014. Accessed 22 October 2019. http:// https://www.neonsigns.hk/?lang=en
- Morgan, Paul. 2010. "Towards a developmental theory of place attachment". *Journal of Environmental Psychology*. 30 (1): 11–22. url: https://www-sciencedirectcom.ezproxy.lb.polyu.edu.hk/journal/journal-of-environmentalpsychology/vol/30/issue/1.
- Proshansky, Harold, Fabian Abbe, and Kaminoff Robert. 1983. Place-identity: physical world socialisation of the self. *Journal of Environmental Psychology*, 3 (1): 57–83. url: https://www-sciencedirect-com.ezproxy.lb.polyu.edu.hk/journal/journal-of-environmental-psychology/vol/3/issue/1.
- Relph, Edward. 1976. Place and Placelessness. London: Pion.
- Ribbat, Christoph. 2013. *Flickering Light: A History of Neon*. London: Reaktion Books.
- Tam, Keith. 2014a. "In search of Hong Kong's traditional calligraphic signs". Accessed 18 February 2019. https://web.archive.org/web/20170313185057/http://invisibledesigns.org/cal ligraphic-signs/.
- Tam, Keith. 2014b. "The Architecture of Communication: The Visual Language of Hong Kong's Neon Signs" *Neonsigns.hk*, Accessed 9 October 2019. https://www.neonsigns.hk/neon-in-visual-culture/the-architecture-ofcommunication/?lang=en
- Tuan, Yi-Fu. 1977. Space and place : the perspective of experience, London: E. Arnold.
- Van Dulken, Stephen. 2002. Inventing the 20th Century: 100 Inventions that shaped the world. NY: New York University Press.
- Venturi, Robert, Denise Brown, and Steven Izenour. 1972. Learning from Las Vegas: The forgotten symbolism of architectural form. MA: MIT Press.

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