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Townscape in a High-rise: Imageability and Accessibility of Vertical Malls in Hong Kong

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Abstract

The increasing integration of public space and consumerism in Hong Kong has yielded new urban forms. The emergent vertical malls in Hong Kong and other East Asian metropolises have overturned the existing vertical order of the city. This vertical order is determined by the level of accessibility, but is being challenged by widely adopted vertical circulation technology. Inspired by Fredric Jameson's and Rem Koolhaas' reflections on the cultural significance of vertical transportation, this article examines the conflict between market logic and urban design requirements in the vertical interior spaces. "Departmentalization," as the current programming formula for vertical malls, can be further optimized by critically applying urban design doctrines such as Kevin Lynch's five elements of city image. It concludes with a statement that the knowledge base of vertical urbanism should be open to a set of new terminology informed by a new technological environment.

Keywords: Vertical Circulation, Interiorized Urbanism, Townscape, Imageability, Accessibility

1. Introduction

The Asian Financial Crisis of 1997 and the outbreak of SARS in 2002 resulted in a sharp economic downturn, prompting the Chinese Central Government to launch the "Individual Visit Scheme," a policy allowing travelers from the Mainland to visit Hong Kong and Macau on an individual basis. The growing consumer and tourist industry reshaped the city profile of Hong Kong. In the new century, Hong Kong gradually slid to a new form of urban practice, which blends pragmatic consumerism and a "Culture of Congestion" (Koolhaas, 1994). Such urbanity is exemplified by the vertical shopping centers that have sprung up all over the territory of Hong Kong. The emergence of shopping malls in the postwar American urban scene was concurrent with the decay of traditional townscape and suburbanization. Conversely, its popularity in Hong Kong and other East Asian megacities testifies to the triumph of high-density urbanism, characterized by the successful extension of the vibrant street life into interior space. Rem Koolhaas (2002) and Fredric Jameson (2003) called attention to the cultural significance of shopping in the urban scene. Jameson, in discussing John Portman's Westin Bonaventure Hotel at Los Angeles, sees escalators and elevators as "allegorical signifiers" of the traditional promenade (1998). These critical reflections on the cultural implication of the vertical circulation are challenging the existing knowledge of urban design, which mainly re-

fers to urban patterns in the horizontal dimension.

In Hong Kong, mall spaces are not mere representations of the city, but integral components of authentic city life. The origin of the shopping mall as a collective urban form (and shopping as collective practice) implies its internal paradox- between the role of an economic device and the role of an interior public space. This paradox is even manifest when the shopping mall stands within a high-rise structure instead of a relatively flat retail podium. A critical amount of floor spaces must be set aside for vertical circulation, which complicates the interrelationship between building form, building program, business model and site condition. In response to the internal paradox of vertical shopping centers, this article attempts to identify the underlying syntax in blending market logic and good urban form.

The scholarly reflection on a fine-grained, high-density urban form first appeared in Walter Benjamin's and Asja Lacin's impression of Naples as a "porous city" (Benjamin and Lacin, 1925). It was referenced by Stan Allen as "mat urbanism," featuring part-to-part connectivity with a "thick" surface condition (Allen, 2001). Recently, architect Jon Jerde referred to the Italian hill towns as the prototype of his architectural practices (Anonymous, 2008). It is noteworthy that the latest mall designers have introduced the logic of traditional townscapes to a vertical dimension and developed a programmatic formula to balance market logic and the public good. In the context of Hong Kong, what might further complicate the internal paradox of the consumer space is the extremely magnified vertical dimension. Vertical shopping centers of Hong Kong are not allowed to fit in the classical layout that is

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popular for modern regional malls in the West. Sitting in a tight footprint due to fragmental lot subdivision, a consequence of lease sales in the early stage of the colonial regime, new vertical shopping centers adopted a so-called “move up and trickle down” model to send shoppers to the topmost floors. This model is exemplified by two cases - iSquare at Tsim Sha Tsui (1700 m² building footprint) and Hysan Place at Causeway Bay (2400 m² building footprint). However, I will argue that this “move up and trickle down” model can be further elaborated with reference to existing urban design knowledge (Figs. 1, 2).

2. Internal Paradox in the Vertical Malls in Hong Kong

Retail centers have long been integrated with Hong Kong’s urban fabric as the main gathering spaces for residents. In the 1970s, the opening of Ocean Terminal, developed by the Hong Kong and Kowloon Wharf and Godown Company, marked the commencement of a consumer age in Hong Kong. In the 1980s, Hong Kong bore witness to the emergence of Japanese-style department stores. These early models, such as Yaohan in Sha Tin New Town Plaza in 1985 and Cityplaza at Tai Koo Shing in 1982, are precedents of the latest all-in-one shopping centers. In terms of operation, these retail facilities were organized by sorted product types with blurred brand differences (with consignment shops). However, like the Ocean Terminal, they were reminiscent of multi-story warehouses and fall short of a vertical order that is typical of Hong Kong. In these cases, retail spaces were usually leased to tenants by way of consignment counters, with no control of the overall experience. In the 1990s, to entertain the increasingly diversifying tastes of shoppers, the American retail model of individually-branded shops with single consignment counters were ushered in to Hong Kong. Festival Walk (1998), designed by ARQ Architects, was the first American-style shopping center in Hong Kong. It is structured into a typical dumbbell layout and a relatively generous footprint. However, such generosity in space is an exception in Hong Kong.

Vertical malls appeared in Hong Kong in the early 1990s as a local adaption of the American models. The Times Square, a commercial complex designed by Wong & Ouyang architects, was the first vertical mall in Hong Kong, with a 14-story retail podium.

In the next iteration, the office building “sky lobby” was then introduced to shopping centers. Designed by the consortium of Benoy and Rocco Design, iSquare at Tsim Sha Tsui is structured according to a circulation model of “move up and trickle down” (PRC Magazine, 2010). The circulation pattern of iSquare enables direct connection between the concourse of Tsim Sha Tsui MTR station and the “sky lobby” through a group of express escalators. The express escalators extend to upper floors and penetrate into vertically separated zones, each composed of a couple of

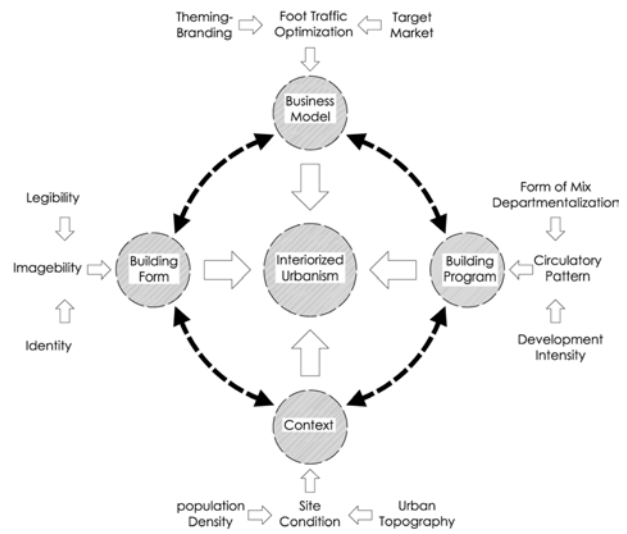


Figure 1. The conditions and concerns of interiorized urbanism in a vertical mall.

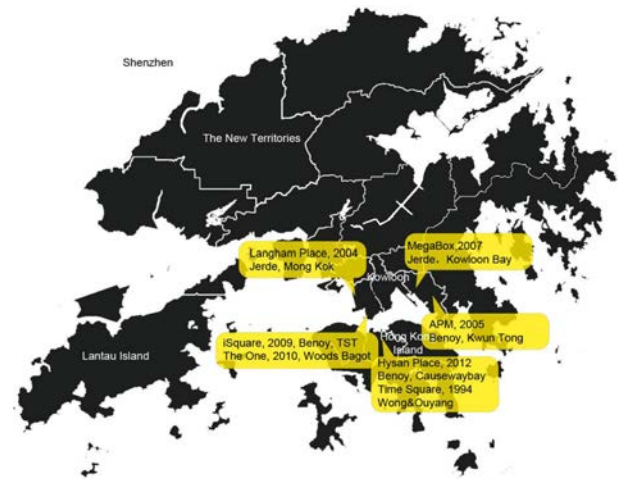


Figure 2. A map showing Hong Kong vertical shopping centers (shopping arcades more than 10-stories high).

floors selling similar goods or services. This model is the outcome of economic speculation. It ensures that all tenants get the maximum amount of foot traffic in an interlocked circulation pattern, hence equalizing the economic value of all floors regardless of its distance from the ground level. Correspondingly, a form of vertical “departmentalization” is adopted in the vertical shopping malls (You, 2013). In this model, the shops and services are vertically sorted and clustered, enabling the shoppers to weave through the escalators or elevators to the destination through the most efficient path. This spatial configuration contests the principles of dispersed tenant mix for low-rise regional malls.

What is typical of many vertical shopping centers is that

the express escalator has become a critical element guiding the spatial organization. Thus, the structure of circulation acts as a separate icon, or even a “landmark” in Lynch’s lexicon. This approach is utilized in many vertical retail centers. The latest instance is the recently built Hysan Place at Causeway Bay. Like iSquare, Hysan Place achieved high accessibility and connectivity with express escalators and double-decked elevators. On the one hand, the “move up and trickle down” circulation pattern allows the shoppers to be evenly distributed across all floors. On the other hand, this pattern hinders wayfinding and forces the shoppers, who in many cases do not have target shops, to be immersed in an endless one-way labyrinth. Ways of placemaking must be introduced to enhance the legibility of interior mall spaces.

In light of the discussion about departmentalization, the requirement of achieving high connectivity in the vertical dimension, which prevents consumer spaces from growing higher in the West, is calling for innovative urban design tactics. Needless to say, the principles of good urban design practice are valued in the vertical dimension as much as in the horizontal one. These guidelines as classical statements by Kevin Lynch (1960), should be re-contextualized in the context of a high-density environment. The focus of Lynch’s theory is that the contents of the city images are referable to physical forms, which can conveniently be classified into five types of elements: paths, edges, districts, nodes, and landmarks (Lynch, 1960). In light of this theory, the spatial traits of vertical malls can lead to a few thoughts for framing a general formal theory in the vertical dimension:

First, in a vertical mall, the absence of a natural ground reference is detrimental to the legibility of a gathering space. In this regard, the topographic condition and its associated sectional behavior (in landscape and streetscape) must be reconstructed in the interior, which usually demands sophisticated surface treatments such as sloping, weaving, warping, folding and interlacing.

Second, plazas and courts, which are normally open spaces with distinctive spatial features, architectural expressions and distinct geometric orders, should be maintained to neutralize the uniformity and boredom of evenly-gridded floor plates. Simultaneously, they should be fashioned so as to preserve the dimension of a public space and outdoor features in an air-conditioned environment, albeit the uniform floor plates might pose unwanted blockage of visibility and connectivity.

Third, the express escalators and elevators provide shortcuts within an orderly organized space and form into interchanges where such shortcuts converge at a point. These devices again are regarded as a new type of shared space, impacting the collective behavior of shoppers.

Fourth, the interlocked vertical circulation undermines the vertical hierarchy ordered by gravity and elevation, resulting in a dynamic cognitive map that does not necessarily correspond to the physical floor order. All four

points will be given special attention in the ensuing case study.

3. Case Study and Topological Analysis

The case study looks into two projects designed by Jerde Partnership (Langham Place and MegaBox) and examines the two cases in relation to the typology of retail spaces as a whole. The case study includes two parts:

The first part examines the particulars of the site condition, the programmatic requirements, the formulation of the architectural scheme and the technologies and approaches used to achieve the synergy of accessibility and imageability of interior spaces.

The second part analyses the sectional organization by diagramming the topological structure of the circulation pattern of the two cases as an approximation of the cognitive map of the retail spaces.

The topographic diagrams are laid out with the assistance of a Graph Description Language (DOT) in Graphviz and basically represent the structuring of floors (nodes) and their connections (edges) through escalators and elevators (both local and express). The “neato” layout is used to generate the graph because the algorithm of this layout is able to indicate the level of connectivity of a specified floor (node), in which the node (floor) with more connectivity is positioned closer to the middle of the center of the diagram.

Notably, one rule of thumb for retail planning is to have a simple loop for arranging the shopping paths. The traditional dumbbell layout forms the simplest loop for a retail environment. In the case of a vertical mall, the shopping route so extends the vertical dimension that a complex three-dimensional loop should be formed to facilitate wayfinding and efficiency of the retail space. With that in mind, one of the design goals for vertical retailing is to optimize the circulation loop while equally distributing the market value of each tenant at different levels. In the meantime, this optimized path is required to cohere with both the tenant mix and the basic urban design principles that are evident in the traditional hill towns. The spatial analysis can provide a perspective to test the consistency between the circulation and the architectural statement.

3.1. Case Study 1. Langham Place

The opening of Langham Place facilitated the upgrading of the community around Portland Street, which was infamous for its sub-standard residential community, brothel industry, and gang culture. Langham Place is the second project in the urban renewal program of Kowloon, and the first project inherited by the Urban Renewal Authority (URA) from former Lands Development Corporation (LDC, a government agency). In 1988, Wong & Ouyang Ltd. was commissioned by LDC for the project, and Great Eagle Holdings was selected as the joint venture developer of the site, shortly before Jerde Partnership was

appointed as the chief designer. The site is situated in a hyper-dense urban fabric with narrow streets. Shanghai Street split the whole site into two - the office-retail complex at Site A, and the Langham Place Hotel and a cooked-food center at Site B. The 13-story retail podium is accessible to the city at various levels from the metro station to weather-proofed footbridges. As an urban renewal project, Langham Place fulfilled its mission by injecting the urban vibrancy of Mong Kok into its gigantic interior space (Fig. 3).

The complex contains a 56,000 m² retail center, a hotel, and a 59-story office tower. It also contains a variety of public amenities, including a four-lane minibus terminus at the ground level at Site B, a Food and Environmental Hygiene Department cooked-food center, and a Social Welfare Department community center. The lobby of the hotel was elevated to Level 4, above a three-story podium of welfare facilities, at the same level as the 60-meter “Grand Atrium.” As a major urban renewal project, the site provides a few outdoor amenities as well. A 1,100 square-meter double-decked public garden sits in the south of the welfare block. A sculpture known as “Happy Man” stands in the northeast entry plaza of Site A, which has also become a popular gathering point for Hong Kong residents.

The vertical dimension granted Langham Place extra flexibility to achieve a legible circulation pattern. In order to bring the outdoor features to the interior, the architects created three distinct “virgin sites” at different levels - “Grand Atrium” at Level 4, “Spiral” at Level 8, and the “Sky Garden” at Level 12. Each atrium is served by its internal floor-to-floor escalator and, at the same time, connects with other atriums via express escalators. The entire shopping center can be treated as a “sandwich” of sorted zones targeting shoppers with different purposes. These indoor open spaces, flooded with skylights, are exposed to the outside urban activity through large curtain walls.

The openness of each atrium facilitates wayfinding and self-locating for shoppers in an enormous panorama.

The “Grand Atrium” at Level 4 was the outcome of negotiations about building regulations. Hong Kong building codes prohibit site coverage of more than 65% above the 15-meter mark. In a multi-lateral negotiation with the Buildings Department, Planning Department, Fire Service Department and Environmental Protection Department, the developer (Great Eagle Holdings) and local architects (Wong & Ouyang) recommended covering the gap between the retail block and the office tower with a glass atrium, in exchange for making this atrium a public space. Without such a decision, the Level 4 deck would have been an outdoor rooftop. The atrium increased the site coverage above the 15-meter mark from 65% to almost 90%. At the top of the atrium is a 120-meter-long “Digital Sky.” The 60-meter-tall atrium also functions as a public lobby, leading shoppers to the hotel and other community facilities on the block of Site B, via an enclosed footbridge. The atrium was initially designed to contain only air, and not to accommodate leasable spaces, so as to fulfill the developer’s promise to make it a publicly accessible space.

Langham Place contains more than 300 tenants, and many stores are boutiques under 50 square meters. Such a business mix usually requires an extra secondary shopping path and narrower store frontage. Instead, the spiraling path from Level 8 to Level 12 merges the floor-to-floor slopes and the shopping arcades, an approach that greatly reduces the logistic floor space. A seamless streetscape made of well-ordered business types was fit into a compressed and continuous experience woven by the spiraling path and express escalators. Department stores and large outlets composed the three-story podium under the “Grand Atrium.” Sportswear and lifestyle stores occupy Level 4 to Level 7. Most boutiques cluster around the “Spiral” from levels 8 to 11. In a way, Jerde reversed the

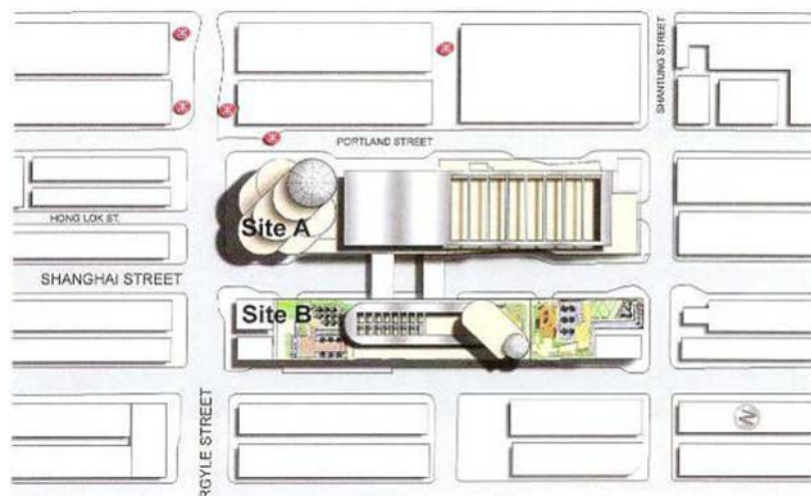


Figure 3. Master plan of Langham Place at Mong Kok. Source: Jerde Partnership).



Figure 4. The “Grand Atrium” of Langham Place. (Source: Jerde Partnership).



Figure 5. The “Spiral” of Langham Place.

order of “servant” and “served” spaces by transforming the circulation into a stage for “happenings.”

In Langham Place, digital media and iconic objects are seamlessly integrated with physical elements. Apart from the 120-meter digital canvas covering the whole “Grand Atrium,” a video wall was mounted onto the balcony of the office main lobby at Level 5. The shoppers are im-

mersed in an imageable space. Artificial landscape elements, rock finishes, comic signage, and deformed balconies are both functional elements and messaging platforms. Starting from its Westfield Horton Plaza project in San Diego (1985), Jerde has created a reservoir of formal elements, a “kit of parts” system ready for assembly and reassembly. As a typical manufacturing method of post-Fordist industry, the “kits of parts” system applies an adaptive formulaic building language with which people

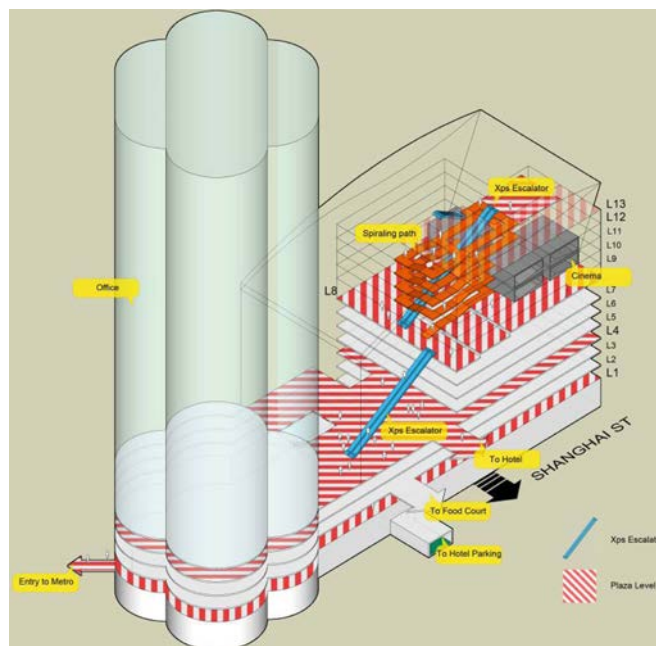


Figure 6. Diagram showing the internal space of Langham Place.

of different cultures can identify and enjoy (Figs. 4, 5, 6).

3.2. Case Study 2. MegaBox

MegaBox sits in Kowloon Bay, a post-industrial brown field with rusted warehouses and factories. Kowloon Bay adjoins the old Kai Tak Airport, which has been recently remodeled into a cruise terminal designed by Norman Foster. The neighborhood around Kowloon Bay is becoming a catchment area, catering to one million East Kowloon residents. Like Langham Place, the project of MegaBox was proposed as a catalyst to facilitate Kowloon Bay's economic upgrade from a rundown manufacturing neighborhood to an upscale commercial hub. It is a part of the Enterprise Square 5 retail-office complex built by Kerry Properties, and was expected to draw foot traffic from the adjacent Enterprise Square 3 through a footbridge.

The site is located at the center of the East Kowloon area and is currently accessible from the Kwun Tong Line's Kowloon Bay Station (nearby Telford Garden is the air-rights development of Kowloon Bay Station) via a free shuttle bus. Its proximity to the waterfront creates an exclusive visual contact with the skyscrapers of Central on the other side of Victoria Bay. Most importantly, MegaBox demonstrates a different model of the shopping center, targeting middle-class couples with kids. While parking is merely a subordinate component in Langham Place, it is inextricably a prominent element in MegaBox (Fig. 7).

At first glance, MegaBox possesses few aspects that would qualify it as a regional activity center like Langham Place. The complex is situated on a site not directly attached to a metro station. A footbridge system to connect the site to the existing Kowloon Bay Station was proposed by the government and the stakeholders of Enterprise Square, but has not yet been built. For five years, there were scarcely any public amenities in the area until the completion of the Zero Carbon Building to the north in 2012. It stands on a whole street block of 100 x

120 meters, wrapped by tight sidewalks. Meanwhile, MegaBox is threatened by a couple of competitors in the broad East Kowloon area—the “apm” mall at Kwun Tong, Telford Plaza at the Kowloon Bay metro station, and the E-Max shopping center, each striving to become a local commercial center. MegaBox, then, reacted to these challenges with creative space planning and internal circulation. Ever since its opening, the whole Enterprise Square district of Kowloon Bay has become a new focus of Hong Kong's office leasing market, attracting tenants in logistics and electronics from downtown to the new corporate campus.

The whole Enterprise Square 5 complex has a total gross floor area of 1.6 million square feet (148,644 square meters). As the flagship of Kerry Properties, MegaBox, the 19-story tube podium of the 34-story complex, houses 111,000 square meters of big box outlets, specialty retail stores, a food court, signature restaurants, bookstores, cinemas and, most importantly, three “virgin sites” at different levels. One of them is the largest ice rink in Hong Kong. The three giant indoor atriums are stitched together by express escalators, and each atrium caters to an independently themed zone with internal floor-to-floor circulation, a solution also adopted by Langham Place. Unlike Langham Place, however, MegaBox targets middle-class couples with kids, and 60% of the shops at MegaBox are more than 1,000 square meters. Large anchor stores, such as B&Q (superseded by IKEA in 2009), Suning and AEON, were packaged under the rule of vertical departmentalization. MegaBox's target market is not interested in fashion shopping, but rather in home improvements, educational services, and family-friendly amusement programs.

Public space results from the carefully designed chemistry of architectural syntax and vocabularies. Like Langham Place, the circulation pattern of MegaBox consists of a continuous folding topographical surface, connected by a few atriums. Thus the continuous motion strung together by express escalators becomes a signifier of movement, although this movement is completely mechanical, based on mechanized transportation. The major circulation loop of MegaBox connects a few atriums: the arrival court, the ball atrium, and the grand ice rink. It is worth noting that the three atriums are both arranged for gathering and for specific activities. The interpenetration between circulation and leasable functions ensures that a variety of programs such as dining, sports, amusement, and retailing share a common space and reinforce each other (Fig. 13).

The architectural syntax and language in MegaBox also reflects good urban design visions. The unique 19-story vertical shopping center is built around the concept of “totally connected modules” (TCM). This concept was borrowed from postwar European town planning, in which activity zones made up of streets, plazas, places, and connectors were linearly organized through public transit. In MegaBox, the TCM is actualized in three ways: first, the



Figure 7. MegaBox (2007), Source: Jerde Partnership.



Figure 8. Ball atrium of MegaBox.

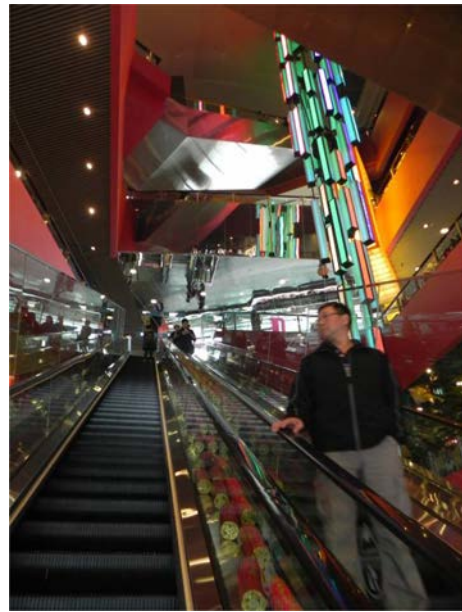


Figure 9. Express escalator of MegaBox.

foot traffic can be funneled by express escalators and elevators to connect the mall’s four major stacked departments; second, the spiraling garage ramp reaches all floors and creates multiple access points at different levels, including the top floors; and third, the express escalators act as a point of interest. The express escalators turned the two giant atriums (the “Ball” atrium and the “Beehive” ice rink) from cul-de-sacs to open spaces, which can be accessed by pedestrian traffic from two directions. Meanwhile, the ver-

tical circulation created a new perspective of store frontage which cannot be viewed without riding the express escalators (Figs. 8, 9, 10).

3.3. Analyses and Findings

In comparison to the “move up and trickle down” model, the organization pattern of Langham Place and MegaBox is more respectful of the established rules for legible urban forms. First, in terms of Lynch’s theory on five ele-

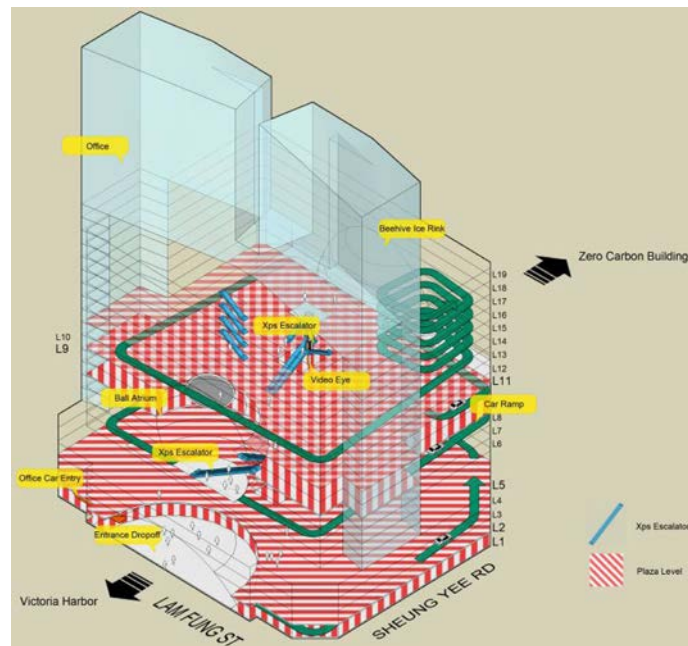


Figure 10. Author’s spatial diagram of the MegaBox.

ments as constituents of an imageable city form, the paths, edges, districts, nodes, and landmarks respectively become escalators and elevators, storefronts, departmentalized zones, sky atriums and iconic forms. Both sites have simple circulation patterns, such as the “Spiral” in Langham Place and the “Z” path in MegaBox. Second, due to the fact that most Hong Kong stores are more compact than North American ones, the main circulation system is co-existent with the fine-grained secondary circulation system. In this regard, the “trickle down” is limited in the secondary path and can be funneled back into the main path. Third, each gathering space is designed in such a way that different uses can reinforce each other (such as restaurants and ice rinks) and the boundary between circulation and tenants is blurry. This programmatic ambiguity neutralizes the rigidity of vertical departmentalization and brings outdoor proportion and features into the interior.

In earlier sections, we have discussed that vertical departmentalization is a business strategy that works for high-rise malls on a compact footprint. Businesses such as ladies’ wear, jewelry/fashion accessory and unisex clothing categories tend to cluster on the lower floors. By the same token, retail categories with a clear target market (bookstore, restaurant, men’s wear, furniture and hardware) are usually placed on upper floors, and are vertically zoned to reduce ineffective vertical traffic.

The legitimacy of this model has been justified by the below assumptions regarding vertical departmentalization, which should be called into question in the Asian context: 1) lower floors are usually of higher market value and should be left for larger stores or anchors, thanks to higher accessibility; 2) floor-to-floor escalators are major vertical circulation devices; 3) visitors come to malls mainly with a purpose of buying goods or services; 4) except ladies’ wear or jewelry/fashion, different business categories are mutually exclusive due to negative externalities (One example is that food stores should be separated from pet stores). These rules have been acknowledged and practiced uncritically for many years in the retail industry and should be given a second thought.

Amongst these assumptions, the concern about negative externalities has a different picture in East Asia. One tendency is that retail environments in Hong Kong and East Asian often allow for deeper mixing of businesses and functions that would be considered to exert negative externalities in the West. This inclusiveness, which is rooted in the Asian urban tradition and has been emblemized in the city image of Mediterranean hill towns, encourages the circulation/gathering spaces to be intermingled with a broader spectrum of programs and events.

The paradox between mixed functions (as an emblem of urbanity) and departmentalization (as an outcome of market logic) has to be resolved in a spatial way. In comparison to other retail centers of comparable sizes and significance, in the two studied cases, the mixing of functions is

more likely to occur around these gathering spaces, which are fashioned both as iconic, stage-like places and as multipurpose spaces. Departmentalization, which runs the risk of removing the vitality of the traditional townscape, still plays a critical role in overall retail programming, but it has been restricted to areas far from major circulation/gathering spaces.

The meaning of such a retail programming strategy is twofold. First, it conforms to a clearly structured circulation pattern that reflects the overall architectural character of the site. Second, it conforms to the normal practice of retailing industry as *status quo* (Figs. 11, 12).

4. Conclusion and Reflection

To conclude, the previous analysis seeks to investigate the new agreement reached by technology and culture. Evidently in the case of Hong Kong’s vertical malls, Lynch’s five elements of city image (paths, edges, districts, nodes, and landmarks) should be re-contextualized

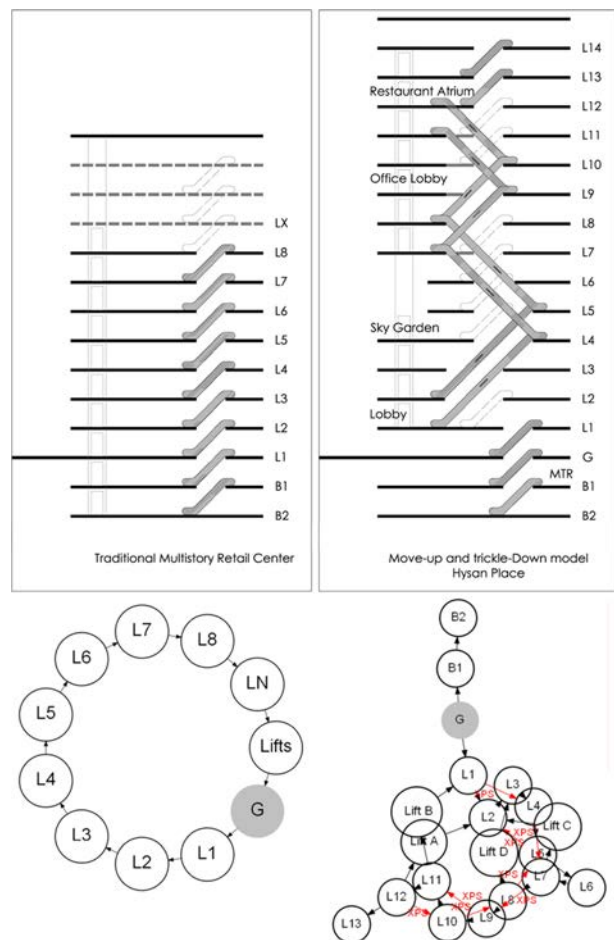


Figure 11. The circulation diagram showing the traditional multistory retail center (left) and the “move up and trickle down” model (Hysan Place), with the topographic analyses based on floors (nodes) and floor-to-floor connections (edges).

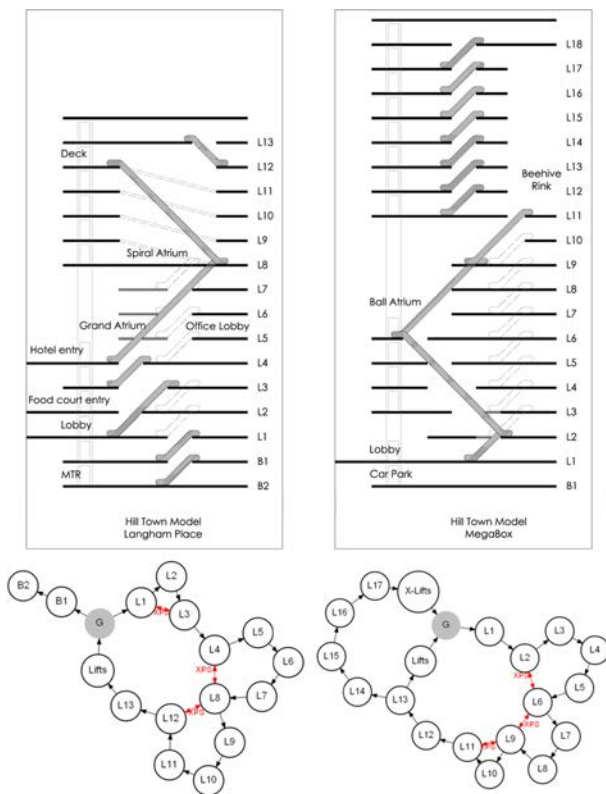


Figure 12. The circulation diagram showing an interiorized urbanism, a balance of legibility and accessibility. Left: Langham Place. Right: MegaBox.

in a new technological environment. Challenges from technological innovations gradually yielded architectural implications, which need to be further studied to inform the current urban design knowledge. The foremost challenge comes from free organization of vertical circulation. In this regard, vertical circulation can permeate through an array of floor plates, instead of standing within a well like a staircase.

On a compact footprint, escalators, with considerable length in both vertical and horizontal dimensions, exert a great impact on how the stores, goods and services are accessed. This challenge impelled Hong Kong’s retail operators to adopt alternative ways to maintain the coordinates of a traditional townscape in a space dominated by technologies. Second, the elongated vertical dimension redefines the conception of public space, which has been always equated with an outdoor open plaza.

Since the traditional order of accessibility in a high-rise has been overturned by the prevailing express escalators, a sky lobby can be as accessible as the lobby on the ground. The architectural implication of this new order is that, with the differentiation of express and local escalators, the requirement of a uniform rhythm and proportion of the interior elevation, as seen in the consistent floor-to-floor spacing, is obsolete. Speed and motion, instead of static

measurements such as area, volume and occupancy, become the major elements in building programming.

In a capitalist city like Hong Kong, for a long period of time the economic principle was exclusively privileged over other urban codes concerning the public good. Under this circumstance, there is no disjunction between urban design and market doctrines. Moreover, because the retailing industry has been seamlessly integrated with mass transportation, retail space *per se* has become an extension of street life in the interior, such that shopping centers play a critical role in shaping the overall metropolitan experience. Escalators and elevators are not only key components of vertical circulation, but also the icons of a new city image.

The outcome of this “technological alienation” (Jameson, 1998) is that people’s collective movement becomes an aesthetic object and marketable sign (such as Hysan Place’s escalators on the main facade and the prominent express escalator in Langham Place’s “Grand Atrium”). This alienation of building circulation does not reduce the public realm to circulation space, but conversely turns the retail “machine” into a new site for considering the spatial condition of the public realm in contemporary metropolises.

Vertical malls are challenging the conventional vertical order in the city, particularly the podium-tower stereotype, as an old-fashioned solution for Hong Kong and East Asia. For more than a century, the term “skyscraper” has been reserved for office towers, with its fundamental form as a legacy of Louis Sullivan (Sullivan, 1896). With reference to the emergent vertical mall spaces, concepts such as retail podiums, typical floor layouts and core-tubes seem obsolete and should be superseded by a set of new terminology more relevant to contemporary architectural practice.

More remarkably, Hong Kong is not alone in leading the practice of vertical urbanism. The proposal of Peruri 88, Jakarta, a 400-meter mini-city, represents the latest culmination of this trend. The emergent vertical interior spaces in Hong Kong open a new window for examining architects’ commitment to restoring the townscape in the contemporary metropolitan context. It is not only about restoring visual perception of the city, but about restoring the intensity of communication and movement in the public realm. The only question that remains is whether architects have consciously prepared themselves for leading this foreseeable urban renaissance in the near future.

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References

Allen, Stan. (2001). “Mat Urbanism: The Thick-2D.” In H.

- Sarkis (Ed.), *Le Corbusier's Venice Hospital and the Revival of Mat Building, CASE #2*. New York: Prestel.
- Anderton, Frances (Ed.). (1999). *You are here: the Jerde Partnership International*. London: Phaidon.
- Anonymous. (2008). "Interview with Jon Jerde." *ART and Living, Spring Summer 2008*, 68-76.
- Benjamin, Walter & Lacis, Asja. (1925). "Naples" (E. Jeffcott, Trans., 1986). In P. Demetz (Ed.), *Reflections: Essay, Aphorisms, Autobiographic Writings*. New York and London: Hellen and Curt Wolff Book.
- Benjamin, Walter. (1999). *The Arcades Project* (H. E. a. K. McLaughlin, Trans.). Cambridge, MA and London: The Belknap Press of Harvard University Press.
- Eckert, Andrew, He, Zhen, & West, Douglas S. (2013). "An empirical examination of clustering and dispersion within Canadian shopping centers." *Journal of Retailing and Consumer Services*(Volume 20, Issue 6), 625-633.
- Jameson, Fredric. (1998). "The Westin Bonaventure Hotel." In A. A. Berger (Ed.), *The Postmodern Presence: Readings on Postmodernism in American Culture and Society*. Walnut Creek, CA: AltaMira Press.
- Jameson, Fredric. (2003). "Future City." *New Left Review, May June 2003*, 65-79.
- Koolhaas, Rem. (1994). *Delirious New York: A Retroactive Manifesto for Manhattan*. Rotterdam: 010 Publishers.
- Koolhaas, Rem. (2002). *Junkspace. October, 100* (Spring 2002), 175-190.
- Lynch, Kevin (1960). *The Image of the City*. Cambridge MA: MIT Press.
- PRC Magazine. (2010). "It's hip to be Square." *Pacific Rim Construction*. <http://www.prc-magazine.com/it%E2%80%99s-hip-to-be-square/>
- Sullivan, Louis H. (1896). "The tall office building artistically considered." *Lippincott's Magazine*, March 1896.
- Yuo, Tony Shun-Te. (2013). "Modeling the Optimal Spatial Strategies for Tenant Variety within Vertically Structured Large-scale Shopping Centers." *Journal of Taiwan Land Research, Vol. 15, No.2*, 87~125.